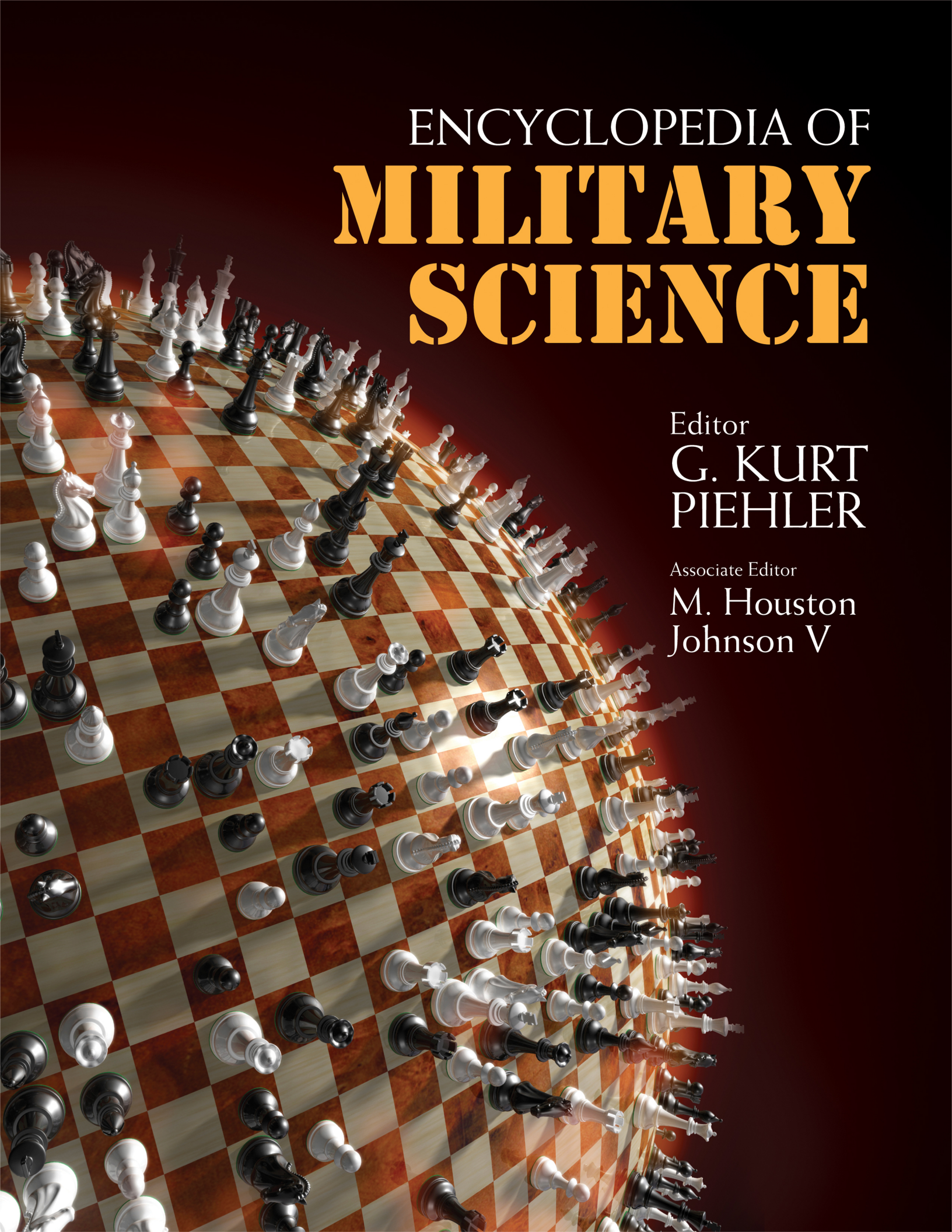




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Introduction

The *Encyclopedia of Military Science* is intended to offer an interdisciplinary perspective on the nature of modern warfare. It is aimed at those serving in the armed forces, as well as those training to enter the profession of arms in a service academy, an ROTC program, or an officer candidate school. It will inform scholars and students with diverse interests in military science, especially in the disciplines of history, political science, international relations, sociology, psychology, anthropology, and the humanities. This work embraces the sentiment of the French leader Georges Clemenceau who declared that war was too important to be left only to generals, and it seeks to inform government leaders and average citizens who must, under the system of government in the United States, make the ultimate decisions regarding the use of coercive force. For journalists who write about issues of war and peace, it is envisioned that this encyclopedia will serve as a ready reference and background information on the complex nature of military science.

Scholars from a diverse range of disciplines such as history, political science, sociology, psychology, philosophy, literary studies, anthropology, philosophy, and peace studies have contributed to this volume. Given its broad range of contributors, many of whom are active-duty or retired members of the American armed forces, it will interest a broad range of scholars and students interested in a better understanding of military science. The list of contributors is international in scope and includes authors from Brazil, Canada, Colombia, Germany, Great Britain, India, Japan, Lithuania, Singapore, and Taiwan.

In his overview essay in this encyclopedia examining military science, Kelly Jordan observes that military science is a “systemized body of knowledge regarding and related to the theory, application, and employment of military units and weapons in land warfare.” This encyclopedia takes an even broader

view of military science and has a number of entries focusing on naval science and homeland security.

Armed Forces and American Society

This work devotes significant attention to civil-military relations. Under the U.S. Constitution, command of the American military is vested in a civilian, the president, who serves as commander in chief. Only the U.S. Congress can establish the armed services, and it must appropriate funds for its operation. The U.S. Senate must also confirm the appointment of all officers commissioned to serve in the armed forces. Although the Constitution delegates the responsibility to declare war to Congress, the last time the United States actually declared war against another nation occurred during World War II. For instance, American intervention in the Korean War (1950–1953) and the Persian Gulf War (1991) was based on American adherence to the call of the United Nations to enforce collective security and to repel aggression.

Since the founding of the republic, presidents have asserted the right to deploy American forces to defend American national security without explicit congressional authorization. During the early 1900s, the United States directly intervened in the internal affairs of Cuba, Haiti, and countries in Central America. More recently, presidents have intervened in Panama, Bosnia, Haiti, and Somalia without seeking congressional approval.

In the aftermath of the Vietnam War, Congress sought to rein in the power of the president through the passage of the War Powers Act. Although Congress has the ability to halt military operations by withholding appropriations to fund them, it has seldom adopted this tactic. With few exceptions, the Supreme Court has been reluctant to take cases that would require it to define the war-making power of Congress versus the role of the president as commander in chief.

If there is one lesson from the terrorist attacks of September 11, 2001, on the World Trade Center in New York City and the Pentagon it is that the military alone cannot halt terrorism. As a result, this encyclopedia takes an expansive view of military science and includes a range of articles dealing with homeland security and the vital role of civilian agencies, including articles on the Border Patrol, Central Intelligence Agency, Federal Bureau of Investigation, and the Department of Homeland Security. A number of articles center on the U.S. Coast Guard, which has a long history in the area of homeland security. The Coast Guard, while a uniformed service, is part of the Department of Homeland Security, and only in wartime is it under the control of the Department of Defense. In contrast to the other branches of the armed services, the Coast Guard routinely enforces a range of maritime and other laws, especially in the area of drug smuggling, environmental protection, and immigration.

The role of the military in American society is complex. Military spending consumes a substantial part of the federal budget and has a significant impact on the broader economy. In many regions of the country, military bases play an important role in the economic life of many small communities. As a result, efforts by the Department of Defense to close redundant bases proved difficult until Congress delegated substantial authority regarding base realignment and closure to an independent commission that determines which bases within the United States should be open and which should be closed.

Since Reconstruction and passage of the Posse Comitatus Act, the U.S. Armed Services, with the exception of the Coast Guard, have seldom engaged in civilian law enforcement. There are important exceptions, however. Presidents have intervened on a number of occasions in cases of civil disorder when civilian law enforcement authorities were overwhelmed. The military, especially the National Guard, has also played a vital role in responding to humanitarian disasters. Since the early 1800s, the U.S. Army Corps of Engineers has built and maintained a number of public works projects, especially in the areas of flood control and navigation.

Organization and Commands

This encyclopedia provides an overview of the major branches of the American military—the U.S.

Army, U.S. Navy, U.S. Marine Corps, and U.S. Air Force. Organizationally and culturally, the different branches of the military remain quite distinct. At the same time, the growing pattern since World War II has been to encourage greater interservice cooperation and unified commands that span the services. The National Security Acts of 1947 and 1950 created a unified Department of Defense headed by a secretary of defense, as well as the National Security Council, to better coordinate foreign and defense policy. Under the Goldwater-Nichols Department of Defense Reorganization Act, the power of the Joint Chiefs of Staff was strengthened, especially that of the chairman of the Joint Chiefs of Staff. Interservice joint commands have emerged as the norm for projecting American military and naval power, and this work includes articles on several of the most significant ones including the U.S. Africa Command, U.S. Central Command, U.S. Northern Command, U.S. Pacific Command, and U.S. Southern Command.

Military Education and Training

Despite its importance, military training and education have received relatively little attention from scholars. This encyclopedia includes broad overview articles focusing on the training of officers and enlisted personnel for all the armed services, as well as the ROTC program. Entries appear on all the service academies for the American armed forces including the U.S. Military Academy, U.S. Naval Academy, U.S. Air Force Academy, and U.S. Coast Guard Academy. The work also includes entries examining the major postgraduate institutions such as the Army War College, Naval War College, Naval Postgraduate School, and National Defense University.

Military training and education are designed not only to provide essential skills and knowledge but also to cultivate the traits of leadership. Officers and noncommissioned officers, by virtue of their position, are to serve as leaders. This encyclopedia includes a range of articles on leadership, including articles focusing on squad leadership, staff relationships, and military command staffs.

Military Theory and Strategists

The editor and associate editor of this encyclopedia are historians, and this reference work bears this imprint. From time immemorial, military leaders

have looked to history for lessons from the past and for the critical skills garnered from the study of this discipline. Two articles provide an overview of differing approaches to military and naval history.

This work also includes overview articles on the fields of anthropology, literature and war, religion and war, sociology, and political science/international relations. The social sciences provide valuable analytical concepts useful for considering the role and value of using force to further political ends; the encyclopedia includes entries on several of these, including deterrence, realism, and soft power.

The encyclopedia contains analytical biographies of a number of military leaders, strategists, and scholars who have offered insights into the art and nature of war, including articles on Sun Tzu, Thucydides, Frederick II of Prussia, Carl von Clausewitz, Antoine-Henri Jomini, Alfred Thayer Mahan, Vo Nguyen Giap, and Mao Zedong. Special weight has been given to contemporary military theorists such as Samuel Huntington, Edward N. Luttwak, S. L. A. Marshall, John Keegan, and Victor Davis Hanson.

Waging War

This encyclopedia considers war from the strategic, operational, and tactical perspectives. Comprehensive articles examine strategy from the perspective of air power, ground power, naval power, and nuclear weapons. The varied nature of warfare is analyzed, with separate articles on amphibious, biological, electronic, psychological, submarine, surface, and unconventional warfare. Other articles provide an overview of tactics as applied in the air, on the ground, and on the water.

The work also considers the weapons systems and munitions needed to wage warfare by the U.S. Armed Forces. There are articles dealing with anti-aircraft, biological, chemical, nonlethal, nuclear, and space weapons. More specialized articles consider the range of aircraft (antisubmarine, bomb, carrier, fighters, patrol, reconnaissance, and transport) employed by the armed services, warships (aircraft carriers, destroyers, frigates, submarines), missiles (air-to-air, conventional, cruise, nuclear), artillery, and mines (land and sea).

As the entry on research and development notes, weapons systems and munitions require significant investment by the federal government, especially

given the complex nature of weapons technology. Military contractors provide the bulk of munitions needed by the armed forces, and this encyclopedia contains a brief overview of the most significant defense contractors. During the current wars, there has been a growing reliance on outside contractors not only to supply military hardware and munitions but also to take over many of the functions previously undertaken by the armed forces. For instance, private contractors such as Blackwater employed civilians to run mess halls used by U.S. troops in Afghanistan and Iraq, used civilian drivers and guards to move cargoes in war zones, and even provided civilian guards to protect American diplomatic personnel stationed abroad.

Military Life

Legally and culturally, those serving in the armed forces lead a different life from their civilian counterparts. Members of the armed forces take an oath of allegiance to obey lawful orders from their civilian and military commanders. They serve in an institution that controls virtually every aspect of their lives, from the uniforms they wear to the food they eat and equipment they carry as part of their combat load. Specific customs, traditions, and even a different language serve to reinforce the distinctive features of military life. Members of the military and their dependents have their own health care plan—TRICARE. Issues of personal finance present a number of challenges to servicemen and servicewomen, as well as dependents of service members. The military still provides retirement income in the form of a pension to members who serve the requisite number of years to qualify. For servicemen and servicewomen who are disabled as a result of military service, there is a separate disability system.

Frequent deployments during the Iraq War and the War in Afghanistan have placed great stress on military families. In contrast to earlier eras, the military has been more conscious of the need to promote family readiness, but despite informal and formal support groups such as the National Military Family Association, the strain of military life on the family is substantial. This encyclopedia includes a number of entries describing aspects of life in the military across the lifespan, including articles on personal finance, discharge and separation, and retirement.

Diversity

The U.S. military today is a diverse institution that draws men and women from a variety of different races, ethnicities, and sexual orientations. This is not a new tradition. For instance, African Americans have a record of military service that dates back to the colonial era and the American Revolution. At the same time, they have endured generations of discrimination and segregation. Only after World War II did the federal government and the military end segregation and adopt policies that offered equal opportunity to both Black and White servicemen.

There is an equally long tradition of other ethnic groups serving in the armed forces. Entries in this work examine the service of Arab Americans, Asian Americans, Latinos, and Native Americans. Gays and lesbians have also served for generations in the military service, although until the repeal of Don't Ask, Don't Tell, they could not serve openly.

The underrepresentation of women in today's military demonstrates a legacy of institutional and wider societal discrimination. Women have participated in virtually every American war, during the eighteenth and nineteenth centuries mainly as camp followers or illicitly serving in the ranks by disguising themselves as men. Women were not allowed to serve in uniform as nurses until the army and navy created the Nurse Corps after the Spanish-American War. Not until World War II did all the services make a systematic effort to bring women into the uniformed ranks, although they continued to restrict them from the combat ranks. With the rise of the all-volunteer army in the 1970s, the number of women in the ranks grew, and more occupational specialties opened up to them. Not until the Persian Gulf War and its aftermath did prohibitions against women serving in combat start to end, beginning with the U.S. Air Force and U.S. Navy. Given the nature of the recent wars in Afghanistan and Iraq with their lack of clear front lines, an increasing number of women serving with ground forces participated in combat operations. Women were seen by the army and Marine Corps as especially valuable in interacting with women civilians in both countries. Articles examining women's service in the military and related entries on rape and sexual trauma are especially timely as the armed forces work toward the full integration of women into all the combat arms.

Law and Questions of Military Justice

To wage war successfully requires calculated violence, restraint, and an adherence to the laws of war. The laws of war that have governed the conduct of war for centuries draw heavily on customary usage and precedent. Since the late 19th century there has been a concerted effort to codify the laws of war through international treaties. Among the most significant are the Hague and Geneva Conventions, which seek to ensure the protection of civilians and the safety of prisoners of war and the wounded in battle. Since the American Revolution, American political and military leaders have stressed the need to adhere to the laws of war. This encyclopedia includes entries on these conventions as well as articles on genocide, human rights, and war crimes that place the laws of war in a broader context.

Responsibility for the enforcement of the laws of war has traditionally resided in the actions of sovereign nations. For instance, during the Vietnam War, the United States held a war crime trial to try the perpetrators of the My Lai Massacre. After World War II, special temporary international courts were created to try German (Nuremberg War Crimes Trial) and Japanese (Tokyo War Crimes Tribunal) war criminals. Although the United States played a pivotal role at Nuremberg and Tokyo and supported the creation of ad hoc international courts to try war criminals from Yugoslavia and the Rwandan genocide, it has refused to accept the jurisdiction of the recently created International Criminal Court.

This encyclopedia also includes entries on U.S. military law and the military justice system. Under the U.S. Constitution, Congress is authorized to establish a distinct military system of justice that grants servicemen and servicewomen fewer constitutional rights than civilians. On the most basic level, they cannot leave the military without an official discharge and can be charged with the crime of desertion for trying to quit the service before their term of enlistment ends. Military personnel are subject to the Uniform Code of Military Justice and a separate judicial system. Soldiers are tried not in a court of law but through courts martial. If convicted of a crime under the Uniform Code and incarcerated, they serve time in a military prison. The armed forces also maintain their own law enforcement agencies to enforce the Uniform Code.

Military Values, Ethics, and Culture

If there is a normative bias to this work, it is the belief that military service is an honorable profession and that ethics and ethical judgments play an important role in guiding men and women who serve their nation in uniform. Civil-military relations have traditionally been governed in the United States by military leaders obeying and executing lawful orders issued by the president, the secretary of defense, and other civilian leaders. In contrast to many countries where military officers pledge allegiance to a monarch or other national leader, military officers and enlisted men take an oath of enlistment in which they pledge to defend and protect the Constitution of the United States from all enemies foreign and domestic.

Since elected civilian leaders ultimately commit the United States to war, it is important that all citizens have a basic understanding of military science. Although the just war tradition has been influential in shaping the reasons why and when nations in the Western tradition resort to war, until the 20th century there were few restrictions in the laws of war limiting the ability of sovereign nations to wage war. As a result of the terrible destructiveness of World War I and World War II, there has since been a concerted effort to consider wars of aggression as illegal under the laws of war. This has been codified in treaties the United States has signed and ratified, most notably the Kellogg-Briand Pact and the United Nations Charter.

Contemporary Events

If one were to periodize American military history, one could argue that there has been a significant change since 1940 regarding the deployment and use of American military power. Prior to the Spanish-American War and the Philippines Insurrection, the United States seldom deployed significant land forces beyond the Western Hemisphere. Although the United States entered World War I, it did not join the League of Nations after the conflict ended. World War II witnessed an unprecedented mobilization of American society; 15 million men and women served in the armed forces and were deployed throughout the globe to meet the threat of Nazi Germany, Fascist Italy, and Imperial Japan. In the aftermath of World War II, the United States joined the United Nations, and during the Cold War, it signed a series of political and military alliances. Perhaps the most significant of these alliances was

the North Atlantic Treaty Organization (NATO) wherein the United States joined Canada and a number of Western European countries in a system of mutual security. Initially formed to meet the threat of communism and to deter possible aggression, NATO has survived the collapse of the Berlin Wall, the reunification of Germany, and the collapse of the Soviet Union. In the post-Cold War era, NATO mounted operations to protect Kosovo and to fight terrorism in Afghanistan after 9/11.

The end of the Cold War marked a reordering of American foreign and defense policy. In the heady days following the collapse of the Berlin Wall in 1989, talk in political and intellectual circles concerned the peace dividend that would come from the dramatic downsizing of the U.S. military. There would be a modest peace dividend in the 1990s, and several significant changes did occur after the 1991 Persian Gulf War. Both the United States and Russia, the successor state to the Soviet Union, dramatically downsized their nuclear arsenals. The United States withdrew a substantial number of military and naval forces from Europe, most notably from Germany.

U.S. engagement with the Middle East has been long-standing, and the United States has been an ally of Israel for over a generation. But the rise to power of a theocratic Islamist regime in Iran, the invasion of Kuwait by Iraq in 1989, and the aftermath of the Persian Gulf War led to increased deployment of American forces in the region. The attacks of 9/11 led to a dramatic increase in military spending as the United States fought wars to overthrow the Taliban in Afghanistan in 2001 and to topple the regime of Saddam Hussein in Iraq. Despite embarking on two long wars, the United States did not adopt conscription but relied on an all-volunteer army to fill the ranks. Limited manpower required servicemen and servicewomen, especially those in the army and Marines, to undertake multiple combat deployments. To ensure small unit cohesion, stop-loss orders required men and women whose term of service was ending to remain with their units if they were called up for overseas deployment. The military in the Persian Gulf War, Iraq War, and War in Afghanistan relied heavily on reservists and National Guard units.

In the aftermath of the Vietnam War, the U.S. Army generally focused on preparing for a major conventional war against the Soviet Union and generally neglected preparing for counterinsurgency

warfare. Although the United States quickly toppled the Taliban regime in Afghanistan and Saddam Hussein in Iraq, the military was ill prepared for the occupations and the insurgencies that followed. In the case of Iraq, General David Petraeus implemented a new counterinsurgency strategy, the surge, that dramatically improved the security of the civilian population in the country and diminished insurgent attacks. The success of the surge allowed the United States to withdraw armed forces from Iraq by the end of 2011. Although a similar counterinsurgency strategy was implemented in Afghanistan in 2009, it is uncertain if the United States will achieve the same success.

Media, Military, and the Public

An independent, free, and unfettered press is a central hallmark of democratic society. In the United States, there is a long tradition of American journalists covering war that dates back to the 19th century. Not until World War I did the federal government and the armed forces institute formal censorship of war reporting, establishing a precedent that would be invoked in later conflicts. World War I set other important precedents, including the federal government's establishment of the first formal propaganda effort to convince Americans to support America's first land war in Europe.

The news media have often been quite supportive of U.S. war aims, even during such divisive conflicts as Vietnam. But it was during the Vietnam War that relations between the media and the military soured. Some critics within the armed forces and the U.S. government blamed the critical press coverage of the Vietnam War for causing America's loss or, more accurately, forcing America's withdrawal from Indochina in 1973. As a result, the U.S. military adopted policies after Vietnam that limited reporters' access to the battlefield in Grenada, Panama, and the Persian Gulf War. During the wars in Afghanistan and Iraq, restrictions loosened, and the military increasingly allowed journalists to embed with units.

The Internet has led to a widespread shift in the relationship between the military, journalists, and the public. For the news media, the Internet has placed pressure on traditional news media outlets, especially print newspapers, but also on network television. It has sped up the news cycle since the Internet allows print, images, and videos from a war

zone to be transmitted back to the United States instantaneously. Censorship is more difficult to implement and can easily be subverted. For instance, in the Global War on Terrorism, terrorists have made widespread use of the Internet to disseminate their message and to recruit adherents.

This encyclopedia contains a number of entries dealing with the news media, the military, and the public. It also includes articles on broader depictions of war in literature, television, and war films.

Development of the Encyclopedia

The idea for this encyclopedia originated with Jim Brace-Thompson, acquisitions editor from SAGE, after he spoke to a number of college and university librarians who suggested a need for a reference work that examined military science. G. Kurt Piehler was approached about the possibility of editing such a project in 2007 and conducted preliminary research that confirmed the need for a comprehensive work examining war and military affairs from a broad, interdisciplinary perspective. After returning from a Fulbright Fellowship in Japan in August 2008, Piehler formed an advisory board to help formulate the parameters of the project and develop a table of contents. Members of the advisory board were generous with their time, and a number contributed entries in addition to reading articles in their area of expertise when requested by the editor.

M. Houston Johnson V played a central role in every aspect of the encyclopedia's development, especially in helping identify and contact potential authors. In his role as associate editor, Johnson had primary responsibility for editing a number of entry categories, including Intelligence, Logistics, Supply, Equipment Transportation, Military Organizations and Commands, Tactics, Weapons Systems, and Weapon Contractors. As editor, Piehler reviewed every one of the 520 entries and nearly 1.1 million words. In addition to the A–Z entries, this encyclopedia includes materials in the back matter that touch on civil-military relations, military ideals, laws of war, U.S. Supreme Court cases related to war, U.S. military organizations, and casualties.

Assembling authors for this project was difficult. On several occasions, authors needed more time to complete an entry because they were deployed either to Afghanistan and Iraq. Even if not deployed

to a war zone, members of the armed forces have many responsibilities and demands on their time. The editor and associate editor of this encyclopedia want to express our appreciation to all who contributed to this work, but especially to servicemen and servicewomen who have shared their expertise with a wider audience. While this work has a

number of audiences, we believe one of the most important are those in uniform or those who aspire to serve in the armed forces of the United States of America.

G. Kurt Piehler and M. Houston Johnson V



ABU GHRAIB

The controversy surrounding the 2004 prisoner abuse scandal at Abu Ghraib prison near Baghdad, Iraq, drew worldwide attention to the treatment of prisoners held by U.S. forces occupying that country. The graphic images of torture first released during a *60 Minutes* broadcast and later published in the *New Yorker* magazine prompted worldwide protest against U.S. interrogation policies and raised a number of questions about the complicity of the executive branch and the Department of Defense in the abuse. While several soldiers and junior officers were ultimately tried for their involvement in the scandal, the most senior officers were either given reprimands or reassigned, escaping any criminal charges regarding their supervision of Iraqi prisoners. This entry provides an overview of the events that led up to the scandal, the participants, and the aftermath.

Background and Scandal

After the start of the Global War on Terrorism and the opening of prisons, such as the detainment center in Guantanamo Bay, Cuba, public debate began over the legality of holding detainees without the rights granted to combatants under international humanitarian law as expressed in the Geneva and Hague Conventions. Questions regarding the legality of U.S. detention centers—what qualified as legal interrogation measures and what constituted torture and war crimes—drove the debate, both in the

legal system and the media. Prior to the Abu Ghraib scandal, President George W. Bush had maintained that no ill treatment or torture was taking place under U.S. watch. In the case of Afghanistan, the Bush administration ruled that Taliban fighters were not lawful combatants and not entitled to protections accorded to prisoners of war under the Geneva Conventions.

In the case of Iraq, the Bush administration declared that individuals captured and detained would be granted the protections accorded to prisoners of war under international law. As a result, the International Red Cross had regular access to detainees held by U.S. and coalition forces in Iraq. In 2003 and early 2004, the Red Cross lodged complaints of abuse of those being held in Iraqi facilities by the American forces. In February 2004, the organization provided a confidential report to U.S. authorities that documented systematic abuse of prisoners, especially those thought to be of special value for interrogation on intelligence matters. It found that the abuse included physical violence, psychological abuse, and threats against family members, all illegal under international humanitarian law. In response to this concern, the U.S. Army set out to investigate the allegations and compile its own findings.

Specialist Joseph Darby was responsible for bringing the specific abuses at Abu Ghraib to the attention of military authorities in January 2004. He provided the army's Central Investigation Command with a computer diskette containing clear evidence of prison abuse. U.S. Central Command immediately launched an investigation, and both Secretary of Defense

Donald Rumsfeld and President Bush were informed of the parameters of this incident. The scandal became public in April when an unnamed Pentagon official leaked the images to CBS News.

On April 28, 2004, the CBS news magazine *60 Minutes II* ran a segment on U.S. prisoner abuse at the Abu Ghraib prison, featuring the now-famous photograph of a prisoner draped in a cloak, wires attached to his hands, as well as showing additional photographs depicting smiling, uniformed soldiers posing with naked prisoners. In an interview with Dan Rather, Brigadier General Mark Kimmitt acknowledged that the abuse was “reprehensible” but claimed it was the work of a few soldiers at the prison and should not be viewed as representative of the whole army. On April 30, 2004, the first of a series of articles by Seymour M. Hersh in the *New Yorker* was posted online, with more photographs and further details about the systematic abuse of prisoners. Hersh’s first article, “Torture at Abu Ghraib,” appeared in print on May 10, 2004, and in it and subsequent pieces, he described the torture used by U.S. forces during interrogation and documented involvement by senior military intelligence officers and military contractors. The series was later published in Hersh’s book *Chain of Command*.

In early May, the Pentagon released a comprehensive report by Major General Antonio Taguba, who in February of that year had been charged with investigating the abuse. In his report, Taguba found that the army had encouraged these brutal methods of interrogation among military police and that the use of such tactics was more widespread than previously acknowledged. Soldiers at Abu Ghraib had engaged in “systematic” physical and sexual abuse of inmates, even using dogs to attack the prisoners. The Taguba Report also acknowledged that Abu Ghraib held unidentified detainees who were hidden from Red Cross workers visiting the prison to determine whether Geneva Convention standards were being maintained.

Aftermath

After the Abu Ghraib scandal emerged, the Pentagon released numerous documents concerning internal discussions of interrogation practices. These documents revealed that the Justice Department,

the executive branch, and the Department of Defense were aware of many of these tactics and that the Department of Defense and Rumsfeld had approved them. One leaked Justice Department memo from Attorney General Alberto Gonzales revealed that harsh treatment was not considered torture unless it caused significant physical pain comparable with organ failure, impairment of bodily function, or death. In June 2004, the U.S. Supreme Court issued rulings on several cases related to detention and abuse, and though the Court did not disagree with the president’s right to detain prisoners, the justices noted that detainees had the right to counsel and the right to contest their charges.

The United States is a signatory to the 1949 Geneva Conventions and the 1984 UN Convention Against Torture, which define torture as a war crime wherein there is intentional infliction of severe mental or physical suffering to obtain a confession from, punish, or coerce an individual. Despite concern that the actions at Abu Ghraib constituted torture and war crimes, there were few legal repercussions for those involved. At the time, many called for Rumsfeld’s resignation (and he claimed to have offered it twice), but he stayed with the administration. Seven were charged with their involvement in the abuse, though none were ever formally charged with the deaths of detainees occurring under U.S. watch, including Lieutenant General Ricardo Sanchez who was later found to have approved the interrogation techniques.

The only criminal prosecutions pursued in connection with Abu Ghraib were of enlisted personnel. Seven soldiers faced court-martial, including Staff Sergeant Ivan Frederick, who posed in many of the abuse photographs, and Specialist Charles Graner and Private Lynndie England (who also posed in the photographs and was transferred before the scandal as she was pregnant with Graner’s child). Graner acted as one of the ringleaders of the abuse, and 173 photos of abuse were found on Graner’s camera. Frederick reported that military intelligence, including members of the Central Intelligence Agency and private government contractors, had encouraged the abuse. Brigadier General Janis Karpinski, the senior officer in charge of the prison, was suspended in January 2004 and reprimanded, but she was never charged with a crime, nor were any of her superiors.

Senate hearings on the scandal were started in 2004, but the proceedings were postponed until the U.S. Army could complete its courts-martial on the matter. Army officials such as Sanchez essentially claimed Abu Ghraib was an aberration and not part of a wider institutional pattern. At one hearing, Lieutenant General Paul Mikolashek presented his findings that the abuses were not representative of anyone in the army other than the individuals who directly participated in the abuses. While there was some backlash in the press, there was little follow-up, and the scandal gradually dissipated from the public eye. In early 2006, several of the alleged abusers accused of threatening prisoners with dogs went to trial. Colonel Thomas M. Pappas, the former intelligence chief at Abu Ghraib, testified against some defendants, including Sergeant Michael J. Smith, in exchange for immunity from prosecution.

In the Arab world, Abu Ghraib was a public relations disaster that undercut American credibility. While conducting its war in Iraq, the Bush administration had insisted that the United States remained committed to promoting democratization and the rule of law. The scandal undercut this position in the eyes of many in the region. In terms of gender politics in a region with strongly patriarchal societies, the abuse of male prisoners by a female soldier was perceived as especially degrading.

Conclusion

The question of whether U.S. actions at Abu Ghraib amounted to torture or war crimes was key in the investigation of the prison, though the scandal has largely disappeared from the public eye. At the time of the scandal, the executive branch was involved in a prominent public discussion on the legality of its detention policy, and it was reluctant to change course.

Documents released in the aftermath of the scandal revealed that as early as 2002 the administration and the Pentagon had been aware of torture in the U.S. interrogation policies; some claim that these very relaxed interrogation guidelines paved the way for these abuses. The Bush administration claimed that the Global War on Terrorism and its combatants did not qualify for protection under the Geneva Conventions, though the nation of Iraq is signatory to the Geneva Conventions and its citizens and combatants were legally protected by its standards.

Some scholars suggest that the “us” versus “them” mentality displayed after 9/11 and in support of the Global War on Terrorism was largely responsible for the abuses and that the approval of “enhanced interrogation techniques” for Guantanamo detainees encouraged their spread to Iraq and Abu Ghraib. Whatever the case, the military police at Abu Ghraib were involved in a number of war crimes, enabled by a chain of command that approved of their conduct. The Abu Ghraib scandal bears witness not only to the results of officers neglecting their leadership expectations but also to the necessity of proper adherence to international humanitarian law.

Hillary Jean Sebeny

See also Crimes, War; Geneva Conventions; Iraq War (2003); Prisoners of War; Rape; Red Cross, International Committee of; Trauma, Military Sexual; Yamashita Precedent

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ABUSE, FAMILY AND CHILD

Research indicates that domestic violence suffered within military families is greater than that in the civilian community. The lack of uniformity in command's response to domestic violence incidents often creates obstacles to appropriate treatment and intervention. The Uniform Code of Military Justice (UCMJ) offers guidance regarding remedies and punishment. However, domestic violence is not clearly defined or coded in the UCMJ.

Depending on the severity of the case, a soldier may be charged with assault, battery, or rape. In most cases, domestic violence offenses are addressed by non-court-martial proceedings. Punishment or sanctions can range from written reprimands to loss in liberty, loss in pay, and/or loss in rank. A military protective order may also be issued. This entry examines domestic violence in military families, including its link with posttraumatic stress disorder (PTSD), the phases and patterns of family violence, and investigation procedures and sanctions.

Background

Department of Veterans Affairs (VA) research indicates that male veterans with PTSD are 2 to 3 times more likely to engage in intimate partner abuse and become involved in the legal system than non-PTSD veterans. A Yale University study concludes that men who serve time in combat are 4.4 times as likely as other men to engage in domestic violence. In addition, they are 6.4 times more likely to suffer from PTSD and 2 to 3 times more likely to suffer from depression, substance abuse, unemployment, divorce, and separation.

A Yale study that appeared in the *American Journal of Public Health* states that even those veterans not diagnosed with PTSD often suffer unemployment and substance abuse. This reaffirms the challenges associated with addressing the needs of veterans returning from combat.

Frank Schoenfeld, director of the Post-Traumatic Stress Disorder Clinic at the VA Medical Center in San Francisco, comments, "Whether or not they develop post-traumatic stress disorder symptoms, combat vets frequently suffer from a lower tolerance for frustration, explosive outbursts and never-ending alertness" (quoted in Dotinga, n.d.).

Veteran population demographics are changing. World War II veterans are reaching their 80s and 90s as young veterans complete tours of duty in Iraq and Afghanistan. The number of living veterans who have served in the U.S. military is staggering.

Interpersonal Violence: Military Significance

Studies have found that, in addition to more general relationship problems, families of veterans with PTSD have more family violence, more physical and verbal aggression, and more instances of violence against a partner. In these studies, female partners of

veterans with PTSD also self-reported higher rates of perpetrating family violence than did the partners of veterans without PTSD. In fact, these female partners of veterans with PTSD reported perpetrating more acts of family violence during the previous year than did their partners—veterans with PTSD.

Similarly, Byrne and Riggs found that 42% of the 50 Vietnam veterans in their study had engaged in at least one act of violence against their partner during the preceding year, and 92% had committed at least one act of verbal aggression in the preceding year. The severity of the veteran's PTSD symptoms was directly related to the severity of relationship problems and physical and verbal aggression against the partner.

Domestic violence and child abuse in military families can arise at every level of command or rank; no one is immune to the consequences. While many offenders are men, women are also capable of committing acts of domestic violence and child abuse. Occasionally, a synergistic and pathological relationship unfolds, which involves both parties meeting violent psychological needs.

Approximately 3 million service members are currently serving in the armed forces. Increasing rates of deployment, long family separations, and multiple redeployments increase the likelihood of domestic conflict and strife. Thousands serving in Afghanistan and Iraq under considerable stress and trauma face considerable challenges of increased stress and unsatisfactory family reentry adjustment when they return.

Definitions

Spousal Abuse

Military spousal abuse includes (a) assault, (b) battery, (c) threat to injure or kill, (d) acts of force or violence, (e) emotional maltreatment inflicted on a partner in a lawful marriage, and (f) a spouse under the age of 18 years of age falling into this category.

Child Abuse/Neglect

Department of Defense definitions include physical injury, sexual maltreatment, emotional maltreatment, and deprivation of necessities, or combinations of these behaviors by an individual responsible for the child's welfare. The circumstances must indicate that harm or the threat of harm is imminent to the

child's welfare. The term *child* refers to a natural child, adopted child, stepchild, foster child, or ward.

Child Abuse–Neglect Connection

Military police investigators who take domestic abuse and violence calls understand the child abuse–neglect connection. The sad little faces tell it all; their victimization and psychological trauma appear obvious to first responders. Children living in these homes represent part of the cycle of abuse. Unfortunately, children often become pawns on a family chessboard of players, their designated role—to checkmate family members. Their innocent presence offers the potential for maltreatment, deprivation, victimization, and potential sexual exploitation.

Obstacles to Breaking the Cycle of Violence

Military commanders, officers, and noncommissioned officers find domestic violence disturbing. The child abuse and neglect cases are intense and require extremely difficult decision making. Related personnel domestic abuse and violence issues take considerable time and effort away from the military's traditional warfighting mission.

Moreover, military police personnel who become involved dread the violent scenes they witness. Responders understand that victims of domestic violence often do not cooperate with the authorities because of concern for their spouse's military career. This is especially the case when dependent children are a major consideration.

Patterns of abuse, battering, and violence emerge in pathological cycles. The cycle repeats itself primarily because of denial on the part of commanders, officers, sergeants, and victims. The objective of effective intervention requires breaking through the mask of denial and the related rationalizations.

Military police personnel and sergeants who serve as first-line supervisors are the most likely military personnel to encounter domestic violence. Breaking the cycle of domestic violence requires identifying and learning the red flags of domestic violence. Domestic violence generally emerges in three phases: (1) tension building, (2) acute explosion, and (3) honeymoon. Primary issues for the abuser or domestic violence offender include power and control.

In the tension-building phase, the victim will retreat into denial, rationalize events, and recant on

earlier statements. In many cases, these behaviors produce reluctance to assist and encourage denial in those who respond to complaints. At this stage of development, the red flags include isolation of the victim, withdrawal of affection, and picking on small things. As the tension rises, the abuser becomes sullen, hypercritical, and prone to screaming and threatening. The abuser may destroy property or personal items.

In the acute explosion, the red flags include spitting, shoving, blocking and slamming doors, grabbing, and blocking escape routes. Choking or striking the victim and violence escalation are possible. During the acute phase, military authorities and military police personnel are likely to react to the violence and evaluate life-threatening behaviors. Missing these red flags in this phase may turn a domestic abuse and violence call into a homicide investigation.

In the honeymoon phase, red flag behaviors include the abuser expressing remorse; however, the apology may serve as a ruse and not be sincere. The offenders seek to reposition their place in the tension-building phase and find temporary relief from the attention of military authorities. The temporary reconciliation can be frustrating to commanders and military police personnel. Reconciliation encourages denial and may prevent an appropriate military response, intervention, and further effective solution.

Closing a military domestic violence case is a difficult decision. The danger that abusive behaviors may reemerge often persists for years. Moreover, the military offender may transfer to another command or switch targets when entering a new relationship. The novelty of the relationship may distract the abusive partner in the short term; however, a return to targeting the former or separated spouse is always possible. A domestic violence/stalking pattern may emerge after incarceration, commitment, or even a lengthy prison term.

Investigation Procedures

The military has two separate tracks to address domestic abuse and violence. One track is the military chain of command and military justice system. The other track is social assistance and family assistance. These pathways are separate and distinctly different in purpose and goals.

The social service assistance track is titled the Family Advocacy Program (FAP). This program

is not punishment oriented; it seeks to protect the victim and rehabilitate the offender. FAP program goals include (a) identification, (b) intervention, and (c) treatment programming.

For example, the military system determines if the case is unsubstantiated, suspected, or substantiated. In contrast to military justice, FAP might find that a case merits substantiated abuse. However, there is insufficient legally admissible evidence to allow punishment under the UCMJ and military justice system. The military and FAP might arrive at different conclusions after reviewing the facts related to the same case.

The FAP social worker will investigate the domestic abuse incident and assess the victim's safety and planning procedures. During this preliminary process, the victim's immediate medical needs take priority. Mental health issues and protection response needs are also of primary concern. At this point, the FAP social worker may request a military protection order issued by the commander.

Social investigations include interviewing alleged offenders and informing them of their rights under Article 31 of the UCMJ. The decision must include the protection of the children. When child abuse or neglect is involved, military regulations require that child protection agencies be contacted and that they conduct an independent investigation.

The military justice system may involve a commander's Article 15 punishment or military Article 31 investigation, and court-martial under the UCMJ. U.S. Army Criminal Investigation Command (USACIDC) may become part of the investigation in felony-related crimes or homicide.

A Responsibility to Intervene

Domestic abuse and violence affect morale and unit readiness. Proactive preventive measures that offer positive intervention require command emphasis. Military commanders and leaders need to address family abuse/violence interventions. Absent and maladjusted military personnel influence mobilization and mission requirements. Military personnel who are obsessed with family issues cannot perform their duties effectively and present a risk to themselves and others who serve within the U.S. military. This is especially a concern in military combat zones. Proactive assessment means meeting the needs of the military families and service members,

because serving their needs ultimately serves the nation well.

Thomas E. Baker

See also Constitutional Rights, Personnel; Court-Martial; Hazing; Uniform Code of Military Justice

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ACCOMMODATIONS, FIELD

Field accommodations provide members of the military the basic living necessities under temporary conditions in a field environment. Field accommodations supply the using military unit the capability to live and operate in an austere environment away from established bases and permanent stations.

These temporary facilities are designed to be easily transported and erected and to be made operationally capable quickly, then to be repackaged and moved as the mission and combat situation dictate. Field accommodations can vary based on the size of the unit, the threat environment, the duration of the operation in which the unit is participating, and military service. Additionally, as technology changes, the equipment in field accommodations changes, but the basic elements and requirements have remained the same throughout the modern military era. This entry provides details on the elements of field accommodations: shelter, food services, and hygiene services.

Field Accommodations Based on Environment

Field accommodations can vary greatly by the environment in which the operation is taking place, and those conditions will have a massive impact on the quality and availability of field accommodations. In hostile, forward combat areas, the field accommodations are very austere, relying primarily on what each service member can carry. Logistical limitations due to great enemy threats prevent the movement of large or supply-intensive equipment directly to the forward line of troops. This results in the creation of forward operating bases or logistical support areas, which are large cantonment camps designed to house supplies, maintenance facilities, and other logistical requirements in a centralized location near the combat troops but far enough away to avoid significant threats. Many of these logistical areas are created around runways, making the airfield/logistical area a massive field base. This is a common situation in Operation Enduring Freedom, where bases are built around airfields and house large logistical facilities. This was also common during Operation Iraqi Freedom. As the threat environment improves, many forward troops build combat outposts that provide them with a small living area that consists of basic accommodations. Combat outposts can vary greatly by their location, which affects logistical resupply and equipment availability options. Many combat outposts in Operation Enduring Freedom have billeting tents, a command and control or headquarters tent, and a field kitchen. Some are able to set up hygiene services, although the amount of water required to run the equipment is often a factor. In prolonged conflicts at major bases, such as

the case of Operation Enduring Freedom and, earlier, Operation Iraqi Freedom, many field accommodations services are contracted. For example, the hygiene, food service, and billeting requirements aboard Al Asad, a massive base in the Al Anbar province of Iraq, were provided predominantly by a company called KBR. All services were provided by civilians and civilian companies contracted by the Department of Defense.

Elements of Field Accommodations

The key components to field accommodations include those basic elements that satisfy standard military needs, such as shelter, food and food preparation equipment, hygiene services, and fundamental equipment to facilitate morale and troop welfare. Field accommodations imply that the equipment and facilities are temporary in nature and used in an environment where the site must be self-sufficient (limited or no host nation support available). Field accommodations are used in training evolutions in the United States and overseas away from primary, permanent bases, and they are used during actual military operations, including operations in armed conflict, humanitarian operations, and peacekeeping operations. While each service may use a different manufacturer and size of style of equipment, based primarily on mission requirements and field testing results by its service members, the elements of field accommodations are standard throughout the military; that is, each service will have shelter and food and hygiene equipment, although they may not be the same color or produced by the same company.

Shelter

Depending on the type of military operation being conducted and the threat environment of the area in which the unit is operating, the type of shelter required may vary from a single, one-person sleeping system to a massive, 1,300-pound tent facility. In each case, the requirement is basic protection from the elements.

Each service member is issued a sleeping system, a combination of three sleeping bags and a carry sack, that provides warmth and waterproof protection from the elements. The system is designed to be easily compacted and carried in a backpack, providing each person with a rudimentary, very lightweight shelter. The sleeping system can be used by

light infantrymen on patrol in enemy territory when constant maneuver is required. The system is also designed to be used in lower threat environments on static temporary bases as bedding on cots. The sleeping system has evolved since the end of the Cold War, focusing on reducing the weight of the equipment and improving its effectiveness. Sleeping bags have been issued to service members since World War II. The first such bags were mummy-style, single polyester bags that served the basic infantry soldier. As technology improved, the sleeping system came to include a combination of bags made from synthetic material whose outer layer is made from waterproof Goretex material. The four-part Modular Sleep System sleeping bags and other components are constructed to be used in conjunction with each other or separately to complete an interoperable system known as the extreme cold weather sleeping bag. The sleeping system provides warmth to the user in temperatures ranging from 50° to -30° F, provided the user is wearing base layer cold weather clothing. The first component of the sleeping system is the green patrol bag, suitable for temperatures down to +30° F. The bag has a reversible double pull slider, allowing ventilation at the head or feet, a nonlocking slide fastener to prevent snags, and a draft flap to prevent heat loss. The hood adjusts for heat retention as well. The black intermediate bag is the second piece of the system, suitable for temperatures down to -10° F. The insulation is twice as thick at the feet area to provide additional warmth. The chest collar prevents drafts up and down the hood of the bag, which adjusts for heat retention like the patrol bag. The outer layer of the sleeping system is a camouflage bivy cover, which waterproofs the system with an impermeable Goretex material but allows vapor to escape. The bag is sealed by a zipper slide or a snap fastener system. Finally, the bags can be placed into a water-resistant black stuff sack, which can compress the sleeping system to 1 cubic foot by using six 1-inch-wide nylon webbing straps. The sack is closed by a nylon draw-cord closure with a barrel lock. The compact, lightweight system can be easily transported in a backpack, providing each service member with personal shelter.

Like the sleeping bag, tents have routinely been used since World War II, especially as sleeping quarters, office space, and storage. The original general-purpose (GP) canvas tent, used in World War II and changed little until the first decade of the 21st

century, provides the user a 16-foot × 32-foot tent with two entrances at each end. The tent is essentially a canvas skin supported by 15 wooden poles ranging from the 10-foot center beam to the 6-foot side poles. The tent walls can roll up to allow air to flow through, and the tent comes with two stovepipe shields to support a standard, 4-inch heater pipe. The tent offers cover but no flooring. This basic tent can be used as a billeting tent, fitting roughly 16 troops with cots and their equipment, as a headquarters tent, and as a storage tent for supplies. The GP tent was used extensively in Operations Desert Shield and Desert Storm in the coalition desert base camps, and although they are nearly phased out of the current inventory, they are still seen on major U.S. training bases for routine field exercises.

The GP tent has been replaced by the modular general-purpose tent system (MGPTS), a pole-supported, modular military tent that provides users with a multipurpose weatherproof shelter for any environment. The tent skin is made from a lightweight, waterproof vinyl-coated polyester fabric supported by a metal skeleton support system. The MGPTS medium-sized tent measures 18 feet × 18 feet and can be extended by adding 18-foot intermediate sections. The tent features four windows on each sidewall and two screened doors at each end. A fluorescent tube lighting system is incorporated within the tent, allowing it to be plugged into a power source to provide adequate lighting. The MGPTS can easily be set up in less than 45 minutes by four people and provides more than 300 square feet of floor space. The tent may serve as billeting, headquarters, and supply service shelters. These tents are often used during humanitarian aid missions by the military as emergency and disaster relief shelters.

The Drash XB series military dome tent is another style of medium to large shelter used by the military mainly as command and control, life support, medical, or surge facilities. The Drash tents can be set up and torn down within 30 minutes using six people because they require no assembly in the field. Both the Drash and the MGPTS come with a small attachable tarp that serves as basic flooring.

Military units may also utilize a shelter for the maintenance facility within the field base camp. A common version is the lightweight maintenance expandable tent (24 feet × 32 feet) with a modular design that can be extended in 16-foot increments.

The lightweight design is made possible by a collapsible aluminum frame that maintains structural integrity in adverse weather conditions. The lightweight maintenance tent provides rapid deployment and forward maintenance elements without sacrificing mobility, as it weighs only 1,332 pounds. The maintenance tent is designed to provide shelter for both track and wheeled vehicles in all climates.

For billeting purposes, the military provides its service members with small, portable two-man sleeping tents. The basic form of these tents has evolved from the basic shelter-half, a tent designed for each service member to carry one half of the canvas, poles, and stakes. The two halves are combined to create a triangle-shaped shelter, olive drab in color, whose durable canvas provides protection from the elements. These shelter-half tents do not provide floor panels. The military replaced the shelter-half system with a small collapsible nylon tent. The two-man tent style can vary by service, but the system is basically a 40-inch × 72-inch ripstop nylon, free-standing tent with two openings erected by a collapsible pole system. The water-resistant flooring combined with an impermeable rain fly make the tent waterproof, and it is ideal for use in temperatures ranging from 0° F to 120° F and can withstand winds with a speed of 40 miles per hour. With the rain fly attached, the tents can provide more than 35 square feet of cover for the individuals and their equipment.

Food Service

Food service in field accommodations comes basically in two forms: (1) individual meals and (2) ready-to-eat (MREs) or in-tray rations designed to feed a group of service members. The MRE comes in a sealed plastic bag that contains an entire vacuum-sealed, precooked meal and a number of supplements and accessories. Originally consisting of only 12 menus, the MREs have expanded to more than 24 options that include ethnic and vegetarian options. Each MRE provides a main course (typically 8 ounces); crackers or bread; a form of spread, such as cheese, peanut butter, or jelly; a beverage powder; and a type of dessert, such as poundcake or cookies. MREs also contain an accessory packet containing coffee or tea, creamer, sugar, salt, matches, a plastic spoon, and toilet paper. A chemical flameless ration heater is packed with every meal, which requires only water to activate it. MREs

provide approximately 1,200 calories per meal and nearly all the required vitamins and minerals. MREs have a shelf life of 3 years, weigh less than 2 pounds, and can be easily transported, making them an ideal food option for austere conditions.

In larger cantonment sites, the military unit may use a tray ration system, which requires only that the vacuum packaged trays of food be heated. One tray ration heating system is designed to feed 500 troops per day by heating 18 tray packs of food at a time in the tray ration heater. The heater boils 15 gallons of water around the tray packs, heating the contents. The tray packs only need to be removed, opened, and then the food served. The tray ration system can be used in all climates, from -65° to 125° F. The heater system is constructed of heavy stainless steel, has no open flame, and uses diesel fuel. The tray packs contain both a main meal and side dishes, which are also heated. The meal system also comes with cans of fruits and vegetables, desserts, and accessories. The tray ration heating system is designed to be mobile and easy to use, providing a hot meal option to service members in a field environment.

The mobile kitchen, or containerized kitchen, is another field food service system, which is a 20-foot expandable, dual-chassis trailer that becomes a true food preparation and cooking area. The system provides onboard power, water, ventilation, and environmental control and includes convection ovens, tray ration heaters, sinks and dishwashing area, food preparation tables, and utensil storage racks.

Hygiene

Depending on the threat environment and the size of the field base camp, a military unit may provide field hygiene services to its members in the form of a tactical shower unit and laundry system. The shower unit was created to provide hot water showers in the field, utilizing a water heater, pump, and shower stalls. The system requires electricity for the pumps, diesel fuel for the water heater, and water storage tanks, making the logistical demand somewhat high. The system can be set up in only a few hours by trained personnel, and it allows for a platoon-sized unit to shower in less than 30 minutes. The system is typically set up linearly, with a GP tent at the entrance used for a changing tent, the shower system in the middle, and the pump, heater, and hoses at the back of the unit.

The tactical laundry system operates in much the same fashion as a standard washer and dryer in one's home. The system utilizes a trailer-mounted washer and dryer, which operate electrically and can wash up to 800 loads of laundry per day, using only 500 gallons of water. The system is designed for a service member to drop off the laundry and receive it the next day, a process referred to as dry-to-dry.

August Immel

See also Food; Logistics; Uniforms

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ADVERTISING, MILITARY-SPONSORED

Over the past 40 years, the U.S. military has increasingly become focused on advertising, branding, and imaging. With the help of high-powered advertising agencies, it currently spends hundreds of millions of dollars each year creating stunning marketing campaigns. These campaigns rival, and in some cases exceed, the efforts of many *Fortune* 500 companies. The military hires top-tier advertising agencies such as McCann-Erikson (army), Campbell-Ewald (navy), GSD & M (air force), and J. Walter Thompson (Marine Corps). These agencies also serve clients like McDonald's, Ford, Southwest Airlines, BMW, Disney, and Coca-Cola, to name a few. They help the military conduct market research and develop adver-

tising campaigns to reach potential recruits. These advertising campaigns make use of all available media, including television, radio, print, the Internet, video games, and sponsorships. This entry examines the history and types of U.S. military-sponsored advertising and details advertising campaigns of the army, navy, air force, and marines.

The military has had a long-standing relationship with advertising agencies; however, prior to the 1970s, advertising efforts were minimal. It was the military's transition to the modern all-volunteer force (AVF) that set the course for transition to full-blown adoption of commercial marketing and advertising. To achieve the goal of an AVF requires the use of monetary incentives, recruiters, and advertising. Military-sponsored advertising campaigns are designed to increase awareness of incentives, encourage potential recruits to seek more information, and increase receptivity to interactions with recruiters.

Among the service branches, the U.S. Army has been the leader in adopting, implementing, and even innovating advertising practices. This de facto leadership role is the result of the army's significant manpower requirements. Their advertising budget runs into hundreds of millions of dollars and is usually several times larger than the other service branches.

Pursuing Paid Advertising

Starting in the late 1960s, recognizing that the transition to the AVF was inevitable, Army Chief of Staff General William Westmoreland took the initiative and commissioned the Project PROVIDE study to understand how the army could embrace the transition to the AVF. Among the findings, the report specifically addressed how the army needed to cultivate its public image and embrace the use of broadcast media. At the writing of the report in 1969, the army's advertising budget stood at approximately \$3 million annually, with restrictions against purchasing commercial television and radio time. While broadcast outlets offered free airtime for army commercials as part of their public service obligation, these were not prime-time slots and did not hit the target audience. In all, the report specifically called for increasing the advertising budget to \$36 million and securing approval to pay for broadcast media advertising.

In 1971, the army requested, but did not receive, additional funding in the budget for paid media advertising. However, Congress granted the army

permission to reallocate other money and conduct a limited, 13-week paid broadcast media test. The use of broadcast media and the purchase of prime-time advertising slots allowed for greater control and saturation of the target audience. The results of the test showed that paid broadcast advertising increased awareness, motivated some to action, and led to increased enlistments. Furthermore, the test showed that broadcast advertising had residual effects as enlistments remained high for several months following the campaign. Unfortunately for the army, while the results of the test were successful, Congress was not so supportive. Congressional critics, such as F. Edward Hebert (D-LA), chairman of the House Armed Services Committee, were in opposition to government paid advertising. Hebert felt that it was the patriotic duty of broadcasters to give priority to military advertising and that if they did not do so, they should be threatened with Federal Communications Commission violations. This ban on broadcast advertising remained until Hebert's end as chairman in 1976.

Of particular interest is how the army went about creating the advertising campaigns. The army turned to social science to better understand what would attract recruits. Two themes emerged from this study, freedom and individualism, both the result of a generation scarred by the Vietnam War and steeped in consumerism. The army took this social science insight and worked with its advertising agency N. W. Ayer to modify the army's image to meet this new generation. The result of their work was the "Today's Army Wants to Join You" campaign. The message, a play on the Uncle Sam's poster stating "I Want You," attempted to convey that the army was not demanding service from a recruit but seeking to offer the recruit a partnership. Gone were appeals of patriotism and service to country. As might be expected, the army's generals were not impressed, but the Ayer group convinced them that they were not the target market and young people would respond to it, thus ceding creative control to the advertising agency. Since the use of broadcast media was prohibited, "Today's Army Wants to Join You" proceeded in print and radio only. These ads reflected what young men, and eventually women, coming of age in the mid-1970s wanted. For example, the tag line of one advertisement was the following: "We care more about how you think, than how you cut your hair." This represented acquiescence to

individual and personal freedom. Another ad featured the tag line "When was the last time you got promoted?" This ad was interchanged with four different photos: a White male, a White female, a Black male, and a Black female. Because critics of the AVF were quick to criticize the potential for an army consisting solely of minorities, the interchange was a deliberate attempt to avoid direct racial appeals to any specific market segment. Similarly, the ad with the tag line "If you think you'll miss the guys bring them along" depicts four White males and one African American male, in an effort both to ensure mass appeal and to place the subtle message that the army is racially inclusive. Future video ads copied this trend and eventually incorporated women in the same way.

Building Marketing Brands

Essentially, the army was creating its marketing brand. A brand is the definition of what an entity is, what it stands for, and how it conducts itself. It is these elements that differentiate it from the competition and attract customers. Most major businesses spend significant time and money to establish, cultivate, and sustain their brands. In the case of military advertising, the potential recruit is the consumer, and the other service branches are the competition. Thus, each service branch started to develop a brand that effectively sold the benefits of serving in that branch. Therefore, being able to associate a set of key traits and messages with a brand helped make the broadcast advertising more effective.

Army

As noted above, the U.S. Army sought to push past the tarnished Vietnam legacy and create a brand that represented service as leading to mutual benefits. Continuing to work with N. W. Ayer, it created the "Be All You Can Be" advertising campaign in 1981. The campaign was so successful that it was rated, by the industry advertising magazine *Ad Age*, number 18 in the list of the top 100 advertising campaigns of all time. The message was so popular and successful that it remained in use through 1999. The army continued to expand its brand throughout the 1990s to include the themes of character building and service to country. At the start of the new millennium, the army brought in a new ad agency, Leo Burnett, that created the "Army



"Army Strong" logo.

of One" campaign. The concept was based on real soldiers talking about their jobs in their own words. Thematically, the ads conveyed character building, discipline, and self-esteem by implying the opportunity to be transformed by mental, physical, and emotional challenges. The army took advertising to new heights with its new agency McCann Erickson and the 2006 "Army Strong" campaign, which used Samuel Bayer, a prolific and accomplished video director, to direct the video. Mark Isham, an Emmy award-winning composer, was commissioned to write the score.

Navy

Historically, the U.S. Navy has always had a challenge in recruiting people to serve from the interior of the United States. How do you entice someone to go to sea when they have grown up landlocked their entire life? To address this challenge, the navy has focused its branding on the benefits of service, educational opportunities, teamwork, and travel. As such, the advertising campaigns have followed suit. For example, the navy's 1976 campaign "It's Not Just a Job It's an Adventure," created by Bates Advertising, attempted to speak to the type of adventures one could experience by serving in the navy. The navy's next ad success was "You Are Tomorrow; You Are the Navy" and "You and the Navy, Full Speed Ahead," created by BBDO Worldwide in 1988 and 1990, respectively. The Campbell-Ewald ad agency created the "Accelerate Your Life" campaign in 2001. In all of these cases, the message of individual benefits and "you" resonated clearly. By contrast, the navy's 2009 "America's Navy. A Global Force for Good" focuses on the navy's impact on

history in terms of both warfighting and providing humanitarian support. Research suggests that the generation coming of age in the early 21st century is interested in making a difference beyond themselves. This ad campaign is targeted at those desires, a stark change from the "you" so prominent in the earlier campaigns.

Air Force

The U.S. Air Force has had a reputation for being at the forefront of cutting-edge technology. The pursuit of everything from jets to satellites to nuclear missiles and bombers has established and reinforced the air force brand. Consequently, the air force has been the destination for recruits who want to be trained in and work with cutting-edge technology. This resulted in an abundance of qualified recruits with limited recruiting efforts. Amazingly, the air force did not pay for television broadcast media until the late 1990s, when recruiting numbers dropped. Up until that point, they relied solely on public service announcements. The air force's signature advertising campaign was "Aim High," released in 1984. This ad promoted themes of improvement, achievement, and technological sophistication. The campaign held the highest recognition value, second only to the army's "Be All You Can Be," all the way until 2000. Unfortunately for the air force, the subsequent campaigns "Cross Into the Blue," "No One Comes Close," and "Do Something Amazing" have struggled to attract the same level of success. "Do Something Amazing" was particularly criticized because many thought that it was not specific enough to the air force brand and could have applied to any of the service branches. The air force replaced this ad in 2008 with "Above All," which is a double entendre, suggesting physically above others with air, space, and cyberspace technology as well as figuratively standing out above the other service branches. After a range of new slogans were considered, "Aim High" in 2010 returned as "Aim High, Fly-Fight-Win."

Marines

The Marine Corps has a long history of marketing its brand, born out of a desire to retain its autonomy. The Marine Corps brand has consistently promoted toughness, courage, and belonging to an elite organization. This was well represented in the marketing

slogan “A Few Good Men,” which dates back to the 1700s. However, with the AVF and a greater integration of women into the services, the marines had to expand their message to be more inclusive. Its ad agency J. Walter Thompson came up with “The Few, the Proud, the Marines.” This message highlights the exclusivity of the service, suggesting that being a marine is not for everyone, only those who seek to achieve greatness. This theme remains in use in modern marine marketing advertising. During the 1980s, the Marine Corps produced a memorable broadcast marketing campaign based around the themes of rite of passage and transformation. These video spots, complete with high computer-generated imagery effects, showed individuals being thrust into challenging situations and forced to conquer obstacles and fight dragons. On successfully completing the challenge, the individual transforms into a marine. Naturally, these ads were a metaphor for the transformation one would achieve by serving in the Marine Corps. When watched, these videos played as part video game, part movie, and part music video. To some degree, they came to represent the excessive end of service marketing advertising. *The Simpsons* television show cemented them into popular culture by creating a parody commercial in Episode 5, Season 18.

By contrast, the marines have recently opted for a more toned-down approach to their advertising. The 2008 ad “America’s Marines” featured the marines’ Silent Drill Platoon performing its routine at famous landmarks across the United States. This ad received positive feedback for showing a softer side and having a broader appeal. In conjunction with this campaign, in 2008 the marines for the first time started advertising directly to women. They ran ads in magazines and television shows that appealed to women. These ads focused more on patriotism than personal heroism and achievement. However, in 2009, the marines shifted back to a rougher, tougher, and grittier image with “America’s Marines.” This ad showed marine recruits being challenged with obstacle courses, crawling through mud, and being teargassed (including vomiting). The recruits are shown making this journey and on successful overcoming of these obstacles, they are transformed into marines—very similar to the 1980s commercials. In 2012, a new advertising campaign, “Toward the Sounds of Chaos,” highlighted the marines’ work providing humanitarian relief and

conducting peacekeeping operations under difficult and dangerous circumstances.

“Free” Advertising

While the service branches worked to navigate congressional funding for paid broadcast advertising, the Department of Defense (DOD) has had access to the ultimate advertising tool at its disposal for decades: Hollywood films. Hollywood film producers can receive in-kind use of billions of dollars of military equipment (e.g., tanks, planes, helicopters, nuclear submarines, aircraft carriers) and locations from the military for nominal cost. In return, the DOD retains creative control of the script to ensure support for recruiting and retention efforts by portraying the military in a positive way. Movies such as *Top Gun* (1986) not only show military service in a positive light, but they also enhance or glamorize it. There are no specific studies that quantify the effect movies have on recruiting, but plenty of anecdotal evidence exists to suggest that movies help recruiting efforts, and for the DOD it is essentially paid advertising without the cost. While all the branches have been represented by and make use of this medium, the one most pointed to as success was the navy’s role in *Top Gun*. Sensing the potential public relations impact of the movie, the navy coordinated recruiters at some of the movie showings to help boost enlistments. As one might expect, the navy saw a huge spike in naval aviator recruits after the movie came out.

Movies like *Top Gun* and, more recently, *Behind Enemy Lines* (2001), *Black Hawk Down* (2001), and even the sci-fi *Transformers* (2007) play to audiences as gigantic recruiting posters. The characters and scenes in these movies, and others like them, grab the audience and do not let go. Replete with millions of dollars in special effects, stunning music, and top-notch acting talent, these movies inspire, excite, and capture the imagination. Scenes like a Black Hawk helicopter being shot down and American soldiers bravely fighting wave after wave of Somali attackers, Owen Wilson traversing across Bosnia using only his training to outrun the militia pursuing him, or Tom Cruise and Val Kilmer, outnumbered and at a technical disadvantage in their F-14 Tomcats, successfully fighting off a bevy of enemy MiG fighters while a Joe Satriani guitar anthem blasts in the background—these scenes are

no coincidence. The end result provides the DOD with a low-cost way to drive high-value positive messaging of the military.

Research

Once the DOD and service branches started paying for broadcast advertising, they had to answer the question “Was it making a difference?” As with private sector businesses, quantifying advertising effectiveness is a difficult proposition. It is nearly impossible to identify the return on investment of advertising expenses, especially with broadcast media, where there is no metric as to how many people saw or heard the advertisement and whether or not they took action. Nevertheless, the DOD engaged the RAND Corporation to produce a study in 1989 that measured the effects of advertising testing. Their analysis found that advertising programs were good at increasing the number of potential enlistments and that national broadcasting produced significant results versus local radio spots. Interestingly, the authors determined that a concentrated short-term increase in advertising expenditures not only increased short-term enlistments, but it also created a residual effect over the following months. Furthermore, they noted that timing was important when deciding when to pay for advertising. Also, they found that recruiting was affected by the economy such that when it was bad, enlistments went up, with little need for advertising. Yet when the economy was good, enlistments declined, creating a good opportunity to make advertising purchases. This suggested that modulating when and how the advertisements were broadcast prevented oversaturation and dilution of the message. Also, the study demonstrated that combining media types could complement each other. For example, broadcast media evoked an emotional response, which could garner a potential recruit’s interest. By comparison, print media provided a cognitive experience, allowing the potential recruit to absorb the details of the message and offer. In this way, as it does for businesses, advertising provides a way to generate potential leads. Broadcast media also generate wide-scale impressions, the number of times people are exposed to a marketing message. Researchers concluded that infrequently purchased products, in this case enlisting in the military, required a longer sales cycle. Longer sales cycles required generating

and sustaining impressions for a much greater time frame. Broadcast media, and more recently Internet and social media campaigns, gave military advertising the requisite boost.

The Internet and New Media

As the Internet and social media have come on the scene, the DOD has taken advantage of these mediums. The Internet has the unique ability to simultaneously present an emotional and cognitive experience, combining the benefits of broadcast and print media. Also, Internet technology provides interactive, two-way, and quantifiable experiences. Historically, advertising campaigns used broadcast media to garner the attention of potential recruits, print campaigns provided detailed information, and the recruiter signed the recruit up. Now that entire process is streamlined. The individual service branch websites offer emotionally stimulating videos, and on the same page, they provide links to all the information a potential recruit might desire. The ability to chat live with recruiters directly is simply a click away, all within the same user experience. Furthermore, this technology is extremely cost-effective because once it is built, the ongoing costs are minimal.

Military advertising has also kept up with the development of social media. Social networking sites such as Facebook, Twitter, and Myspace (before its demise) provide an opportunity for potential recruits to connect with other people of like-minded interests without time and geographic limitations. From a cost perspective, social networking sites are free, so there is no monetary investment for recruiters to participate on these sites. Each of the service branches has a strong presence on these sites, and that effort has grown and adapted with the technology. The ability to make large-scale social connections with communities of people who share a common interest is quite helpful to each of the service branches. Through these sites, recruiters can facilitate meaningful interactions with potential recruits on a massive scale. Furthermore, these sites blur the lines between advertising and recruiting, which could change how advertising money is spent. However, social networking sites are not without their downside. Just as those who share similar interests in the military can easily congregate, it is easy for critics to form and create negative attention.

The army has a proven track record of advertising leadership and willingness to adopt new methods, as evidenced by its initial push into paid advertising in the early 1970s. The army took a similar initiative in 2002, pushing the online interactive experience further by developing the video game America's Army (AA). AA is a first-person shooter, massively multiplayer online role-playing game. First-person shooter games consist of on-screen views that mimic that of the character, and massively multiplayer online role-playing games allow for hundreds or thousands of players to play together simultaneously online. AA provides users with a realistic virtual experience of the army. AA is one of the most popular first-person shooter games in the video game industry. As of this writing, there are more than 10 million registered users of AA. The game's popularity has spawned versions that can be played on gaming consoles and cell phones, and there is even an arcade version. These games can be played in single and multiplayer modes simultaneously linked with users from all over the world. More important, for recruiting purposes, army recruiters can play the game and can build relationships with potential recruits.

Taking this concept further, the army has a 19,500-square foot mobile inflatable exhibition dome that houses the Virtual Army Experience (VAE). The VAE allows 40 players to become army soldiers for 20 minutes by participating in a virtual reality experience through Humvee and weapons simulators. The VAE travels around to various NASCAR and air show events, as well as to popular spring break destinations. Similarly, the air force has a mobile marketing tour called Command Center Alpha (CCA). The CCA provides an arcade-like environment where users can participate in various 3D experiences, videos, and games. The CCA travels around to sporting events, air shows, and festivals where potential recruits are to be found.

Conclusion

Paid military advertising has come a long way in a short time. The service branches and their advertising agencies have developed, refined, and implemented sophisticated advertising and branding efforts. The DOD has expended great effort and money to research the effect of recruiting and further

refine how money is spent. More impressive is the way in which military advertising efforts have kept up with changing forms of media. Originally adopting print and broadcast media, the DOD has been at the forefront of the Internet and social media. Advertising media and techniques will continue to evolve as the underlying technology changes. These changes will necessitate increasingly sophisticated advertising campaigns and techniques. Whereas once upon a time the DOD paid for newspaper ads, they may now choose to advertise keywords on Google. Instead of paying for ads during football games, they may choose to spend money advertising on YouTube. Regardless of the medium and the message, the fundamental premise remains the same: spending money to highlight the benefits of military service to attract recruits into the various service branches.

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See also All-Volunteer Force; Media Relations, Military; Public Affairs, Military

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AERIAL REFUELING

Aerial refueling is a technique whereby a tanker aircraft transfers fuel to a receiver aircraft while in flight. This capability was developed after much trial and error, and its refinement has dramatically altered the use of combat aircraft throughout the world by allowing aircraft to carry out missions while not being based within a theater of operations. This entry discusses historical developments and then describes the aircraft, systems, and techniques used for aerial refueling.

History

Early Developments

The Russian naval aviator Alexander P. de Seversky first speculated about aerial refueling during World War I. Following the war, Seversky immigrated to the United States, became an aeronautical engineer, and developed and patented the first aerial refueling device. The Seversky system used a grapple method whereby a crewmember in the tanker reeled down a hose to the receiver aircraft that plugged into the fuel receptacle of the receiver aircraft.

With the development of this system, the U.S. Army Air Corps conducted the first aerial refueling tests in 1923. These flights, which varied in range, featured one DH-4 biplane refueling another. The Air Corps followed these tests with another in 1929. During this test, two Douglas C-1 aircraft, still using the Seversky reel and grapple method, refueled a Fokker C2A, which flew continuously for 5 days. Because of these early events, the Air Corps paced development for the rest of the U.S. military throughout the history of the technique.

Cold War Developments

Aerial refueling did not receive much attention from the Air Corps following the 1929 tests until after World War II. This changed during the early days of the Cold War when the newly created U.S. Air Force embraced a global strategic bombing mission. The new tasking of the air force spurred a new round of aerial refueling development that saw the creation of a replacement for the Seversky system as well as new tanker aircraft for the jet age.

The first alternative for the Seversky system appeared in 1949. At that time, modified B-29 bombers, using a method called the looped-hose system, refueled a B-50 that flew a nonstop flight around the world. On the basis of this success, the looped-hose method became the preferred method of aerial refueling in the air force throughout the early 1950s. At that same time, the air force looked to address deficiencies in the looped-hose system by looking for a new aerial refueling technique. From the air force's research came the two aerial refueling systems that have made aerial refueling an integral part of U.S. military operations. The first system, developed by the Boeing Corporation, uses a flyable, retractable pipe to fuel aircraft. After some trial and error, the air force adopted this boom system due to the ability to transfer large amounts of fuel quickly over long periods. This makes the "flying boom" ideal for the air force's strategic bomber and transport fleets.

The alternative to the boom system is the probe and drogue method created by Flight Refueling Limited of Great Britain. The probe and drogue system uses an arrangement where the tanker aircraft deploys a fueling hose with metal basket on the end and the pilot of the receiving aircraft flies a probe into the basket to receive fuel. In terms of usage, the air force largely phased out the probe and drogue system for the use of their strategic bomber force due to the small size of the tankers using the system. However, the air force did adopt the probe and drogue system when developing a tanker variant (KC-130) for use in refueling Combat Search and Rescue and Special Operations helicopters. Finally, the U.S. Navy saw the probe and drogue system as an ideal system because it allowed the navy to use existing aircraft as tankers.

The early Cold War period also brought the development of new tankers within the U.S.



77th Fighter Squadron F-16 Fighting Falcons receive fuel from a KC-135 Stratotanker. The Stratotanker is from the Air Force Reserve's 916th Air Refueling Wing.

Source: U.S. Air Force photo by Staff Sergeant Suzanne Day.

military. To that point, the tankers used by the air force were converted propeller-driven bombers such as the B-29. However, due to the increased speeds of the service's jet aircraft, it became evident that the air force would need jet-powered tankers as well. Thus, the air force developed the KC-135 Stratotanker in 1956.

Tankers in Combat: Aerial Refueling in Vietnam, Desert Storm, and Conflicts in the 21st Century

The refinement of aerial refueling in the early Cold War period has had major implications for U.S. combat operations since that time. During the Vietnam War, when the majority of U.S. combat aircraft were stationed in Thailand, Guam, and the Gulf of Tonkin, aerial tanking allowed U.S. aircraft to perform combat operations throughout the region during the 9 years of the Vietnam War. The same held true during Operation Desert Storm in 1991. At the outset of the conflict, the United States did not possess the men or materiel in the Middle East

to conduct effective combat operations. To help close this gap, aerial tankers allowed the movement of troops and materiel to the region by transport aircraft. Moreover, once hostilities did begin, tanker aircraft played a vital role performing 15,434 refueling sorties. In addition, the U.S. aerial refuel capabilities have allowed U.S. aircraft to perform combat missions in Afghanistan and Iraq while being based outside those theaters of operation—in fact, from as far away as the United States.

Current Aerial Refueling Systems

Current aerial refueling systems and aircraft in the U.S. inventory are a blend of the systems and aircraft developed in the early Cold War period and new technologies. In terms of systems, the air force still relies on the boom system, while the navy still uses the probe and drogue system in their ship-board tankers. Moreover, the KC-135 remains the air force's main aerial tanker. However, despite the reliance on these tried and true systems and aircraft, the United States has introduced changes to the



U.S. Air Force Airman 1st Class Rick Taylor, a boom operator with the 78th Aerial Refueling Squadron at McGuire Air Force Base, New Jersey, refuels a C-17 Globemaster from McGuire, April 17, 2006.

Source: U.S. Air Force photo by Scott H. Spitzer.

concept of aerial refueling. On the one hand, the U.S. tanker fleet—with the addition of the KC-10 Extender to the air force fleet in 1981—is capable of refueling aircraft designed to use either the flying boom system or probe and drogue-equipped receiver aircraft. On the other hand, new versions of the KC-135 as well as the air force's next tanker (the KC-X) are capable of refueling multiple planes at the same time using multiple refueling points. These developments will ensure that the United States will maintain a strong aerial refueling capability into the 21st century.

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See also Boeing; Iraq War (2003); Navy, U.S.; Persian Gulf War; Vietnam War; War in Afghanistan

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AFGHANISTAN

Afghanistan is located in South Central Asia, surrounded to the north by Turkmenistan, Uzbekistan, and Tajikistan, and to the east and south by Pakistan and Iran. Approximately the size of the state of Texas, it is a landlocked country containing significant mountain ranges, including the Hindu Kush, as well as steppe and plateau regions. As a result, climate and precipitation vary significantly, though much of the country is characterized by a continental climate, with hot summers and cold winters. Afghanistan has an estimated population of between 25 million and 30 million, composed of a number of different ethnic groups. The capital city is Kabul, with a population of approximately 3 million. The cities of Kandahar and Herat, with populations of approximately 500,000 each, are important regional centers in the south and west, respectively. Its central location on the Eurasian landmass has subjected Afghanistan to numerous attempts at foreign influence and foreign invasions, and it has emerged in the past two centuries as a primary field of contest between global powers even as its population remains largely subsistence based. This entry examines the politics, economy, culture, and history of Afghanistan, with a focus on the rule of the Taliban and Afghanistan after the attacks of September 11, 2001.

Politics and Economy

The current political system in Afghanistan emerged from a constitutional Loya Jirga (Grand Council) established in 2003. Delegates from across the country approved a new order following the 2001 defeat of the Taliban and the subsequent selection by a multinational conference in Bonn, Germany, of an Afghanistan Transitional Administration headed by Hamid Karzai, a representative of a powerful political family and a strong opponent of Taliban rule. Promulgated in 2004, the new constitution provides for a highly centralized, presidential system. The president is head of state with responsibility for the executive, legislative, and judicial branches of the Islamic Republic of Afghanistan, including full control of the military. The president also serves as head of government; following pressure from Karzai, the presumptive president, and his supporters, no position of prime minister was created.

The constitution provides for direct elections based on universal over-18 suffrage for a president and two vice presidents, who may serve no more than two 5-year terms. Under the constitution, the president not only is charged with determining and executing state priorities but also has massive powers of appointment at all levels of government, including provincial governors. The constitution also provides a number of emergency or regulatory measures that allow the presidency legislative as well as executive power.

Two houses of parliament have limited but potentially important powers under the constitution. The lower house, the directly elected Wolesi Jirga, can approve or reject the president's choices for cabinet or the upper levels of the judiciary. It adopts laws and performs administrative tasks, including preparing annual budgets. The electoral system, which is not fixed in the constitution, nonetheless works against a chamber that can provide a counterweight to the presidency. Following his own popular election in 2004, Hamid Karzai refused to offer legal recognition to political parties, and only the names of the candidates were allowed to appear on the ballot. The Wolesi Jirga is elected through a single nontransferable vote system. In the first elections in 2005, a number of the 249 ridings featured several dozen candidates, with some winners receiving only about 10% of the vote. The upper house, the Meshrano Jirga, consists of 102 seats and is appointed by a combination of district and provincial councils and the president. Members serve terms of between 3 and 5 years. The Meshrano Jirga reviews laws created in the lower house, but its decisions can be overridden. Judicial power also reflects a powerful presidency, as only the government or lower courts, not the parliament or individuals, can initiate reviews of laws under the country's Supreme Court. The constitution requires adherence to the Hanafi school of Islamic law (the sharia), and leading judges must be trained only in Islamic law. In addition to the Supreme Court, the constitution provides for primary courts at provincial and district levels as well as appeals courts. Also recognized are informal dispute mechanisms, in particular district councils (jirgas), which, using customary alongside Islamic law, generally rule on civil, family, or minor criminal disputes.

Subsistence agriculture and family-run businesses characterize the economy for the majority of

Afghans. Wheat, sugarcane, fruits, and nuts are the main crops in a country where arable land is scarce (only about 12% of the total) and water supplies often unpredictable. Opium has risen since 2001 as a major export crop, with Afghanistan producing around 90% of the world's supply. International aid constitutes a substantial amount of Afghanistan's gross domestic product and has gained particular importance because the government cannot sustain itself through tax revenue, as the great majority of economic activity is unofficial. The country has a limited industrial base, supplying primarily cotton, textiles, sugar, and cement. Afghanistan appears to be rich in a number of minerals, including iron and copper, but these resources are yet to be tapped in any significant way. Unemployment is difficult to estimate in a subsistence postconflict economy with a high level of gray and black market activity, but it likely runs between 30% and 40%.

Society and Culture

Afghans have strong ethnic, village, tribal, and religious bonds that mediate social relations. Pashtuns are the largest ethnic group in the country, with about 40% of the population. The origins of the Pashtuns, once known as Afghans before the latter term came to designate a kingdom instead of a people, remain unclear. They appear to have coalesced from a number of migratory waves from the Middle East, Eurasia, and South Asia and asserted political dominance in the 18th century. They speak a common language, Pashto, and adhere to a common cultural code, the Pashtunwali. Governing all sorts of behavior and relationships, the Pashtunwali incorporates aspects of Islamic law and glorifies honor, bravery, prestige, and hospitality. The code stresses equality of adult males, and leadership is held through merit and reputation. Pashtuns predominate in southern areas of Afghanistan and have traditionally been a rural, and sometimes nomadic, population, though they have also formed the governing elites in urban Afghanistan. Beyond this ethnic identity, Pashtuns subdivide into a number of units based on common ancestry. Political struggles have notably occurred between the Durrani tribes, who have traditionally held power, and the Ghilzais of eastern Afghanistan.

Persians, or Tajiks, compose about 25% of the population and have traditionally formed the largest urban groups in the northern cities of Kabul and

Herat. Their settled oasis culture relied on small-scale local production of textiles and domestic goods as well as trade with nomadic peoples and along networks that connected Europe and Asia. Turkic ethnic groups, which appeared in Afghanistan beginning in the 7th century, include the more settled Uzbek peoples and primarily nomadic Turkmen. All of these groups, including the Tajiks, are found primarily in the north of Afghanistan and have substantial ethnic brethren in the Central Asian states of the former Soviet Union; strong village, kinship, and regional identities reduce the power of cross-border ethnic links, however. Among the 20 or so other ethnic groups in Afghanistan are the Hazaras, of Mongol descent, who live primarily in central Afghanistan. Unlike the Pashtuns, Tajiks, Uzbeks, and Turkmen, who are overwhelmingly Sunni Muslims, most Hazara come from the Shi'i branch and have faced persecution in the past centuries.

Islam plays a central cultural and social as well as religious role for the overwhelming majority of Afghans. The religion pervades daily life in terms of the way people see themselves and act, relate to and judge the behavior of others, and consider their place in the world. Most cultural rituals and common gatherings are related to a religious purpose. Afghans identify their Muslim background with a sense of national identity as well, as the country has resisted incursions from non-Islamic as well as Islamic powers over the course of its history. A conservative approach to Islam, combined with the patriarchal nature of the Pashtunwali, has led to the isolation and subjugation of many Afghan women, particularly in rural areas.

History: From the British to Soviet Invasions

Islam only emerged as a political force following the first British invasion of 1838–1842. Outside invaders had crossed the territories of Afghanistan for centuries, and the region had remained for long periods under Persian control before a Pashtun tribal leader, Ahmad Khan, marched into Kandahar and declared himself King of the Afghans in 1747. His ascent began the Durrani dynasty, which faced significant internal opposition from other Pashtun tribes, as well as minority ethnic groups. Dost Muhammad Khan, who assumed leadership of the Durrani dynasty in 1826, feuded with Sikh forces in the Kashmir and Peshawar regions bordering British

India. Unable to bring Dost Muhammad into their orbit, British forces invaded Afghanistan in 1838, installing a previous ruler, Shah Shuja, on the throne. Islam emerged as an important rallying cry against the foreign invaders, though only after British troops began raiding cities for taxation revenues. In 1841, the British sought to withdraw their 4,500 troops and 12,000 other support staff, but in the legendary story of an Afghan insurrection, only one Indian doctor returned alive. The British engaged in a policy of so-called masterly inactivity for the subsequent 40 years, agreeing to supply Afghan leaders with arms, until suspicions over a possible alliance of the Afghan king, Sher Ali, with Russian troops to the north prompted another invasion in 1878. Once again, efforts to install a pliable leader and pay off local chiefs had only temporary success; by 1880, British troops withdrew in the face of significant Afghan resistance, though the new monarch, Abdur Rahman Khan, proved happy to take British weapons in order to enforce his own rule. In 1893, he agreed to a border between Afghanistan and India known as the Durand Line, which left significant numbers of Pashtun tribes under British rule until decolonization, when they became a part of Pakistan.

Another failed invasion by the British in 1919 led to the international recognition of Afghanistan as a modern nation, turning the main political contest into one between young, modernist Afghans, who sought to implement greater legal rights for all citizens, including women, as well as European-style education, against tribal chiefs and religious officials, who worked to maintain traditional society. Conservative forces provoked the overthrow of the modernist king Amanullah in 1929. Afghanistan gained stability under Zahir Shah, who ruled from 1933 to 1973, but stagnated. Schools, electricity, and roads remained limited in scope, and the government largely ignored rural regions, which remained at subsistence levels, isolated from each other as well as the broader world. To make up for the lack of internal taxation revenue, Zahir Shah and his ministers manipulated Cold War rivalries to gain funds and support from both the former Soviet Union and the United States. By 1973, two thirds of the country's revenues came from foreign grants and loans.

Frustration over perceived Afghan backwardness prompted a number of secret societies among the young, university-educated elites in Kabul in the 1970s, at the same time as an Islamist movement developed in the provinces. Young communist leaders in the People's Democratic Party of Afghanistan played a role in a 1973 coup against Zahir Shah and then assumed power themselves in 1978. They introduced radical reforms that included land redistribution and equality for women. Resistance quickly developed in the provinces, and the Kabul-based communists found themselves with very few allies, unable even to find unity within their own party. Appeals to the Soviet Union for military intervention initially fell on deaf ears, as Moscow worried about the expense and consequences of being dragged into war. Fears of border instability and a potential Afghan turn toward the United States nonetheless led to Soviet troops crossing into Afghanistan on December 27, 1979, to support the Afghan communist government. Their presence prompted Afghans to rally for a jihad, or holy war, against the foreigners. The United States and Saudi Arabia, meanwhile, funded resistance movements based largely in Pakistan, with the help of Pakistan's intelligence service, the Inter-Services Intelligence (ISI). Soviet invasion forces at their height consisted of 100,000 troops, with 90,000 Afghan fighters, but they could not overcome local Afghan resistance as well as the numbers of foreign, largely Islamist forces supplied by outside powers. After years during which villages were bombed repeatedly and with even the subsistence economy severely damaged, the Soviets withdrew in 1988–1989 as their leader Mikhail Gorbachev emphasized domestic reform and positive relations with the West.

The Rise and Fall of the Taliban

Afghanistan degenerated from a proxy battle between forces loyal to the former USSR, the United States, Pakistan, Saudi Arabia, and other outside interests into a civil war in the early 1990s. The Communist People's Democratic Party of Afghanistan held on in some cities where the Soviets had made significant investments in infrastructure, but the ravaged countryside followed a number of different regional leaders. Millions left for refugee camps, primarily on the border with Pakistan, where they came into direct contact with Salafi Islamist movements.

The Soviet-sponsored government collapsed in April 1992 into a number of resistance groups of so-called mujahideen fighters, who began to organize tightly along regional and ethnic lines. The state essentially disintegrated as leaders, often called warlords, controlled districts where they had ethnic and tribal support and took turns fighting over the ultimate prize of Kabul. Against a backdrop of seemingly irresolvable violence and suffering arrived a group calling itself the Taliban, or religious students. The Taliban arose around Kandahar in 1994, apparently as a grassroots movement seeking to fight corruption and end arbitrary violence against average citizens. Many Talibs had links with Pakistan, through time in refugee camps and relationships with Islamist groups from the Soviet war. The ISI adopted the movement, supplying it with arms and advisors and allowing the Taliban to become the most coherent fighting force in the highly fractured country.

Led by the reclusive Mullah Omar, the Taliban gained control of Afghanistan in the late 1990s. Its ascendancy ended the civil war, and the movement began to implement its own policies that reflected the Pashtun background of its local soldiers and Salafi tenets imported from Pakistan and Saudi Arabia. The Taliban enacted extremely severe restrictions on women, driving them from public life where many had entered during the period of Soviet rule, and forcing them to wear full veils, or burqas. Public entertainment was banned, with the exception perhaps of the executions carried out for various crimes against the Taliban's conception of law. Islam, alongside a tacit Pashtun nationalism, served as an important rallying cry, with religious clerics for the first time assuming full power in a fractured country. Despite their Pashtun base, however, the Taliban only survived with foreign support.

Only three countries—Pakistan, Saudi Arabia, and the United Arab Emirates—officially recognized Taliban rule over Afghanistan, which received global condemnation for its brutal attacks on minorities, such as the Hazaras, its seemingly crude style of justice, and its attacks on women. The last factor in particular soured relations with the United States, as feminist pressure helped turn the Clinton administration against the Taliban, after initial hopes from some business leaders of building a pipeline through the country soured. The Taliban also sheltered, among any number of militant Islamist groups, Osama bin Laden, one of the “Arab-Afghans” who had come from Saudi Arabia to fight the Soviet invaders, who

later developed a virulent anti-Western strain of Islam along with followers he had met in the 1980s and with whom he formed the al Qaeda (the base) organization. The Clinton administration ordered a cruise missile strike against al Qaeda encampments in Afghanistan following its 1998 attacks on U.S. embassies in East Africa. Mullah Omar, although personally uninterested in spreading Islamist revolution outside Afghanistan, refused repeated global pleas to expel bin Laden and al Qaeda.

On September 11, 2001, a plot hatched by bin Laden and al Qaeda led to the hijacking of four U.S. commercial aircraft, two of which slammed into the World Trade Center in New York and one into the Pentagon in Washington, D.C., causing thousands of civilian casualties. After Mullah Omar refused to turn bin Laden over to the United States, Pakistan, its last ally, abandoned the Taliban, and the United States prepared to attack. On October 7, 2001, U.S. military operations in Afghanistan began. Ground attacks, largely through the Tajik and Uzbek dominated Northern Alliance, which had maintained resistance to the Taliban, began from the north. Rather than relying on significant ground forces, the United States used air power, coordinated by Central Intelligence Agency special operations officers on the ground. These special operations officers also used persuasion and money to turn former and present Afghan warlords against Mullah Omar's regime. Such efforts proved successful, as loyalty to the Taliban in Afghanistan was neither particularly broad nor deep and evaporated once they had provoked the strongest military power on the globe. Taliban fighters abandoned Kabul on November 12, 2001, and saw support even in their Pashtun heartland to the south melt away. Mullah Omar went into hiding, and Osama bin Laden apparently narrowly escaped capture at Tora Bora, on the border with Pakistan, in December 2001, the likely consequence of a heavy reliance on local instead of U.S. troops.

Afghanistan After 2001

The disappearance of the Taliban left Afghanistan without a functioning government, and the country lay in ruins after decades of invasion and war. The United Nations sponsored a meeting on the political future of the country at Bonn, Germany, in December 2001. Uniting various Afghan factions as well as potential donor states, the conference settled quickly on an interim government led by Hamid

Karzai, a Durrani Pashtun whose family's record of opposition and whose ability to interact with the international community trumped other potential contenders, including the former king, Zahir Shah, who had been removed in the 1978 coup. As the political system began to develop, Afghans faced a new reality: a country with a barely functioning economy and a regime sponsored by yet another foreign power, the United States. As Thomas Barfield has argued, the Afghans initially viewed U.S. troops favorably and anticipated the benefits of being linked to a wealthy state that had no obvious territorial claims on the country.

The initial U.S. presence failed to provide the Afghans with their two hoped-for goals of security and economic development. After the defeat of al Qaeda and the Taliban, the United States maintained only 7,000 troops in the entire country in 2002–2003, with an extra 5,000 from the International Security Assistance Force (ISAF) through the United Nations. Training of a new Afghanistan army also went extremely slowly; only 4,500 troops existed on paper in 2004, and many of those were poor quality. In the meantime, development work proceeded slowly, particularly outside the capital. International development funds were channeled through the Afghan government or foreign aid organizations; quickly, the population began to believe that each group was benefiting at their expense. International agencies have frequently sought to import developmental models that are not relevant to the Afghan situation and have little knowledge of the country's history or culture. Some Afghans resented the strings that came attached to aid, particularly those that had a cultural component; requiring the participation of women in certain projects, for example. Others believed that the United States lost interest in the country following the decision to invade Iraq in 2003.

Corruption rapidly became a hallmark of the new Afghanistan, emerging alongside insecurity and unemployment as a top concern of the population. Sources of and opportunities for corruption are many, from the siphoning of foreign aid to the awarding of state contracts, from smuggling to graft. Afghans have little loyalty to the new state, and for many engaging in activities that could be characterized as corrupt is a choice not just for personal enrichment but also to benefit family members or those in a particular village or region. Public offices are bought and sold at will. Local leaders see

no advantage in engaging with a centralized state other than to procure specific benefits for their home regions, from where they derive their support and legitimacy. At the same time, most of the benefits from corrupt practices remain with the elites rather than average citizens, whose standard of living remains extremely low almost a decade after the end of Taliban rule.

Opium production emerged in the 2000s as a primary tool for farmers to gain income, though many have been pressured by traffickers, including neo-Taliban forces, who use the burgeoning industry to fund a continuing and strengthening insurrection in Afghanistan. The country produces approximately 90% of opium worldwide, most of which is exported to Europe and Asia. Various Western and government efforts, including the burning of poppy fields, have failed to turn farmers away from the crop. Intensive regional eradication campaigns through powerful leaders have been shown to have some short-term success, but poppies remain a far more profitable crop than wheat or vegetables, particularly as farmers have difficulty getting foodstuffs to markets given the state of infrastructure and the local economy.

The insurrection in Afghanistan became noticeable in 2005. U.S. attention had diverted to Iraq, and the international community was not meeting obligations to supply effective aid to the state. All these factors weighed on the relatively inept Karzai government, which grew increasingly unpopular and whose authority did not extend far beyond Kabul. Forces assuming the Taliban mantle asserted themselves as U.S. troops withdrew from the south of the country, to be replaced with North Atlantic Treaty Organization forces from the United Kingdom, in Helmand province, and from Canada, in Kandahar province, in 2005. Direct military confrontations with Western troops generally ended in defeat, but the Taliban stepped up their use of improvised explosive devices in 2006. The post-2001 Taliban have stressed the national character of their resistance—the necessity to drive out the infidel and to restore Pashtun domination in the country, where the present regime is seen as overly filled with Tajiks—rather than Islamism, though elements of al Qaeda are certainly working on the Afghanistan-Pakistan border. Many of those who have joined the Taliban are in fact tribes that have lost local power struggles and seek to oust provincial governors and other officials who profess support for the Karzai government.

Instability in Afghanistan intensified during the 2009 election, which Hamid Karzai won only through massive voter intimidation and fraud. His campaign also involved renewing ties with former military leaders from the civil war era, some of whom were clearly implicated in the opium trade. The election posed great difficulties for the new U.S. administration under President Barack Obama, who had made stability in Afghanistan a key foreign policy goal. Resources devoted to the region, earmarked for military action, development projects, and police and military training have increased significantly. But the insurrection remains powerful, with more Western coalition troops killed in 2010 than in any other year: The numbers of the dead climbed from 60 in 2004 to 295 in 2008, and 711 in 2010, before dipping somewhat to 566, including 418 U.S. troops, in 2011.

The Pakistan government operates with at best ambivalent interests toward stopping the insurrection, which continues to gain strength from Pashtuns on their side of the border. Continued U.S. drone strikes on suspected al Qaeda and Islamist leaders on the Pakistan side of the Afghan-Pakistan border, which have resulted in a number of civilian casualties, have soured relations between the two countries. The ISI appear to have continued interest in supporting a Taliban return to government in the region, and the Pakistan government has periodically closed U.S. supply lines to Afghanistan, forcing the United States to use more expensive and complicated routes through post-Soviet Central Asia. The Taliban have used targeted assassinations and intimidation in addition to capitalizing on widespread disaffection with the present regime and the lack of reconstruction to become a significant resistance, launching a number of attacks in Kabul itself after 2010. The number of Afghan civilians killed in U.S. airstrikes has also helped fuel anger that the Taliban has exploited.

An Uncertain Future

Substantial challenges remain in bringing stability to Afghanistan and meeting the U.S. goal of a significant troop drawdown that began in July 2011 following a 2010 “surge” that at least contained mounting violence. Current U.S. and North Atlantic Treaty Organization plans envision a complete withdrawal of combat troops by 2014, though training

and support missions would continue. The Afghan army remains weak and, according to U.S. official and other sources, corrupt, plagued by nepotism and factionalism. Even as it has expanded rapidly in number, reaching a listed strength of 173,000 in October 2011, U.S. advisors admit that Afghan forces are far from being able to stand on their own in fighting the insurgency. The Afghan National Army, under control of the president through the minister of defense and a military commander, is trained by Western countries, with the United States serving as the “lead nation” through the Combined Security Transition Command-Afghanistan. Since 2001, the United States has provided more than \$13 billion to the army and maintains responsibility for supplying it with weapons. The Afghan National Army is divided into five combat corps across the country in an effort to reflect the ethnic balance of the country’s population. The size of the Afghanistan national police stands at approximately 115,000. Alongside the rapid growth of both institutions has been the fear of increased Taliban infiltration as well as the fear that both are far from being able to operate both independently and effectively against internal opposition.

As of May 2012, U.S. troop strength in Afghanistan numbered 90,000, up from 35,000 at the end of the Bush administration. In addition to the numbers of U.S. troops are 50,000 soldiers supplied by the 50 North Atlantic Treaty Organization or coalition countries operating under the ISAF. As of 2012, the largest forces outside of the United States were contributed by the United Kingdom, Germany, Italy, and France. The ISAF has supported a number of Provincial Reconstruction Teams that blend military and civilian missions, seeking to establish environments sufficiently secure for the effective distribution of foreign aid to projects like infrastructure and school building.

Skirmishes and attacks continue to rage across the country. The numbers of Afghan civilians killed in the cross fire, including from Taliban attacks and U.S. and ISAF strikes, has consistently risen since 2006, numbering 3,021 in 2011. The weakness of the presidency, the prevalence of corruption, the uncertainty of the international commitment to the country, and the continued strength of the insurgency combine to offer a pessimistic vision for the future. In 2010, President Karzai committed to reintegrate insurgents into mainstream Afghan

life and negotiate with so-called moderate leaders of the Taliban. Efforts to initiate peace talks have maintained a sporadic character, however. Taliban groups continue to mount effective resistance to Western forces and capitalize on their self-designated status as defenders of an Islamic Afghanistan against outsiders. The U.S. determination to withdraw combat troops by 2014 has overshadowed talk of its future commitment to the country. In the meantime, despite occasional promising signs, Afghanistan remains a country with a largely black market and opium- and foreign aid-driven economy.

Jeff Sahadeo

See also al Qaeda; Central Asia; Counterinsurgency; Guantanamo Bay Prison; Iraq War (2003); 9/11 (2001); North Atlantic Treaty Organization; Petraeus, David; War in Afghanistan

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AFGHANISTAN WAR

See War in Afghanistan

AFRICA, SUB-SAHARAN

The military has been, and remains, one of the most powerful institutions in sub-Saharan Africa. While some forces grew out of structures from the colonial period, others emerged from the independence movements that fought for liberation over the past half century. This entry discusses the history of sub-Saharan Africa, focusing on its exploitation by

Europeans, sub-Saharan Africa's struggle for independence, and the influence of its military.

Although some military forces have proven critical in maintaining internal security, a fair number have been instrumental in suppressing political opposition groups and undermining democratic practice within and outside their own borders. A pertinent illustration comes from the West African country of Mali.

In late March 2012, roughly a month before the presidential elections, Captain Amadou Sanogo seized control of the government of Mali. Sanogo justified the coup d'état by asserting that he and the army would squelch the Tuareg freedom struggle in the northern portion of the country. Tuareg forces repelled the Malian army, but the political vacuum brought in numerous rebel groups, including Ansar Eddine, which appears to be responsible for the sacking of historic sites in Timbuktu. Nearly half a million people have been displaced by the fighting, and a large humanitarian crisis seems to be brewing. The secessionist Tuaregs have sought international aid on the basis that they are the "new ally in the war on terror." It would be easy for Africa's critics to dismiss Mali's problems as the result of cultural inferiority or of giving people freedom before they are prepared for it. The reality of Mali's situation is much more complex and illuminates many of the larger issues regarding the military in sub-Saharan Africa.

The Scramble for Africa

Although Africa is the birthplace of humanity and boasts some of the world's oldest civilizations, modern sub-Saharan Africa is—in many ways—a very recent invention. The nations of sub-Saharan Africa grew from the violent roots of European imperialism. The Portuguese, Spanish, Dutch, French, British, and Belgians, among others, alternately explored the African coasts and pushed as far inland as possible in a colonial enterprise aimed at exploiting the vast, seemingly limitless natural and human resources of the continent. The pace of encroachment and exploitation accelerated in the mid-19th century. In the process, European interests fought with thousands of indigenous ethnic groups and among themselves. In an effort to prevent a full-blown war, Germany's first chancellor, Otto von Bismarck, organized and hosted a conference in 1884 to preserve the delicate European balance of power that the African colonization threatened.

The participants in the conference agreed to the establishment of "spheres of influence" on the continent, the respect for which relied heavily on the ability of the colonizing power to maintain a sufficient military force to police the area. The conference provided a viable outlet for the latent hostilities between European nations as they now could direct that aggression more effectively against Africans and other potential industrial interlopers (e.g., the Americans and the Japanese). The conference also created a structure for dispute resolution that could mitigate hostilities between imperialists. At the conclusion of the conference the following year, the "scramble for Africa" heated up as conference participants raced to coerce agreements with indigenous leaders and impose their military might on their spheres of influence. Within 10 years, only a handful of African states remained independent; two of those were White-minority regimes in southern Africa. In the short term, the Berlin Conference and its aftermath destroyed African autonomy and self-governance. Its legacy continues to fuel the struggle over borders, both literal and metaphorical; to wit, most of the national boundaries that currently exist were created by representatives of Europe's governments for the needs of Europe, and these boundaries failed to respect preexisting areas of ethnic settlement.

Although European domination of the continent cemented itself at the turn of the century, every colony was inherently unstable for various reasons. The serene image of functioning colonial governments, resource extraction, and peaceful White-minority settlements hid the unsettling reality of intersecting social fissures. The colonial subjects consisted of dozens—sometimes hundreds—of different ethnic groups, with multiple languages, traditions, and spiritual systems. These subjects were thrust together because of the needs of the European metropolises. Because of the "Principle of Effectivity" that emerged from the Berlin Conference, a small elite of male African leaders emerged to facilitate and maintain the colonial state. These elites claimed to act and speak on behalf of "the people," but they often found themselves facing tremendous opposition from the masses of colonial subjects.

Prior to colonization, millions of African women enjoyed an autonomy and social power unfamiliar to many women in Europe or Asia. Although pre-colonial Africa was not a utopia of gender equality, colonialism brought with it an intensification

of patriarchal norms and the removal of women from positions of political, economic, or cultural leadership. Despite the fact that many European powers justified the creation of colonies or “protectorates” as part of a “civilizing mission,” education was largely restricted to vocational training, if that. Even as the Atlantic slave trade ended, forced labor and other forms of coercion placed the brunt of economic extraction on Africans as workers. Add to these factors the constant acts of resistance to colonial rule—whether outright rebellion or work stoppages, for example—and one can understand the constant need for a strong military presence in colonized Africa. For example, the British struggled mightily to subdue the popular uprising led by Yaa Asantewaa in the Gold Coast, the Shono people staged their first Chimurenga against the British control of Rhodesia, and the Herero rebellion of 1904 ended in the Herero-Nama genocide perpetrated by Kaiser Wilhelm’s imperial forces in German Southwest Africa. The latter provides a pertinent case in point.

The Herero lived in their ancestral home known as Damaraland, part of modern-day Namibia, and herded cattle next to numerous ethnic groups, like the KhoiKhoi and the Nama. Just before the Berlin Conference, the German businessman Franz Adolf Luderitz claimed to have purchased land from the Nama. Despite the fact that the German government knew that the deal was fraudulent, it declared the area a German protectorate and the colony of German South-West Africa was born. Herero’s leadership, facing repeated attacks by the Ikhowsin people, signed a treaty of protection with the German colonial governor in 1885; importantly, this treaty did not cede Damaraland to the Germans. Over the next 5 years, Herero leaders complained to the Germans about the ineffective protection offered by the colonial military and the fact that German soldiers raped Herero women and girls with impunity.

In 1890, the son of the Herero chief made a separate deal with the Germans; in return for German assistance in making him the paramount leader of the Herero, he ceded large tracts of Damaraland to the colonial government. Immediately thereafter, the German *Schutztruppe* (protection force) came to pacify the region; most Herero were forced into slavery, and their lands and cattle were confiscated for use by White settlers. At the turn of the century, the Herero learned of the colonial government’s plan to build a railroad across the remainder of

Damaraland to connect the inland White settlements to the Atlantic coast and to remove the Herero to “native reserves.” The Herero and Nama revolted in late 1903 and early 1904. The Germans responded by slaughtering rebels and noncombatants alike, forcing tens of thousands to flee to the desert where their death by thirst and starvation was all but ensured. All survivors were herded into concentration camps, where they were used as slave labor for private enterprises or as human subjects of medical experiments.

Decolonization

Immediately following World War II, the major European powers that continued to hold African colonies intensified the extraction of wealth from their holdings as a means of reconstruction. Not only did the postwar period witness an increase in the immiseration of colonial subjects, but it also furthered radicalized nationalist movements intent on gaining independence. Even though Western leaders in capitals like London, Paris, and Washington, D.C., worried that Africans were not ready for self-governance, these movements persisted in their demands and struggles. Britain’s Gold Coast became the first independent sub-Saharan former colony, introducing itself to the world as Ghana in 1957. In 1960, 17 more nations emerged, and by the end of the decade most of the continent was no longer under direct European control. The Portuguese stubbornly held on to their colonial possessions Angola, Cape Verde, Guinea-Bissau, and Mozambique, even in the face of armed revolutionary movements. Meanwhile, the White-minority regimes of Rhodesia and the Union of South Africa clung to power by violently suppressing popular sovereignty movements and branding those organizations as “terrorist.” By the mid-1970s, the wars of independence deprived Portugal of its African holdings; Namibia and South Africa joined the parade of freedom in the 1990s.

It would be a mistake to imagine that the European powers served independence to the Africans on a silver platter. Not only did the Africans have to fight for freedom, but that freedom often came at the cost of colonial governments destroying valuable infrastructure or looting the colonial treasury. Congo’s Patrice Lumumba, for instance, explained to American diplomats in 1960 that his request for American aid was based, in part, on the fact that the departing Belgian colonial officials had stolen

the new nation's supply of gold as they left. For their part, African statesmen were unable to reach a consensus on a path toward development and self-actualization. Some, like Ghana's Kwame Nkrumah, envisioned a Pan-African future in which all of the new nations coordinated their actions toward complete freedom. Others, like Felix Houphouët-Boigny, rejected Pan-Africanism; some did so because they distrusted Nkrumah and interpreted his message as a desire to be the supreme leader of the entire continent, while others were uncomfortable submitting to a continent-wide, federated authority so soon after finally ending colonization. Adding to the shifting landscape was the intense global competition between the West and the Soviet bloc. All of the new nations on the African continent were born at the height of the Cold War. Despite the strength of the nonaligned movement that grew out of the 1955 Bandung Conference, emerging African states were compelled to participate in the Cold War, and the struggle over communism took precedence over the needs of the nations' citizens. More often than not, political independence simply ushered in a neocolonial form of domination, in which many of the new nations remained economically and politically subservient to the West.

The instability of the colonial state became the fragility of the new independent state. Few African leaders were able to successfully navigate the maze of conundrums without alienating either significant portions of their own populations or Western powers (or both). Others simply used the power of the state for personal aggrandizement. Many of the new states' economies relied almost exclusively on exports of agricultural raw materials rather than finished products. In states that tolerated multiple political parties, most were formed along singular ethnic or religious lines. Because the very idea of the nation-state was unclear and contested, so too was the identity of each state's citizens. Many of the competing ethnic groups that had been compelled to live together under colonialism felt only a hazy connection to one another in the postcolonial nation. Numerous individuals and groups within each ethnicity yearned for or celebrated a romantic precolonial past. Thus, it was not clear which group or groups were entitled to control the state or enjoy its benefits. Women, fearful of being shunted aside again by the new emphasis on development and/or industrialization, organized against formal

institutions of power. National leaders leaned heavily on military power to hold their nations together, to maintain personal power, or to attain control of a government. In 1960, Lumumba relied on Soviet munitions (after the United States declined to provide assistance) to combat the Katanga secession. On the opposite end of the political spectrum, the conservative leader of Gabon, Leon M'ba, survived a military coup only through the intervention of French paratroopers. It is worth noting that the Gabonese public objected to the French intervention and saw M'ba's dissolution of the National Assembly—an act that precipitated the coup—as a quest to further consolidate his personal power. Yet, because of French military dominance, the people and the organized opposition could only protest the restoration of M'ba and regard him as a stooge of the French. A similarly combustible mix of factors also played itself out in the Nigerian civil war.

The civil war in Nigeria, also known as the Nigeria-Biafra War, began in the summer of 1967 and lasted for about 2½ years. The conflict grew out of the secession of southeastern provinces that declared themselves the “Republic of Biafra.” Several interlocking factors formed the foundation for the crisis: (a) competition between British, French, Dutch, and Italian oil companies for control of the vast Nigerian oil fields; (b) the British colonial legacy of having divided Nigeria into three distinct regions; (c) competition between and among the dominant ethnic groups from the separate regions—the Igbo, Yoruba, Hausa, and Fulani; (d) an attempted coup d'état and countercoup by junior military officers; and (e) religious intolerance exacerbated by accusations of electoral fraud. The countercoup resulted in the ascendance of Lieutenant Colonel Yakubu Gowon's rise to power; Gowon was a Christian from the largely Muslim north of Nigeria and hailed from a minority ethnic group. When the Igbo-dominated southeast declared itself an independent state on May 30, 1967, the Gowon-led military government met with the secessionists and hashed out several different accords. However, all of the efforts to create a new form of national unity collapsed, and the military government initiated a “police action” on July 6. Although the war was primarily a stalemate for roughly the first year of fighting, the Nigerian army eventually encircled the Biafrans and imposed a blockade that launched a humanitarian crisis. With British support, the

Nigerian army ultimately forced the Igbo surrender through a major offensive that captured several Biafran towns by January 11, 1970. Many officials estimated that up to 3 million people lost their lives (mostly through starvation and disease) due to the war. The problems of Biafran secession are echoed in the contemporary struggle of the minority Ogoni people, who have protested against oil extraction and environmental devastation by Royal Dutch Shell, even as the Nigerian military has sought to violently suppress this mass movement.

In more recent years, foreign investment in sub-Saharan Africa by powers like China has complicated the political and social landscape. Some observers believe that the competition for oil between China and the United States was at the root of the genocide in the Darfur region of Sudan, which ultimately led to the bifurcation of the country. The weakness of the Democratic Republic of the Congo is borne out by both the war-induced atrocities against women and children and by the state's inability to formalize the coltan mining industry. Columbite-tantalite, or "coltan," is a mineral critical to the high-tech economy—some suggest that it is the lifeblood of gaming systems, cell phones, computers, and tablets. Business interests from across the developed world appear to be fueling proxy wars in Central Africa as a means of controlling the price and supply of coltan. In an interesting twist, Chinese investment in Angola has significantly enhanced the latter nation's economy. However, because of the historic lack of an Angolan professional class, Portuguese migration to its former colonies has increased dramatically. Portuguese professionals who cannot find gainful employment in their recessionary home economy are flocking to Angola for work as engineers, lawyers, and managers, among other things. External intervention has taken many forms and often exacerbates military relations with civil society, which brings us back to Mali.

Over the past 10 years, commentators on Malian society have asserted that the U.S.-led initiatives to have the central government crack down on northern Islamic groups have created a crisis where none had existed. Despite the close relationship among the government, the military, and the U.S. African Command, Mali has become less stable rather than more secure; the noted historian Vijay Prishad blames U.S. African Command for providing a perverse incentive to the Malian state to take a military

approach to the question of Tuareg self-determination. The aforementioned Sanogo was trained under the U.S. African Command, and his actions not only undermined democracy but, by fostering instability, strengthened the military at the expense of civilian authority. Not all military institutions in sub-Saharan Africa behave in this way. The following discussion provides examples of the size, influence, and professionalism of Africa's armies.

Africa's Armed Forces

West Africa

Although Ghana has one of the smallest standing armies (active troops per 1,000 citizens) in the world, it is considered to be one of the continent's most professional and up-to-date armed services. The military was formed on independence in 1957 and remained out of politics for the next decade. However, the military asserted itself into civilian politics by staging a number of coups from the late 1960s into the 1980s. At present, Ghana's three service branches—army, air force, and navy—have roughly 7,000 active personnel. Ghana's soldiers have consistently participated in UN peacekeeping missions on the continent and in other parts of the world, like Lebanon.

The Nigerian army grew out of a colonial precedent, the Royal West African Frontier Force. The Nigerian military fought in a civil war in the late 1960s—the Biafran War—and has participated in peacekeeping missions abroad. However, the defeat of secessionist forces gave exaggerated importance to the military in both resources and national power. As a result, the military has consistently intervened in national politics and suppressed civilian dissent, whether in the form of ethnic/religious violence or regional communities' protests against multinational corporations. Perhaps because of its level of activity in and outside the nation, the Nigerian Armed Forces are one of the continent's largest, with roughly 85,000 soldiers. Traditionally, many of its officers have trained in Pakistan.

In Guinea, the army—like the government—received its principal support from Eastern bloc countries. When Prime Minister Sekou Toure uncovered a plot within the army leadership to overthrow him or lead a secession of central provinces, the Toure government developed the militia into a counterweight against perceived political subversion.

Guinea's soldiers tried to maintain peace in Sierra Leone during the early 1970s and were part of a UN peacekeeping mission in their neighboring country from earlier in this decade. Following the death of Toure in 1984, Lansana Conte led a military coup against a transitional government. Conte left the military but used the loyalty gained in his former position to stifle democratic reforms. In time, he faced growing opposition from his former comrades in arms in the early 1990s, especially regarding their poor living conditions. With nearly 20,000 active personnel and 1,800 reserves, the Guinean military constituted a formidable threat to civilian authority. At present, Captain Moussa Camara is the nation's leader; Camara declared himself president following the death of longtime president Conte in 2008.

East Africa

Ethiopia maintains one of the world's largest armed forces, ranking 23rd with roughly 400,000 troops. Although Ethiopia's military traditions span a millennium in this very old nation, its modern forces were organized in the late 19th century and achieved global fame during the First Italo-Ethiopian War, when they defeated an Italian invasion force at the Battle of Adwa in 1896. Under Emperor Menelik II, the professionalization of the armed forces continued as Ethiopians defeated British colonial forces in skirmishes that were part of imperial expansion efforts during the Second Boer War. At that time, Ethiopian officers also received training in Czarist Russia. The modernization of the Ethiopian armed forces continued under Emperor Haile Selassie and accelerated after the Ethiopians liberated themselves from Mussolini's grip in 1941–1942. As the Cold War dawned, Ethiopia remained a staunch ally of the United States and sent more than 3,000 combat troops to Korea. The Ethiopian Revolution of 1974 that toppled Haile Selassie also led the new government to turn to Eastern bloc nations for training and resources. It was in this period that the military grew substantially and honed its conventional and guerrilla tactics in the Ethiopian Civil War, campaigns against Eritrea, and conflicts with the Somalis during the Ogaden War. With the collapse of the Soviet Union and the rise of concerns regarding Islamic fundamentalism, Ethiopia has joined the U.S. Global War on Terrorism and has invaded Somalia on numerous occasions under the pretext of combating potential terrorist organizations. In addition,

Ethiopian troops have served in UN peacekeeping missions from Liberia to Darfur.

The military in Sudan has maintained a central place in national affairs because of long-standing conflicts between the North and South of the nation. The military is quite large, by African standards, with more than 100,000 soldiers, nearly as many reserves, and 17,500 paramilitary personnel. Although the British colonized the entire area of modern-day Sudan, they administered the two regions separately. This division was reflected in the establishment of competing military forces—the Sudan Defence Force in the north and the Equatoria Corps in the south. Prior to independence, the south sought self-determination because it considered itself culturally, linguistically, and religiously distinct from the north. However, Britain gave Sudan independence as a unified sovereign state, resulting in ongoing conflicts that began, in part, with the mutiny of the Equatoria Corps in 1955 (with a slight lull in fighting from 1972 to 1983). Toward the end of the first civil war, army officers in the north took power in Khartoum and only allowed for a civilian-led government following a negotiated peace settlement in 1972. In the wake of the second civil war (which technically ended in 2005), Khartoum relied on militias to augment the regular fighting force. These paramilitary forces have been alleged to be responsible for genocidal attacks on southerners over the past decade. Neighboring countries like Egypt and Libya have sided with the central government and military, while other nations like Ethiopia, Uganda, and Kenya have supported the Anya Nya independence movement. At the height of the Cold War, the United States provided more than \$100 million to Sudan over a 5-year period. However, the national government and the military find their primary support from China, Russia, and Iran.

Just south of Ethiopia, the military in Kenya has maintained a largely favorable reputation. Because British colonial Kenya had a large White settler population, there was no 19th-century precedent for the current armed forces. The British did raise a multi-battalion regiment of soldiers from their East African colonies known as the King's African Rifles (KAR). The KAR included such diverse personalities as Idi Amin, Roald Dahl, and Hussein Onyango Obama (the current U.S. president's paternal grandfather). The KAR fought in British expansionist missions in Somalia, then in World Wars I and II. However,

the units of the KAR in Kenya that became chiefly responsible for suppressing the Mau Mau rebellion of the 1950s included some Indians and Somalis and excluded Kikuyu and Kamba, the ethnic groups that made up nearly half of the indigenous population. Like the military in other African nations, the Kenyan armed forces have participated in numerous peacekeeping operations. Despite its size—roughly 65,000 active service members—the Kenyan military has not overtly asserted its influence on civil society. In addition to avoiding the appearance of impropriety with respect to civilian authority, the Kenyan military has been commended for integrating female soldiers into regular units (in 2000). The country as a whole has maintained remarkable stability in its multiparty representative democracy. However, because the service charter stipulates that the armed forces “will defend the country and . . . support the Civil Power in the maintenance of order,” Kenya’s military has intervened in domestic disputes—most notably in the violence that followed the 2007 national elections.

Central Africa

One of the worst hotspots on the continent is in central Africa, and the military in Burundi is representative of some of the institutions responsible for continued hostilities and atrocities in the region. Burundi became an independent nation in 1962, when the Belgians agreed to decolonization and separated the UN mandate territory then known as Ruanda-Urundi. Despite Burundi’s launch as a constitutional monarchy, Burundi played host to tremendous ethnic conflict between the majority Hutus and the minority Tutsis, like its more famous neighbor Rwanda. Almost immediately, the military played a role in installing or sustaining anti-democratic regimes in the country. In 1965, King Mwambutsa IV after the assassination of the elected Hutu prime minister—Pierre Ngendandumwe—appointed his private secretary, a Tutsi, as prime minister. The military violently suppressed Hutu dissent that resulted from this decision. In 1972, the military again struck at the Hutu population and created the simmering political conditions that ultimately led to civil war in 1993; over the years, this repression included purging Hutus from the nation’s security apparatus. The flashpoint of 1993 was particularly significant because of the assassination of Melchior Ndadaye—the first democratically elected

president and a Hutu. Fighting within Burundi spilled across its borders in Tanzania, Uganda, the Democratic Republic of the Congo, and Rwanda. Complicating matters, regimes in Congo have funded some Burundi rebel groups while Burundi’s army and other militias have sought to destabilize the government in Kinshasha. Given the developments over the past few years, perhaps civil society will be able to rein in the Burundi military. Although peace accords have been notoriously fragile, the transformation of the last rebel group—the Forces for National Liberation—from a paramilitary to a political organization is an important step toward stability. Moreover, the ethnic integration of the government—now composed of 60% Hutus and 40% Tutsis—is a cause for optimism. However, fear over resumed violence remains, partly, because (a) the issue of integration of former rebel forces into the Burundi military remains unresolved and (b) most of the political parties boycotted the 2010 summer elections.

Southern Africa

The Armed Forces for the Defence of Mozambique emerged from the 1992 peace settlement of the young nation’s civil war. By 1994—and with the help of nongovernmental organizations and UN mediators—the Armed Forces for the Defence of Mozambique grew from the integration of rebel forces with the military units of the revolutionary government. Given the tremendous strides made by civil society organizations and the increasing legitimacy of the government, the military in Mozambique has remained subordinate to civilian command. The ability of the democratization to take hold also is indebted to the end of the Cold War and the collapse of the apartheid regime in South Africa. It is worth mentioning that no disturbances followed the president’s firing of the defense chiefs in 2008.

Although the Republic of South Africa (formerly called Union of South Africa) has a military tradition dating back to the 16th century, the South African National Defence Forces grew out of the first postapartheid elections in the nation in 1994. The precedent for South African National Defence Forces supported the racist repression of indigenous African populations and was a major source of destabilization and violence throughout the region. The new military was constructed on a

mandate from the new constitution and grows from a blending of the traditional forces and the guerrilla factions of the African National Congress and Pan Africanist Congress. The new military is divided into four units—army, navy, air force, and Military Health Service—and has active personnel of nearly 75,000.

Budget

Another way to assess the influence of the military in sub-Saharan Africa is through the governmental budget process. With a handful of exceptions—like South Africa and, more recently, Sierre Leone—most of the nations in Africa lack strategic defense plans, threat assessments, and comprehensive and transparent budgetary guidelines. These public management gaps mean that there can be little accountability in procurement, unnecessary redundancies, and waste. Even in countries in which the military budget comprises a relatively small portion of government spending, these problems can lead to the exaggeration of military “necessities,” corruption, and an environment in which civilian authority becomes fragile.

Conclusion

Given the lack of consistent civilian control over Africa’s various militaries, it is likely that militaries will maintain an exaggerated influence on the continent for the foreseeable future. Because the national boundaries of current African countries were based on the colonial lines drawn in Berlin in the 19th century, many observers imagine that African nations will either expand or shrink to fit the needs of their various peoples. For good or ill, the military will help shape the evolution or devolution of African nation-states.

George White Jr.

See also Liberia; Rwandan Genocide; Somalia

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AFRICAN AMERICANS

On October 1, 1989, Army General Colin Powell became the first African American chairman of the Joint Chiefs of Staff. His ascension to the highest uniformed post in the military was a personal triumph for Powell and for all African Americans in the military. It was also the culmination of more than 200 years of effort by Blacks to serve their nation and to be recognized for it. This entry discusses the history of African American men and women in the U.S. military and examines racism and integration in

the armed forces and the fluctuating enlistment rates over the years.

Military Service in the 18th and 19th Centuries

The history of African American military participation in the United States is one of the most striking examples of the connection between a people's right to bear arms and their concurrent quest for full and equal citizenship. African Americans have served in all of America's wars, often in segregated units and with little or no official recognition. There were Black minutemen at Lexington and Concord and at Bunker Hill, and approximately 5,000 African Americans saw service with the Continental Army. After the revolution, the new federal government banned Black Americans from serving in the Militia in 1792 and in the Regular Army in 1820. The restrictions on service were lifted during the Civil War in July 1862, and nearly 186,000 African Americans served as soldiers, accounting for nearly 10% of the Union Army's strength, while another 30,000 served in the Federal Navy. Black sailors served on integrated ships, but the United States Colored Troops served in segregated units. The vast majority of officers and noncommissioned officers (NCOs) in the Black regiments were White, but about 100 African Americans served as commissioned officers and another 7,000 as NCOs. Approximately 38,000 Black Americans died in the war. The Army Reorganization Act of 1866 led to the formation of four Black regiments, the 24th and 25th infantry and the 9th and 10th Cavalry, the famous "Buffalo Soldiers" who served with distinction during the Plains Indian Wars. Black regulars also fought in the Spanish-American War of 1898, earning the sobriquet "Smoked Yankees" from their enemy.

America's entry into World War I in April 1917 gave Black leaders a new opportunity to press the War Department for change. Both Black liberals and conservatives believed that it was essential for African Americans to serve in the armed forces and prove their capabilities to a skeptical White America. Military service was a way to prove that Black men could be loyal, disciplined, and capable, as well as an opportunity to make their case for increased civil rights.

Military officials, however, envisioned a very restricted role for Blacks, primarily as service troops, and largely under the command of White officers.

The army's policies reflected this view. No Black combat divisions were initially envisioned. Fourteen new officer training candidate (Officer Candidate School, OCS) camps were established for Whites, but none for Blacks, and the highest ranking African American officer, Lieutenant Colonel Charles Young, was retired by the U.S. Army due to high blood pressure. Some Black leaders feared, incorrectly, they would even be excluded from the draft.

Eventually, more than 367,000 Blacks, representing 13% of draftees, would be inducted through the Selective Service. Pressure from the Black community on President Woodrow Wilson and Secretary of War Newton D. Baker led to the establishment of the first Black officer's training camp in U.S. history, Camp Des Moines, in the summer of 1917, with 639 of the 1,250 officer candidates receiving commissions. The vast majority of the 390,000 African Americans serving in World War I did so in labor and service battalions, but two all-Black combat divisions, the 92nd and the 93rd, were organized. The 93rd division, under French command for much of the war, established a superb record, but the 92nd performed poorly and was held up as an example of Black incompetence by White officers.

Modest gains were made in the years prior to World War II. In 1936, Benjamin O. Davis Jr. became the first Black to graduate from West Point since Charles Young in 1889, and in October 1940, his father, Colonel Benjamin O. Davis Sr., became the first Black general in the U.S. Army. The Selective Service Act of 1940 prohibited discrimination based on race or color and stated that Blacks would be drafted roughly equal to their proportion of the overall population, slightly more than 11%; 2,438,831 African Americans were drafted, 10.7% of the total inducted.

The pace of reform accelerated after the United States entered World War II in 1941. President Franklin D. Roosevelt ordered the U.S. Navy and Marine Corps to begin accepting Black recruits by the summer of 1942. The navy opened officer training to African Americans, and by 1945 there were 50 Black commissioned officers in the U.S. Navy. There were 7,768 Black officers in the Army and Army Air Corps, although all but 8 were company grade.

Senior political and military officials supported increased opportunity for African Americans. The all-Black 92nd and 93rd infantry divisions were

reconstituted, and Blacks would serve in every major Military Occupational Specialty (MOS) during the war, including fighter pilots such as the famous “Tuskegee Airmen,” and in armored formations, like the 761st Tank Battalion, which served under General George S. Patton in Europe. But the vast majority of Black service personnel would serve in service and labor battalions, as in World War I. Only about 50,000 Blacks would serve in combat units.

The same civilian officials who were willing to support increased opportunities for Blacks were not willing to openly support integration, arguing that it could cause racial friction in the services and seriously impair the war effort. In fact, racial friction and violence did occur during the war on several stateside bases by mid-1943; the most notable examples occurring at Camp Breckinridge, Kentucky, and San Luis Obispo, California. This was largely due to segregation and discrimination. Despite official policy, numerous facets of military life were being quietly integrated. In March 1943, the War Department ordered integrated recreational facilities, post exchanges, and transportation facilities on all stateside bases. The army was also abandoning segregation at all its officer training camps, with the exception of those training pilots, and had also desegregated its specialist training schools. The integrated camps were more efficient, were cost-effective, and reported far less racial friction than the segregated ones. Even some combat units saw some limited integration. During the Germans’ Ardennes offensive in December 1944, more than 2,500 Black service troops volunteered to be retrained as combat infantry men because they were promised that they could fight alongside White soldiers. White officers protested the plan, however, so the men were assigned to all-Black platoons, but in previously all-White units.

Integration and the Vietnam War

On July 26, 1948, President Harry S. Truman issued Executive Order 9981, calling for “equality of treatment and opportunity for all persons in the Armed Services without regard to race, color, religion or national origin,” thereby effectively desegregating the armed forces. But the army and the Marine Corps, in particular resisted implementing the order until the outbreak of the Korean War in 1950.

In both the World Wars, military officials had argued against attempting to integrate the armed

forces during hostilities, but just the opposite occurred during the Korean War. In August 1950, 2 months after hostilities began, the army began integrating training units and implemented what best could be described as “battlefield integration” in Korea as replacements were shipped out to combat units regardless of race. Far from hampering military efficiency, the integrated units performed quite capably in the field. After decades of resisting racial change, the armed forces now embraced their new role as a social laboratory, presenting the services as a shining example of racial cooperation and equal opportunity. It did increase efficiency and reduce costs, and made wonderful Cold War propaganda, both at home and abroad.

Throughout the late 1950s and early 1960s, both institutional and personal racism remained major problems. But for all its faults, the military on the eve of the Vietnam War was easily the most integrated and racially egalitarian institution in America, and a model for civilian society. Even the growing war in Vietnam was initially viewed as an opportunity to demonstrate the merits of integration, but events proved that the military’s highly vaunted success in race relations was somewhat illusory. Many African Americans entering the service in this era were more militant than their predecessors. Racism, both personal and institutional, remained endemic to the system, particularly in testing and placement, and in military justice. Inequities in the Selective Service System meant that African Americans and poor Whites assumed a disproportionate responsibility in fighting the war and, early in the conflict, a disproportionate share of the casualties.

African Americans reacted to these conditions with a heightened sense of Black solidarity. In Vietnam, many chose to bunk in all-Black “hooches,” or living quarters, often flying a black, red, and green “Black power flag.” Many wore the symbols of Black solidarity, such as Afro haircuts and “slave bracelets” woven out of boot laces, and saluted each other with a Black power salute—a clenched fist raised in the air. The most popular expression of solidarity, however, was a ritualized handshake with numerous variations, known as the “dap.” Dapping was deeply meaningful for Black servicemen, but it could often take several minutes to complete and was often performed in inopportune places, such as chow lines, adding to the growing friction between Whites and Blacks in the military.

Preoccupied with the quagmire in Southeast Asia, military authorities ignored growing signs of racial unrest, especially after the assassination of Dr. Martin Luther King Jr. in April 1968. Racial unrest exploded into racial warfare in August 1968, when gang fights erupted at two military prisons in Vietnam, the DaNang brig and the Long Binh stockade. In July 1969, there was violence at Camp Lejeune and at Millington Naval Air Station near Memphis, Tennessee. The navy also saw its share of violence at sea with major racial confrontations occurring on the carriers *Kitty Hawk* and *Constellation* and the oiler *Hassayampa* in the fall of 1972. African Americans no longer viewed military service as a route to advancement but as an undue burden on the Black community, and many Black leaders, including Dr. Martin Luther King Jr. before his assassination in 1968, counseled young Blacks to avoid military service. Toward the end of the Vietnam War, the military's reputation as a model in race relations appeared irretrievably lost. One indication of this was the reenlistment rate for Black veterans. In 1966, more than two thirds of Black veterans chose to reenlist in the armed forces, but by 1972, only 20% did so. The military also witnessed declining first-time enlistments as well.

Post-Vietnam Recruitment and Retention

After Vietnam, the armed forces would regain much of their former reputation. In the early 1970s, they instituted meaningful reforms aimed at eliminating racism and ensuring equal opportunity. The end of the war in Vietnam, coupled with an economic recession in the 1970s, meant that the armed forces once again became an attractive career option for many African Americans, who were joining and staying in the military. By 1983, Blacks made up 33% of the army, 22% of the Marine Corps, 14% of the air force, and 12% of the navy. In 2000, 23.5% of the army's recruits were African American.

The typical African American recruit in the early 21st century was more likely than the national Black average to come from a two-parent family and be a high school graduate. In 1994, 99% of Black army-enlisted personnel were high school graduates. The reasons African Americans chose the military in such large numbers, however, had not changed much since the Vietnam War, such as the difficulty of getting a higher education. According to a study conducted at Texas A & M University, only 12.2% of

Blacks earned bachelor's degrees in 1993, compared with 22.6% of Whites. In 1997, the unemployment rate among African Americans was 2.3 times the rate for Whites. African Americans who did find good jobs in the civilian sector were often underpaid; in 1997, employed African Americans earned only 77% of the wages of Whites in comparable jobs. African American enlistees tended to come from households above the Black national average in income, earning roughly \$32,000 compared with an average of \$27,900.

African Americans stayed in the armed forces because there were greater opportunities in the military than there were in the civilian sector. By 1981, the reenlistment rate was above 80%. A 1999 Pentagon study of job satisfaction, gender, and ethnicity found that African American and Latino men and women in the U.S. military had a higher job satisfaction rate than did White men. There were several reasons. The Pentagon was serious about racial reform and made Affirmative Action the cornerstone of its equal opportunity policies. Because of the large numbers of African Americans in the armed forces, Affirmative Action programs could be linked with high performance standards, making it highly successful. The Department of Defense (DOD) has a Human Goals Charter for Military and Civilian Personnel, which is updated by every new secretary of defense. It details the DOD's assurance to ensure equality and equal opportunity for all DOD employees regardless of race, color, sex, religion, and national origin. Advancement would be based on merit. The Equal Opportunity program, under Army Deputy Chief of Staff, G-1, Human Resources, creates opportunities and programs to ensure fair treatment for all, and in 2007, the army established the Diversity Task Force to review its diversity programs.

The reforms were successful partly because there were now more African American officers and NCOs. African Americans were now over-represented in the senior NCO ranks. Black senior NCOs in the army increased from 14% in 1970 to 26% in 1980 and 31% in 1990. African Americans accounted for only 2% of the officer corps throughout much of the Vietnam War. The army had the highest total, with between 3% and 4%, but the other branches had far less. The air force averaged about 1.7%, and as late as 1971, there were 234 African Americans out of 19,905 officers in the

Marine Corps—only 1.2% of the total officer corps, the highest ranking being a lieutenant colonel. The navy's record was even worse; in 1972, the 660 African American officers in the navy were only 0.9% of the total.

Aggressive recruiting of African Americans by the services beginning during the Vietnam War, greatly increased the percentage of Black officers by the early 1980s; the percentage had risen to more than 6%. By 1989, 10.6% of the army's officer corps was African American, the highest for any of the uniformed services; Black officers accounted for 5.4% of the air force and 5% of the total for the Marine Corps; the navy was the lowest with only 3.6%. The total for all of the armed forces at 6.15% was not much higher than it had been during the 1980s, but there were now more African Americans—men and women—in senior positions. In 1968, there were only two African American generals and no admirals among the 1,342 flag and general officers in the armed forces. In 1971, Samuel Gravely became the first Black admiral in the history of the U.S. Navy. By 1974, there were three African American air force generals. By 1990, there were 28 active duty Black generals in the army. Twenty years later, in 2010, there were 16 African American flag officers in the navy and 12 air force generals, but no Black four-star general currently serves on active duty and African Americans account for only 5.4% of all general officers.

In the first decade of the 21st century, African Americans were more likely to serve in the regular forces than in the reserve or National Guard. Black soldiers make up almost 20% of the active-duty army and nearly 40% of the navy's enlisted ranks but only 13.3% of the National Guard and 22.1% of the Army Reserve. In the army, they tend to be concentrated in two areas. Blacks constitute 30% of the noncombat Military Occupational Specialties (MOSs), such as administrative, medical, and support, and upward of 40% in many combat units. African Americans volunteered for combat units for many of the same reasons their predecessors had, such as for prestige and economic incentives. There are two reasons for the concentration in noncombat specialties. African American enlistees often join up to further their education or career options and tend to choose a noncombat MOS, especially one that might help them later in civilian life. The other reason is the high proportion of women recruits, who are still barred from most combat MOS.

In 2008, for example, African Americans made up 20% of the male enlistees but 33% of the female volunteers. Serving in Iraq or Afghanistan in a non-combat MOS was still extremely dangerous. There is really no front line on the modern battlefield, particularly with the nonlinear warfare practiced by the opposing forces in those wars.

Black women were also making important advances in the military, and at all levels. In September 1979, Hazel Winifred Johnson became the first Black woman promoted to brigadier general in the army. In 1997, Army Sergeant Danyell Wilson became the first to serve in the elite guard detachment at the Tomb of the Unknowns at Arlington National Cemetery, and in 1999, Major Shawna Rochelle Kimbrell became the first female African American fighter pilot in the air force. In September 2011, Marcia M. Anderson became the first African American female major general in the army.

Vestiges of Racism

The racial violence that had plagued the military during and immediately after the Vietnam War has subsided. The Pentagon reported no major incidents of racial violence in the First Iraq War, Bosnia, or Somalia. A 2006 Pentagon study found that while three fourths of minority personnel reported experiencing some form of racist behavior, it was generally in the form of racist jokes or disparaging remarks. The military had been relatively successful in eliminating personal and institutional racism, but vestiges of both still lingered. Two high-profile cases in particular led to charges of racism in the military justice system. In late 1996 and early 1997, the army charged 12 African Americans—a captain and 11 NCOs—at the Aberdeen Proving Ground with the rape and sexual harassment of numerous female recruits, the majority of whom were White. A company commander and three drill sergeants were found guilty and given prison sentences. The most severe punishment was handed out to Delmar G. Simpson, who was convicted of raping six women and sentenced to 25 years. The other eight defendants were either discharged or punished administratively. The Congressional Black Caucus expressed its outrage over the case, as did the NAACP (National Association for the Advancement of Colored People), which demanded an independent investigation of the case. That same year, an African American sergeant major of the army, Gene

McKinney, was acquitted of adultery, indecent assault, and mistreating and threatening soldiers but was found guilty on one count of obstruction of justice and demoted one rank to master sergeant. An inquiry into both cases by the army's inspector general concluded that the charges of racism were without merit, but nonetheless, a Pentagon study conducted that year found that Black military personnel were far more likely than Whites to believe that racism affected their military careers.

Pockets of personal racism remained as well, largely in the form of individual or small groups of skinheads and neo-Nazis in the ranks. In 1997, three soldiers stationed at Fort Bragg, North Carolina, were convicted of the murder of a Black couple in Fayetteville in December 1995. All three were avowed neo-Nazis, and two of them belonged to White supremacist organizations. Officials subsequently identified 22 more soldiers at Fort Bragg who belonged to White supremacist groups; all were discharged and barred from reenlistment. A 1999 Pentagon survey of 76,000 active-duty personnel concluded that organized hate groups were not an extensive problem; however, this finding was contradicted by a 2008 FBI (Federal Bureau of Investigation) report reflecting concern that White supremacists were recruiting military personnel and that there were "hundreds" of neo-Nazis in the active military. In 2009, a random Internet search by the Southern Poverty Law Center found 40 active-duty U.S. soldiers who were members of one particular neo-Nazi social networking site alone. That same year, the Pentagon issued its third directive in 20 years aimed at eliminating right-wing extremism from the ranks; it was updated early in 2012 and directs commanding officers to monitor possible racist blogs and websites by military personnel and to take immediate action to stop them when found.

Military Operations From Desert Storm to Afghanistan

The military was involved in several operations in this era, and African Americans played a prominent role in all of them. On January 17, 1991, Operation Desert Shield became Operation Desert Storm, otherwise known as the First Iraq War. The United States deployed 696,778 personnel to the Middle East, and African Americans were overrepresented, accounting for 24% of the total. Much like in Vietnam, they tended to be concentrated in infantry

and other combat formations, constituting 30% of the army ground forces. Overall, American casualties were relatively light; 382 Americans were killed in the conflict, of whom 66 were African Americans, including 3 women, accounting for 17.3% of total fatalities.

African Americans participated in Operation Restore Hope (later UNOSOM II) in Somalia from April 1992 to March 1995, and on October 7, 2001, they were part of Operation Enduring Freedom, the invasion of Afghanistan, as well as serving in Grenada, Panama, Bosnia, and Serbia. Unlike the Vietnam War and the Persian Gulf War, African Americans did not bear a disproportionate share of the dying; Black casualties in these conflicts were relatively low. In Iraq, between 2001 and the end of American military operations in December 2011, 4,487 American troops were killed, with African Americans accounting for about 9% of the total casualties. The percentages were similar for Afghanistan; from 2001 to 2009, African Americans were 17% of the total forces committed to that conflict but accounted for only 9% of the dead. Surprisingly, the proportion of African Americans among total deaths in the military is much higher. Between 1980 and 2010, Black men accounted for 17.3% and Black women for 26.6% of the total deaths by all causes in the armed forces.

Decline in Black Enlistments

African Americans had generally supported U.S. military operations, but that changed with Operation Iraqi Freedom—the invasion of Iraq in March 2003. Polls conducted prior to the invasion indicated that only 19% of African Americans supported a war with Iraq compared with 58% of Whites. As late as 2009, a Gallup Poll found that 85% of African Americans thought the war was a mistake compared with 53% of Whites. Coupled with other factors, the result was a noticeable decline in Black enlistments. By November 2005, only 13.9% of Army recruits were African American; Black enlistments had declined nearly 40% since 2000. African Americans were also less dependent on the military than in the past for educational or career opportunities. From 1980 to 2002, the percentage of African Americans above 25 years and with at least 4 years of college has risen from 7.9% to 17.2%. The economic downturn that began in 2007, however, is likely to spur Black enlistments again. In 2010, the

national unemployment rate was at 9.7%, but for African Americans, it was 15.8%.

James Edward Westheider

See also All-Volunteer Force; American Revolution; Civil War, American; Diversity; Vietnam War; War in Afghanistan; World War I; World War II

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AGENT ORANGE

Agent Orange was an herbicide mixture deployed during the Vietnam War to defoliate the thick jungle canopy that served as camouflage for North Vietnamese troop movements against South Vietnam and its allies. Its use has been banned by the U.S. Department of Defense since 1970. From a tactical military sense, the use of Agent Orange was very effective in eliminating the concealing vegetation and thereby exposing enemy movement and concentration of force. From a humanitarian sense, the use of Agent Orange led to increased illness and death due to the toxic effects of a contaminant—2,3,7,8-tetrachlorodibenzo-para-dioxin (TCDD), one of the dioxins. Due to the long half-life of dioxin, toxic levels have persisted in the environment, and the full extent of contamination is only now being realized—almost two generations since the last use of Agent Orange. This entry describes the chemical makeup of Agent Orange and the use of Agent Orange in Southeast Asia in the 1960s and examines research studies and lawsuits related to the use of the defoliant during the Vietnam War.

Background of TCDD

As U.S. military involvement in Vietnam escalated in the 1960s, air superiority was established and maintained. Air reconnaissance missions to collect enemy troop information were hindered by the thick foliage in much of the theater. The need to defoliate led to the use of herbicides. Agent Orange was one of the rainbow herbicides (Agent Pink, Agent Blue, etc.) used by the military for this purpose. Agent Orange constituted about two thirds of all herbicides used during the Vietnam conflict because of its broad range of activity on plant cell processes.

The phenoxy herbicides evolved from research conducted in the 1940s to develop synthetic plant hormones that could regulate plant metabolism. Commercial use of these substances by the agricultural industry began in 1946 and rapidly expanded due to their effectiveness. Agent Orange is a 1:1 mixture of two of these synthesized plant hormones: 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) and 2,4-dichlorophenoxyacetic acid (2,4-D). The pure chemicals used in Agent Orange are relatively safe;

however, a contaminant of the 2,4,5-T production process is TCDD, better, but imprecisely, known as dioxin, which is a highly toxic substance—1/1000 of a gram (1 milligram) of TCDD can kill a guinea pig. In a steady state, the estimated half-life of dioxin (the time needed to reduce the level by 50%) is 7.5 years, although in humans this is not absolute and varies based on starting dose, body composition, age, and sex. Human studies have shown this to be in a range of 1 to 10 years. TCDD causes reproductive problems and cancer in test animals.

Use of Agent Orange by the Military

The military use of chemical defoliants was not a new concept as the United States had experimented with its use at the end of World War II. The decision for the use of herbicides in the Vietnam conflict was made by President John F. Kennedy on November 30, 1961. Initially, the only international condemnation of its use came from Radio Moscow, Radio Hanoi, and Radio Peking. In 1961, the U.S. Air Force began Operation Ranch Hand using C-123 aircraft rigged with spray devices (later designated UC-123). Agent Orange was stored in 55-gallon drums clearly marked with a distinct orange strip for easy identification. The contents of the drums were transferred to the tanks on the aircraft and the empty 55-gallon drums, including any residual liquid, were highly sought by the local Vietnamese civilians for personal use—water storage, food storage, and utility containers. The demand by ground commanders for defoliation missions escalated, and the number of aircraft assigned to the unit grew from 6 in 1962 to a peak of 25 by 1969. It is estimated that more than 22 million gallons of Agent Orange were dispersed in areas of North Vietnam, South Vietnam, Laos, Cambodia, and Thailand. In addition to the fixed-wing aircraft, boats, helicopters, trucks, and even individual troops were equipped with dispersal systems allowing for controlled application in tight areas. This multifaceted approach to the application of the defoliant led to wide dissemination of Agent Orange.

By 1964, global and domestic reports began to appear questioning the humanitarian and ecological consequences of the continued use of the herbicides for military operations. The scientific and political queries continued to mount, and by 1969, with the

publication of a report linking the use of 2,4,5-T with birth defects in mice and an unsubstantiated report from South Vietnam of similar problems in human offspring, the future use of Agent Orange was becoming highly controversial. Due to mounting political pressure in the United States and the adoption of chemical and biological weapons ban by the United Nations, the Nixon administration curtailed the use of herbicides in Southeast Asia beginning in 1969. The Department of Defense placed a temporary ban on the use of Agent Orange in April 1970. The inventory from Southeast Asia was stored at Johnston Atoll (approximately 1.37 million gallons); the stateside inventory was stored at the U.S. Naval Construction Battalion Base in Gulfport, Mississippi (approximately 0.85 million gallons). In 1977, the U.S. Air Force destroyed the remaining supplies of Agent Orange in one large operation at sea (Operation PACER HO) using an incinerator ship (M/T *Vulcanus*) that was outfitted with monitoring equipment. This took place in a predesignated burn zone approximately 120 miles west of Johnston Atoll in the Pacific Ocean (latitudes 15°45' to 17°45' N and longitudes 171°30' to 173°30' W) under the strict guidelines, supervision, and regulation of the U.S. Environmental Protection Agency. The operation was finished on September 4, 1977.

Research and Lawsuits

Research conducted in the 1970s and 1980s continued to report no significant difference in the health of veterans exposed to Agent Orange in Vietnam and a matched sample of the general population. The Department of Veterans Affairs (VA) did not recognize exposure to Agent Orange as a cause of disease. However, those studies were inherently flawed due to the fact that the general population in the United States had been similarly exposed to 2,4,5-T and the dioxin TCDD as it was present in many commercial herbicides used by the agriculture industry in the United States since 1946.

The original research studies performed during the development of the phenoxy herbicides became available for public review only after litigation began against the companies that supplied the raw chemicals to both the agricultural industry and the military. A class action suit was filed

in 1979 representing 2.4 million Vietnam veterans and ended with a controversial out-of-court settlement in 1984 for the amount of \$180 million. Only about 50,000 veterans received any compensation from the fund, which ran out of money in 1994. Once the scientific data were reviewed, it became apparent that some maladies produced by TCDD could take 20 to 30 years to surface. Many individual lawsuits had been litigated and denied by citing the 1984 case settlement. However, an appeal of an affirmative ruling in a case against Dow Chemical in which a veteran (Stephenson) developed multiple myeloma in 1998—well after exposure to Agent Orange in Vietnam—made its way to the Supreme Court and was upheld (*Dow Chemical v. Stephenson*). This ruling allowed for representation of those veterans unrightfully excluded from the 1979 class action suit. The resulting individual law suits led to an expanding body of research findings that supported the fact that the dioxin TCDD does indeed cause health issues. The 102nd Congress passed the Agent Orange Act of 1991, which tasked the secretary of veterans affairs to obtain independent scientific review of the available scientific evidence regarding associations between diseases and exposure to dioxin and other chemical compounds in herbicides at least every 2 years for a period of 10 years (subsequently extended until 2014). The National Academy of Sciences, Institute of Medicine's initial report *Veterans and Agent Orange: Health Effects of Herbicides Used in Vietnam* (VAO) was released to the VA in 1994, and updates have been presented every 2 years. Based on these findings, the VA has recognized many diseases as having a causal relationship to exposure to Agent Orange: If a veteran can show exposure history and has one of the diseases, the veteran is eligible for VA medical care and benefits. In a recent ruling from the VA, female military personnel exposed to Agent Orange who have given birth to offspring with certain birth defects can get benefits for the offspring.

Currently, there are lawsuits pending against the chemical manufacturers that seek damages for Vietnamese civilians exposed to TCDD in the form of Agent Orange. Many of the same maladies noted in the Vietnam veterans are seen in Vietnamese directly exposed to TCDD, as well as their progeny. Birth defects seem to occur at an alarming rate in the exposed populations of Vietnam. It is yet to be seen

if the chemical companies will be held accountable for these damages.

David A. Majiros

See also Medicine, Veterans; Veterans Affairs, Department of; Vietnam War

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AIR FORCE, DEPARTMENT OF

The Department of the Air Force is separately organized under its own secretary as one of three military departments that functions under the authority, direction, and control of the secretary of defense. The Department of the Air Force is responsible for organizing, training, and equipping armed forces responsible for aerial, space, and cyber warfare. This entry discusses the history, responsibilities, roles, and recent leaders of the Department of the Air Force.

Historical Origins

After the remarkable contribution of the Army Air Forces to the victory in World War II, the long-term effort to gain autonomy for the air arm and coequal status with the army and the navy came to fruition. On July 26, 1947, President Harry S. Truman signed the National Security Act of 1947, Public Law 253, which provided a comprehensive program for the security of the United States. The act established the

U.S. Air Force as an independent service, and it also confirmed the integration of defense organizations and civilian control over the military through a unified National Military Establishment.

That same day, President Truman also signed an executive order affirming the roles and responsibilities of the armed services. According to Executive Order 8977, Section IV, the specific functions of the U.S. Air Force are to organize, train, and equip air forces for air operations, including joint operations; gain and maintain general air supremacy; establish local air superiority; provide the strategic air force of the United States and strategic air reconnaissance; and offer airlift, air transport, and support for airborne operations and land and naval forces.

Through a series of transfer orders, the functions assigned to the commanding general, Army Air Forces were reassigned to the Department of the Air Force. In September 1947, Chief Justice Fred M. Vinson swore in W. Stuart Symington as the first secretary of the air force, and General Carl A. Spaatz became the first chief of staff. On September 26, 1947, by order of Secretary of Defense James Forrestal (Transfer Order 1), the lineage and assets of the Army Air Forces were transferred from the War Department.

The service chiefs met in March 1948 in Key West, Florida, to clarify the division of aviation assets. The resulting Key West Agreement determined that the primary function of the U.S. Air Force was strategic air warfare. The navy would support antisubmarine warfare, the protection of shipping, and mine-laying from the air, while the army would retain some air reconnaissance and medical evacuation air missions.

The National Security Act Amendments of 1949, Public Law 216, renamed the National Military Establishment the Department of Defense and expanded the authority of the secretary of defense at the expense of the service secretaries. The service secretaries lost executive branch status and their seats on the National Security Council; they became instead military departments within the Department of Defense. Thus, the secretary of the air force lost direct access to the president as well as influence within the Department of Defense.

On September 19, 1951, Congress passed the Air Force Organization Act of 1951, Public Law 150, and completed the process of creating an independent air arm with a much more detailed organizational structure. The act reaffirmed the civilian

authority of the secretary of the air force to administer the department while establishing the command authority of the chief of staff.

During the 1950s, the Department of Defense went through a period of centralization, culminating with the Reorganization Plan No. 6 of June 30, 1953, and the Department of Defense Reorganization Act of 1958. The secretary of defense took greater civilian authority over the services with the intention of fostering greater cooperation between them. The Joint Chiefs of Staff took command authority over several U.S. Air Force major commands, Strategic Air Command, Air Defense Command, and over-seas commands.

Legal Provisions

The secretary of the air force and chief of staff retained their responsibilities “to organize, train, and equip” combat air forces. U.S. Code, Title 10, chapter 803, the law that defines the Department of the Air Force, has changed little since the 1950s: “The Department of the Air Force is separately organized under the Secretary of the Air Force. It operates under the authority, direction, and control of the Secretary of Defense” (10 U.S.C. § 8011).

By law, the secretary of the air force is responsible to the secretary of defense for the functioning and efficiency of the Department of the Air Force; the formulation of policies and programs that are consistent with national security objectives; the effective implementation of policy, program, and budget decisions and instructions of the president or the secretary of defense; the fulfillment of current and future operational requirements of the unified and specified combatant commands; the effective cooperation and coordination between the Department of the Air Force and the other military departments and agencies of the Department of Defense; and the effective supervision and control of the intelligence activities of the Department of the Air Force (10 U.S.C. § 8011).

The Air Staff is the executive part of the Department of the Air Force, under the authority of the secretary of the air force. Its roles include assisting in the execution of any power, duty, or function of the secretary or the chief of staff; investigating and reporting on the efficiency of the air force; preparing detailed instructions for the execution of approved plans and supervising the execution of those plans;

and coordinating the action of organizations within the air force (10 U.S.C. § 8032).

The chief of staff of the air force, with the grade of general, is appointed for a period of 4 years by the president and serves at the pleasure of the president. The chief of staff acts under the authority, direction, and control of the secretary of the air force. The chief of staff presides over the Air Staff, transmits plans and recommendations of the Air Staff to the secretary, implements plans as the agent of the secretary, and exercises supervision over members and organizations of the air force. As a member of the Joint Chiefs of Staff, the chief of staff keeps the secretary of the air force fully informed of significant military operations affecting the duties and responsibilities of the secretary (10 U.S.C. § 8033).

Strategic Roles

Despite the loss of executive branch status and an automatic place on the National Security Council in the 1950s, the Department of the Air Force continued to play a major role in defense strategy and to receive considerable budgets from the Department of Defense. Owing to its robust technological investments, the U.S. Air Force developed ballistic missiles during the 1950s. The U.S. Air Force thus maintained land-based missiles and bombers—two elements of the “Triad” of strategic weapons; the navy had the third—submarine-launched missiles. This ensured the U.S. Air Force a leading role in strategic defense. By the end of the 1960s, more than 1,000 intercontinental missiles were in place, resulting in the reduction of the long-range bomber fleet.

Tactical capabilities also gained new significance under President John F. Kennedy and Secretary of Defense Robert McNamara during the early 1960s, as they sought to enhance conventional forces that could respond to several protracted conflicts while maintaining strategic nuclear deterrence. This initiated a cultural shift in the Department of the Air Force when the fighter pilots involved in tactical air support for theater commands during the Korean and Vietnam wars gained leadership positions within the U.S. Air Force.

Owing to the Reorganization Act of 1958, the Department of the Air Force, like other services, faced constraints in Southeast Asia, particularly the proscribed targeting and restrictive rules of engagement by a network of political leaders, national defense authorities, and theater commanders. Air

operations were directed by varying agencies during the conflict, not all of which appreciated the capabilities of air combat and the increasing value of air power’s flexibility. In the late 1970s, the U.S. Air Force focused its energy on modernizing, upgrading strategic deterrence, and maintaining readiness in Europe.

In the 1980s, extensive efforts to modernize U.S. Air Force strategic forces continued with the B-1B bomber program, air-launched cruise missiles, peacekeeper missiles, and stealth aircraft. The air force played a leading role as the Department of Defense increasingly pursued space assets, including the Strategic Defense Initiative.

In the early 1990s, U.S. military strategic planners no longer focused on Cold War adversaries. The U.S. Air Force itself confronted the evolving use of air power during the Persian Gulf War, the deeper correlation between air and space power, the declining significance of the nuclear deterrence mission, and the increasing focus on cyber security.

Organization

In 2010, the principal civilian assistants within the secretariat were the assistant secretary for acquisition; the assistant secretary for manpower and reserve affairs; the assistant secretary for installations, environment, and logistics; and the assistant secretary for financial management and comptroller. The Office of the Secretary of the Air Force also included the administrative assistant; the auditor general; the general counsel; the inspector general; the deputy under secretary of the air force, international affairs; the director of public affairs; the legislative liaison director; the director of the office of small business programs; and the chief of information dominance and chief information officer.

Other key members of the Air Staff were the vice chief of staff, the assistant vice chief of staff, and the chief master sergeant of the air force. The chief of staff had deputy chiefs of staff for manpower, personnel, and services; intelligence, surveillance, and reconnaissance; operations, plans, and requirements; logistics, installations, and mission support; and strategic plans and programs. The Air Staff also included the director for studies and analyses, assessments and lessons learned; the assistant chief of staff for strategic deterrence and nuclear integration; the chief of chaplains; the air force historian; the judge advocate general; the chief of the Air Force Reserve;

the chief of safety; the surgeon general; the chief scientist; the director of test and evaluation; the chief of the National Guard Bureau; and the director of the Air National Guard.

Recent Leaders

General Ronald R. Fogleman, chief of staff of the air force (1994–1997), and General Michael E. Ryan, chief of staff of the air force (1997–2001), sought to implement a new strategic planning system to introduce new and joint capabilities in the face of budget cuts and the realities of the post–Cold War world. At the forefront was the integration of air and space systems to advance warfighting capabilities, new concepts of operations, and new technologies in aerospace. In particular, they explored and refined concepts of operations and logistics associated with the deployment and employment of aerospace expeditionary forces for exercises and contingencies. By the end of the 1990s, the Total Force Concept matured as the means to integrate the Air National Guard and the Air Force Reserve more closely with the active force.

Following the events of September 11, 2001, Secretary of the Air Force James G. Roche (2001–2005) and Chief of Staff of the Air Force General John P. Jumper (2001–2005) engaged a number of fronts, from contingency operations in Iraq and Afghanistan, to humanitarian missions around the globe, to homeland defense. They promoted concepts of operations, air expeditionary forces, force development, and close air support with new precision weapons and reconnaissance capabilities, such as JDAMs (Joint Direct Attack Munitions) and the Predator.

Secretary of the Air Force Michael W. Wynne (2005–2008) and Chief of Staff of the Air Force General T. Michael Moseley (2005–2008) focused their efforts on waging the Global War on Terrorism, developing and caring for airmen, and recapitalizing and modernizing the U.S. Air Force. Secretary Wynne brought new attention to the use of renewable energy, while General Moseley underscored the U.S. Air Force missions of global vigilance, reach, and power. According to Moseley (2007),

Global vigilance is the persistent, world-wide capability to keep an unblinking eye on any entity—to provide warning on capabilities and intentions, as well as identify needs and opportunities; *global*

reach is the ability to move, supply, or position assets—with unrivaled velocity and precision—anywhere on the planet; *global power* is the ability to hold at risk or strike any target, anywhere in the world, and project swift, decisive, precise effects.

Secretary of the Air Force Michael B. Donley (2008–) and Chief of Staff of the Air Force General Norton A. Schwartz (2008–2012) announced a “back to basics” approach in 2008, promoting accountability in the nuclear enterprise, support for joint operations, care for airmen and their families, modernization of inventories, and the rebuilding of the acquisition workforce. Indicative of an enduring commitment to defend the nation, they reaffirmed that the mission of the U.S. Air Force was to fly, fight, and win . . . in air, space, and cyberspace.

Michael R. Rouland

See also Air Force, U.S.; Air Force Command; Air National Guard; Defense, Department of; Defense, Secretary of; Reserve, Air Force; Surgeon General, Air Force

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AIR FORCE, U.S.

In August 2010, the U.S. Air Force had a total force strength of 693,285. This included 336,317 in active duty (265,297 enlisted, 66,447 officers, 4,573 U.S. Air Force Academy cadets); 107,985 in the Air National Guard; 70,052 in the Air Force Reserve; and 178,931 civilians. The U.S. Air Force was a global force in 263 locations around the world, with nearly 30,000 deployed airmen providing key capabilities in direct support of combat operations. In Fiscal Year 2010, the U.S. Air Force total aircraft inventory was 5,493, with 1.37 million flying hours. The U.S. Air Force oversaw 83 major installations and 81 minor installations around the globe. In 2010, the air force was a part of an interoperable and interdependent force in the nation's defense, supporting joint, interagency, and coalition partners. This entry provides an overview of the U.S. Air Force, from its origins with the Wright brothers and the U.S. Army Signal Corps to recent operations in the Global War on Terrorism.

Historical Overview

The U.S. Air Force has its roots in the early 20th-century technology. In January 1905, Wilbur and Orville Wright sent an offer to the War Department to provide the government with a heavier-than-air flying machine, a technology that had not yet proven viable. The War Department turned down the offer, but the Wright brothers' persistence and continued technological innovation demonstrated the military utility and expediency of the aircraft. In 1908, the newly established Aeronautical Division of the U.S. Army Signal Corps ordered a dirigible balloon, similar to the Zeppelin, and issued specifications for an airplane that the Wright brothers built in 1909. Congress voted the first appropriation for military aviation in 1911, while the U.S. Navy started its own program. Although early aviators rejected a proposal to separate their service from the Signal Corps, the issue of autonomy of the air arm would persist.

The U.S. Army deployed its only aviation squadron to the Mexican border to support its field

operations during the Mexican Punitive Expedition of 1916, but it was not until U.S. entry into World War I that American military aviation made a breakthrough, assigning specific roles to aircraft as reconnaissance, fighter, or bomber. Great battles ensued between the “knights of the air” as every army sought control of the air. A doctrine of air warfare began to emerge as air forces began to perform different roles: “strategic” air operations directed at vital war industries and civilian morale and “tactical” operations against ground forces.

When the Aviation Section of the Signal Corps struggled to meet the increasing demands of wartime production in May 1918, the War Department created an Air Service consisting of two agencies: one civilian to control aircraft and engine manufacturing and one military to train and organize units. In the last months of the war, the American Expeditionary Force's Air Service, led by Major General Mason M. Patrick, Brigadier General William “Billy” Mitchell, and Brigadier General Benjamin D. Foulois, made a major contribution to the Allied victory.

Appreciating the important role of air power in the war, a movement developed during the 1920s and 1930s to create an independent air force. The Royal Air Force, which consolidated its army and navy air arms in April 1918, provided the model. U.S. Army leaders, however, perceived the airplane as a weapon for supporting the infantry and gave the Air Service a status comparable to field artillery, cavalry, or engineering. Despite the many commissions set up to study air organization, ultimately changing the name to the Air Corps in 1926, aviators sought more authority within the U.S. Army.

General Mitchell, who was court-martialed for maligning senior U.S. Army and U.S. Navy leadership, argued that an independent air force was imperative to support strategic and long-range bombing. A combat air force, named GHQ Air Force, was created in 1935. It operated under the command of an aviator and reported to the chief of staff of the army or General Headquarters during times of war.

American air power went through a radical transformation during World War II after U.S. observers witnessed the dominant role of aerial warfare during the Spanish Civil War from 1936 to 1939 and during the Battle of Britain in 1940. On June 20, 1941, the GHQ Air Force became Air Force Combat Command, Army Air Forces (AAF), under

the leadership of Major General Henry H. Arnold. In March 1942, General Arnold became commanding general, AAF, directly under the chief of staff of the army, General George C. Marshall. Arnold and Marshall soon agreed that the AAF would enjoy autonomy within the War Department until the end of the war. In July 1943, General Marshall issued War Department Field Manual (FM) 100-20, *Command and Employment of Air Power*, which recognized the coequality of air and land power. Two years later, his successor, General of the Army Dwight D. Eisenhower, was one of the strongest proponents of air force independence. He remarked after the D-Day invasions in Normandy, "If I didn't have air supremacy, I wouldn't be here." The AAF secured that air supremacy during the war.

During World War II, air power became preeminent in warfare, and the AAF became the world's most powerful air force, expanding from 20,000 men and 2,400 planes in 1939 to 2.4 million personnel and 80,000 aircraft in 1944. The Air War Plans Division, Plan 1, the seminal war plan for the air assault on Germany in 1941, provided a strategic blueprint for victory and a foundation for later air force doctrine. The AAF employed combined bombing campaigns, expanded global air transport, and oversaw the massive industrial effort to build a modern air force. The U.S. Strategic Bombing Survey after the war demonstrated the effectiveness of the U.S. air campaign, and it empowered AAF leaders in postwar debates over armed forces unification and national strategy.

On July 26, 1947, the National Security Act of 1947, Public Law 253, established coequal land, sea, and air services and created the Department of the Air Force. Specific U.S. Air Force functions included air operations, gaining general air supremacy, establishing local air superiority, being responsible for the strategic air force and strategic air reconnaissance, and providing airlift and support of airborne operations, air support to land and naval forces, and air transport other than that offered by the U.S. Navy.

As the United States came to rely on a strategy of nuclear deterrence after the war, the air force gave highest priority to its long-range atomic bombing force, using air refueling to lengthen its reach. Strategic Air Command (SAC) became the centerpiece of air force planning, and SAC's role remained predominant throughout the Cold War, especially during the service of Curtis E. LeMay as

its commander (1948–1957). The first important intervention of the air force in the Cold War, however, was by the U.S. Air Forces in Europe during the Berlin Airlift of 1948–1949.

During the conflict in Korea (1950–1953), U.S. Air Force tactical capabilities were increased to support UN forces. With the armistice in Korea, however, President Dwight D. Eisenhower called for a "New Look" at national defense that promoted greater reliance on nuclear weapons and strategic air power to deter war. The U.S. Air Force reliance on SAC bombers to prevent nuclear devastation justified the organization's motto: Peace Is Our Profession.

U.S. Air Force research and development efforts during the 1950s led to the introduction of ballistic missiles, and SAC began to augment its bomber fleet with intercontinental ballistic missiles in 1959. By the end of the 1960s, the air force deployed more than a thousand intercontinental ballistic missiles. Besides ballistic missiles, the air force became involved with satellites and, in 1961, began supporting the National Reconnaissance Office, an independent, covert agency that managed intelligence satellites.

In the 1960s, as a result of Secretary of Defense Robert S. McNamara's emphasis on "flexible response" in the strategy of deterrence, Tactical Air Command enjoyed a revival. Conventional capabilities were quickly tested when the U.S. commitment to Vietnam increased and a tactical air campaign provided support to U.S. and Vietnamese ground forces. Tactical forces in Vietnam and Thailand took part in strikes at crucial targets in North Vietnam and along supply trails in southern Laos. The U.S. Air Force also supported counterinsurgency operations of the Laotian government.

With the end of the fighting and the return of budget limitations, the U.S. Air Force focused on upgrading the strategic deterrent force and maintaining combat readiness during the 1970s. Greater attention was also given to humanitarian support and global commitments with the Military Airlift Command.

Presidents Jimmy Carter and Ronald W. Reagan increased defense appropriations as the U.S. Air Force surpassed 600,000 active-duty personnel during the mid-1980s. Force deployments in support of operations in Grenada (1983), Libya (1986), and Panama (1989) reflected a growing capacity for quick responses to local crises.

At the same time, successful arms control negotiations with the Soviet Union began to ease the pressure of strategic deterrence. Until 1989, the U.S. Air Force's existence as an independent service had coincided with the Cold War. With the collapse of the Soviet Union in 1991, the U.S. Air Force reduced nuclear forces on strategic alert as the number of small conflicts began to emerge around the world. In 1992, the resources of SAC, Tactical Air Command, and Military Airlift Command were sent to the new Air Combat Command and Air Mobility Command to meet the new strategic environment. This was part of an effort articulated by Secretary of the Air Force Donald Rice (1990), with "an increased emphasis on force projection capabilities—even more flexible, rapidly responding, precise, lethal forces with global reach" (p. 3).

The most successful intervention by the U.S. Air Force in these local conflicts was in the Persian Gulf in 1991. Supporting a coalition designed to expel Iraqi forces from Kuwait, the U.S. Air Force led the way in a 6-week campaign that was a triumph in the application of air power. Later interventions in Bosnia-Herzegovina (1995) and Yugoslavia (1999) continued to demonstrate the effective combination of high technology with skill and determination to apply force in difficult situations. The U.S. Air Force supported peacekeeping and humanitarian operations around the world, including Somalia (1992–1993), Rwanda (1994), Haiti (1994, 2010), Bosnia-Herzegovina (1995–1996), Kosovo (1996–1998), East Timor (1999), and Japan (2011). Within the United States, the U.S. Air Force provides major support and rescue operations during and after natural disasters, as evident in the civil support mission after Hurricane Katrina in 2005.

Recent Operations

Air power played a decisive role in conflicts during the 1990s. The U.S. Air Force and coalition air forces opened Operation Desert Storm in January 1991 with a concentrated air campaign to achieve air superiority over Iraqi forces within 24 hours, eventually flying more than 90,000 sorties, airlifting 540,000 tons of cargo, and guaranteeing the combat effectiveness of coalition forces in the air and on the ground. Operation Allied Force in Kosovo, Yugoslavia, beginning in March 1999, involved 78 days of air missions against an advanced air defense

system and resulted in no combat losses for U.S. Air Force and North Atlantic Treaty Organization (NATO) air forces. Air operations, a central focus in the joint forces campaign plan, relied on bombing capabilities, air refueling, airlift, reconnaissance, and new precision weapons systems.

Unlike Operation Desert Storm and Operation Allied Force, Operation Enduring Freedom in Afghanistan did not rely on the centrality of air power to achieve its goals of antiterrorist operations, and air superiority was achieved with little resistance. Instead, the U.S. Air Force supported Special Operations Forces and ground forces in counterinsurgency warfare in a variety of ways. Precision air power and close air support provided by the U.S. Air Force supported Special Operations Forces and local allied forces as the Taliban was removed from power. Given the vast distances of sorties to Afghanistan, air refueling gained a particular significance. Military airlift also played a key role in supporting humanitarian relief operations and delivering materiel by air to Afghanistan. In addition, remotely piloted aircraft, or unmanned aerial vehicles, gained a new value in aerial combat by providing both reconnaissance and offensive weapon system capabilities.

Although the U.S. Air Force had carried out operations over Iraq since 1990, the return to major combat operations during Operation Iraqi Freedom in 2003 presented another challenge in unconventional conflict. Air superiority allowed the employment of precision-guided munitions in support of joint forces on the ground through interdiction and close air support. These precision weapons allowed each sortie to engage multiple targets, placing fewer airmen in harm's way and preventing collateral damage. The U.S. Air Force led an integrated air component effort to provide increased communication and coordination between the joint forces and rapid opportunities for response. The U.S. Air Force also employed non-lethal measures during Operation Iraqi Freedom, dropping thousands of leaflets to encourage enemy combatants to accept a peaceful resolution.

Since the events of September 11, 2001, the U.S. Air Force has maintained round-the-clock operations as part of Operation Noble Eagle, an enduring air defense mission above the nation's cities, critical infrastructure, and special events, to protect North America from another aerial terrorist attack. These combat air patrols reflect an important shift in aerospace defense from shielding against long-range

missile or bomber threats from abroad to providing air sovereignty against unconventional domestic threats.

Transformation and Innovation

Throughout its history, the U.S. Air Force has emphasized scientific and technological planning. In the late 1930s, General Arnold supported the work of Theodore von Kármán, a professor of aeronautics who worked on jet propulsion, through the Air Corps Jet Propulsion Research Project. This project evolved into the Jet Propulsion Laboratory, a major contributor to research on space flight, supersonic flight, and rocketry. In 1944, General Arnold invited von Karman to appraise the future of air power in the United States. His work with a group of U.S. scientists resulted in the 11-volume collection, *Toward New Horizons*, which advocated an active research program for the U.S. Air Force and outlined future developments, such as high-speed aerodynamics, aircraft and high-temperature materials, automatic flight controls, new power sources, liquid fuel rockets, guided missiles, and the “pilotless” aircraft. In the late 1950s, the U.S. Air Force supported the development of high-altitude deep-penetration strategic bombers that could evade interceptors. And the arrival of effective surface-to-air missiles, intercontinental ballistic missiles, and space capabilities ushered in a new era. The U.S. Air Force’s interest in technological innovation remained active in the 1990s with low-observable “stealth” technology and remotely piloted aircraft. In the 2000s, the U.S. Air Force expanded its coordination and interoperability with other services to confront new anti-access/area denial strategies and capabilities. Through a commitment to science, technology, engineering, and mathematics education, the air force continued to translate technology into operational capability.

Like technological innovation, the U.S. Air Force was a leader in racial and gender integration in the U.S. military. When the first African American military aviators in combat, the Tuskegee Airmen of the 322d Fighter Group, returned to the United States after the Second World War, they returned to racially segregated units. But in a few short years, the air force would integrate entirely and serve as a model for the other services. Following the direction of President Harry S. Truman, General Carl A. Spaatz announced that air force units would desegregate to

increase combat effectiveness and improve efficient utilization of manpower in April 1948. Secretary of the Air Force W. Stuart Symington submitted an integration plan in December 1948, and the secretary of defense approved it on May 11, 1949.

Women Airforce Service Pilots, civilian female pilots employed to fly military aircraft during the Second World War, forged a path for women in the military. On June 12, 1948, President Truman signed the Women’s Armed Services Integration Act, which enabled women to serve as permanent members of the armed services. Previously, women could only serve in the military in wartime. In July 1948, the Women in the Air Force program began to train women to take part in ground, medical, and support roles and continued until 1976, when women were accepted into the military on the same basis as men. On April 28, 1993, General Merrill A. McPeak announced that women could become fighter pilots and fighter pilot instructors based solely on merit and performance. And, by Operation Enduring Freedom and Operation Iraqi Freedom, women began to fly regular combat operations. Colonel Jeannie M. Leavitt became the first commander of a combat fighter wing in May 2012.

To address the increased tempo of contingency operations around the world after 2001, the U.S. Air Force began to streamline its operational and command structure. Air force leadership introduced Total Force Integration in 2003 to leverage the resources and strengths of active-duty, National Guard, and Reserve airmen to improve access to aircraft, encourage retention, and increase total force effectiveness. In the 2010s, attention focused on maintaining a ready, agile, and deployable force despite new budgetary challenges by maximizing efficiencies and focusing on core capabilities: recapitalizing tanker, fighter, and bomber aircraft; modernizing satellite constellations; and confronting the cyber domain.

Mission and Ethos

The current mission of the U.S. Air Force is to *fly, fight and win . . .* in air, space and cyberspace. The U.S. Air Force is a key contributor to national strategic defense through joint conventional and irregular warfare, air transport, humanitarian relief operations, and deterrence and dissuasion of potential adversaries. The Cold War task to detect, deter,

dissuade, and defeat has gradually evolved into a new mantra of global vigilance, global reach, and global power that reflects the unique responsibilities of the air component of the U.S. armed services as the only force not limited by geographic barriers.

Global vigilance is the ability to gain and maintain awareness anywhere in the world; to provide warning and to determine intent, opportunity, capability, or vulnerability; and to fuse this information with data received from other services or agencies and use and share relevant information with the Joint Force Commander. *Global reach* is the ability to project military capability responsively, with unrivaled velocity and precision, to any point on or above the earth and to provide mobility to rapidly supply, position, or reposition joint forces. *Global power* is the ability to hold at risk or strike any target anywhere in the world, to assert national sovereignty, to safeguard joint freedom of action, and to achieve swift, decisive, precise effects related to U.S. Air Force alignment with joint and national priorities.

The U.S. Air Force has three core competencies: (1) developing airmen, (2) bringing technology to the defense portfolio (warfighting), and (3) integrating operations. These core competencies enable the six distinctive capabilities of the U.S. Air Force: (1) air and space superiority, (2) global attack, (3) rapid global mobility, (4) precision engagement, (5) information superiority, and (6) agile combat support. The U.S. Air Force bases these core competencies and distinctive capabilities on a shared commitment to three core values: (1) *integrity first*, (2) *service before self*, and (3) *excellence in all we do*. These are the standards to which every airman is held accountable.

In April 2007, General T. Michael Moseley, chief of staff of the U.S. Air Force, introduced the “Airman’s Creed” to invigorate the warrior ethos of the air force. This ethos is the “warfighting-focused culture, conviction, character, ethic, mindset, spirit and soul” fostered in training airmen. It underlines the current mission of the U.S. Air Force to “*fly, fight, and win*” and to take pride in the heritage of the “American Airman.”

In February 2010, Michael B. Donley, secretary of the air force, and General Norton A. Schwartz, chief of staff of the air force, emphasized the unique capabilities of the U.S. Air Force to succeed in current conflicts while countering future threats to national security in their *Fiscal Year 2011 Air Force Posture*

Statement. In particular, they planned future development of the U.S. Air Force based on its 12 core functions: (1) nuclear deterrence operations; (2) air superiority; (3) space superiority; (4) cyberspace superiority; (5) global precision attack; (6) rapid global mobility; (7) special operations; (8) global integrated intelligence, surveillance, and reconnaissance; (9) command and control; (10) personnel recovery; (11) building partnerships; and (12) agile combat support. These core functions described the range of U.S. Air Force capabilities while identifying the growing interdependence of U.S. military services to sustain freedom of action and ability to project power in the 2010s.

Michael R. Rouland

See also Air Force, Department of; Air Force Command; Defense, Department of; Defense, Secretary of; Military Organization, Air Force

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AIR FORCE COMMAND

Major commands (MAJCOMs) are a major subdivision of the U.S. Air Force and are directly subordinate to Headquarters U.S. Air Force, serving under the chief of staff. This entry examines the history of MAJCOMs and describes the 10 MAJCOMs active today.

History

At the establishment of the U.S. Air Force in 1947, 14 MAJCOMs were initially organized. Although these commands would soon be rearranged and their overall number would change, this organizational form provided a foundation for the air force.

The Air Force Organization Act of 1951 provided the statutory framework for the internal organization of the U.S. Air Force, codifying organizational and management policies. Three major air commands—(1) the Air Defense Command (ADC), (2) Strategic Air Command (SAC), and (3) Tactical Air Command (TAC)—were specifically recognized. The legislation prohibited the alteration and consolidation of these commands without congressional action except during times of war or national emergency. Other commands could be created or dissolved through the actions of the secretary of the U.S. Air Force, in consultation with the chief of staff of the U.S. Air Force.

Throughout the Cold War, SAC was the centerpiece of air force planning. SAC led the nuclear deterrence mission, managing land-based strategic bombers and intercontinental ballistic missiles, strategic reconnaissance and command post aircraft, and air refueling for SAC assets.

ADC, Military Airlift Command (MAC), and TAC were also important. ADC organized the air defense of the United States, developing a series of continental radar systems to monitor Soviet threats, culminating with the North American Aerospace Defense Command. ADC's role declined with the increased responsibilities of the Air Force Reserve and Air National Guard, which took over the air

defense role during the 1970s. MAC organized strategic airlift capabilities, succeeding the Military Air Transport Service—which had served as a joint command with the U.S. Navy—in 1966. MAC played a particularly important role in supporting the wars in Southeast Asia. TAC delivered major tactical air support for theater commands during the Korean and Vietnam wars. TAC leadership thus gained status within the U.S. Air Force, leading to the “rise of the fighter generals” in the 1980s and shifting the balance of power from SAC to TAC.

In the early 1990s, efforts to streamline the budget and command structure resulted in a major reorganization. MAC, SAC, and TAC were deactivated in 1992. SAC's bombers and TAC's fighters were unified into a single offensive air command, the Air Combat Command (ACC). To reduce duplication and to promote rapid force deployment, senior leadership deactivated MAC and created the Air Mobility Command. In addition, Air Force Systems Command and Air Force Logistics Command were deactivated, their functions subsumed within the new Air Force Materiel Command.

The Contemporary Period

As of 2010, 10 MAJCOMs exist, reflecting the core priorities of the U.S. Air Force:

ACC, headquartered at Langley AFB, Virginia, was established on June 1, 1992, as the primary force provider of combat air power. ACC operates fighter, bomber, reconnaissance, battle management, and electronic combat aircraft. It also provides command, control, communications, and intelligence systems, and conducts global information operations that ensure strategic air defense forces are ready to meet the challenges of peacetime air sovereignty and wartime air defense. ACC includes the First, Ninth, and Twelfth Air Forces and the U.S. Air Force Warfare Center. The command operates 15 major bases. The ACC commander is the air component commander for Joint Forces Command.

Air Education and Training Command, headquartered at Randolph AFB, Texas, was redesignated on July 1, 1993, from Air Training Command to train and prepare airmen for mission readiness. AETC commands the Second and Nineteenth Air Forces and Air University.

Air Force Global Strike Command, headquartered at Barksdale AFB, Louisiana, was established

on August 7, 2009, to develop and provide combat-ready forces for nuclear deterrence and global strike operations. It unified the bombers previously with ACC and the intercontinental ballistic missiles from Air Force Space Command. This newest command oversees two numbered air forces, three ICBM wings, two B-52 Stratofortress wings, and a B-2 Spirit wing. The Air Force Global Strike Command's commander is the air component commander for U.S. Strategic Command.

AFMC, headquartered at Wright-Patterson AFB, Ohio, was established July 1, 1992, to deliver war-winning expeditionary capabilities through technology, acquisition, testing, and sustainment. AFMC oversees the Air Force Research Laboratory, the Aeronautical Systems Center, the Air Armament Center, the Electronic Systems Center, three test centers, five sustainment centers, and two specialized units, including the National Museum of the U.S. Air Force.

Air Force Reserve Command, headquartered at Robins AFB, Georgia, was established February 17, 1997. It includes the Fourth, Tenth, and Twenty-Second Air Forces, and it ensures that units are trained and equipped with the necessary logistical support to maintain operational readiness.

Air Force Space Command, headquartered at Peterson AFB, Colorado, was established September 1, 1982. It provides an integrated system of space and cyberspace capabilities to support the mission of precision strike, global awareness, and data connectivity for the U.S. military. The Fourteenth Air Force, Twenty-Fourth Air Force, Space and Missile Systems Center, Air Force Network Integration Center, and Air Force Frequency Management Agency are assigned to Air Force Space Command.

Air Force Special Operations Command, headquartered at Hurlburt Field, Florida, was established on May 22, 1990. It provides forces for global deployment and support of regional commands in four core areas: (1) forward presence and engagement, (2) information operations, (3) precision employment and strike, and (4) special operations forces mobility. Air Force Special Operations Command is a component of U.S. Special Operations Command.

Air Mobility Command, headquartered at Scott AFB, Illinois, was established June 1, 1992, to support global air mobility through airlift and aerial refueling and to supply humanitarian assistance at

home and abroad. The Eighteenth Air Force is the only numbered air force in Air Mobility Command.

Pacific Air Forces, headquartered at Hickam AFB, Hawaii, was established July 1, 1957. PACAF offers integrated expeditionary air capabilities to Pacific Command to promote peace and stability in the Asia-Pacific region. The Fifth, Seventh, Eleventh, and Thirteenth Air Forces constitute Pacific Air Forces, with geographic missions including Alaska, Korea, and Japan.

U.S. Air Forces in Europe, headquartered at Ramstein AB, Germany, was established on August 7, 1945. The oldest of the existing MAJCOMs, it is the air component of the U.S. European Command. U.S. Air Forces in Europe provides forward-based air power, supports the North Atlantic Treaty Organization and coalition partners, and affirms U.S. commitment to Europe.

Michael R. Rouland

See also Air Force, Department of; Air Force, U.S.; Air Mobility Command; North American Aerospace Defense Command (NORAD); Strategic Air Command

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AIR FORCE ONE

With the exception of the White House, Air Force One is the most visible representation of the American presidency. It is the aircraft dedicated to transporting the president anywhere in the world at any time. Technically, Air Force One is the air traffic



President Barack Obama is seen at a meeting with his staff, April 5, 2009, aboard Air Force One on a flight from Prague, Czech Republic, en route to Ankara, Turkey.

Source: Official White House photo by Pete Souza.

control call sign given to any U.S. Air Force plane transporting the president. When the president travels on non-air force aircraft, a call sign following the same naming convention such as Army One, Navy One, or Marine One is used. However, the moniker “Air Force One” most commonly refers to the two identical customized Boeing 747 airplanes, designated as SAM 28000 and SAM 29000 (Special Air Mission). The air force technical classification for these planes is VC-25A. These planes are managed and operated by the Presidential Airlift Group under the 89th Airlift Wing at Andrews Air Force Base in Maryland and are part of the White House Military Office. This entry briefly reviews the history of Air Force One and then describes features of the current aircraft.

Presidential Air Travel, 1940s–1980s

Franklin D. Roosevelt was the first president to fly while in office. His first trip, in January 1943, was to the Allied conference in Casablanca. Roosevelt’s decision to fly highlighted the still prominent U-boat threat. He took a Boeing 314 flying boat across the Atlantic and then a C-54 Skymaster military

transport to Casablanca. Shortly thereafter, a modified C-54 Skymaster was acquired for use as a presidential aircraft. This aircraft, nicknamed the “Sacred Cow,” could transport 15 passengers, had a conference room, and featured a built-in elevator in the center of the plane to accommodate easy access for Roosevelt’s wheelchair. In 1947 a DC-6 was commissioned for President Harry S. Truman; it was nicknamed the “Independence” after Truman’s hometown in Missouri. This plane accommodated 24 passengers, had autopilot, and technically advanced navigation and communications systems, which included a radio teletype machine. In 1954, President Dwight D. Eisenhower was the recipient of two new Lockheed Constellation C-121A airplanes, named *Columbine II* and *Columbine III*.

Presidential air travel moved into the jet age in October 1962 with the arrival of a custom Boeing 707 with the air force classification VC-137C. This plane, designated SAM 26000, served as the primary Air Force One for 10 years. Prior to Richard Nixon taking office, SAM 26000 was completely refurbished and upgraded to include the latest in security and communications equipment. This marked the



Douglas VC-54C "Sacred Cow" at the National Museum of the U. S. Air Force.

Source: U.S. Air Force photo.

transition from presidential airplane to an airborne version of the White House capable of serving as a mobile command center. In 1972, another VC-137C (SAM 27000) entered service and became the primary Air Force One until it was replaced by SAM 28000 and SAM 29000 in 1990.

Modern Aircraft

Today's SAM 28000 and SAM 29000, with air force classification VC-25A, are highly customized aircraft built on a 747 airframe. These planes are equipped with four General Electric CF6-80C2B1 jet engines capable of flying the president at the nearly supersonic speed of 630 miles per hour. They are 231 feet long and 63 feet high and have a 195-foot wingspan. They can cruise at a height of 45,000 feet in the air. They have a range of 7,800 miles, but they are also equipped to do aerial refueling to provide a nearly limitless range. Each plane is divided into three levels; lower deck (cargo and equipment), main deck (passengers), and top deck (crew and communication). The front part of the main deck features a presidential suite complete with

two beds, a shower, a presidential office, and medical room. The middle section contains a conference/dining room and offices for junior and senior staff. The rear section is for guests, security, support crew, and the press. The top deck houses the communication center, crew lounge, and flight deck. There are 87 telephones on board (both secure and nonsecure), fax machines, 19 televisions connected to a satellite transmission, and broadband Internet. Additionally, there are two galleys that serve the president and guests. The plane is staffed by 26 crew members segmented into five groups: flight crew, engineering, communications, cabin crew, and plane security. In addition to the crew, the plane can accommodate 76 passengers.

Security is of the utmost importance for Air Force One. Few details about Air Force One security are ever discussed or confirmed. Yet there are certain details that have emerged over the years. Air Force One contains an array of radio and radar-jamming equipment, sensors to detect attacks, electronic countermeasures, and deployable flares to thwart heat-seeking missiles. All the plane's wiring is covered in heavy shielding to protect against an electromagnetic

pulse stemming from a nuclear explosion. The airplane fuel is guarded and analyzed before being put into the plane. To prevent tampering, food for the plane is purchased by stewards in plainclothes from a variety of markets around Washington, D.C. To minimize exposure, Air Force One is always cleared for immediate takeoff and landing. When traveling internationally, Air Force One will have a fighter escort if the threat level is high. Domestically, Air Force One does not travel with a fighter escort due to cost and air traffic congestion. The exception was 9/11, when fighters provided an escort back to Washington.

The modern Air Force One was conceived and designed to be the airborne global command center for the president in case of nuclear war or a similar catastrophic event; until September 11, 2001, that premise had never been tested. The 9/11 terrorist attacks brought to light several flaws that prevented Air Force One from operating as a true global command center. Perhaps the most glaring problem was that the president had no way of addressing the nation. As a result, Air Force One had to leave the safety of the sky to land at Barksdale Air Force Base to allow President George W. Bush to tape his national address ("Freedom itself was attacked this morning"). Another significant problem was that Air Force One had only voice lines at the time of the attack, with no ability for video conferencing. Yet another major flaw was a lack of coordination between those on Air Force One and those on the ground. For example, leaders on the ground were executing crisis management plans but not always in real-time coordination with the president and his advisors on the plane.

The Future of Air Force One

As the presidency changes so too must Air Force One. SAM 28000 and SAM 29000 are reaching their effective limits. The air force is currently planning the next version of Air Force One. It is seeking to bring three new planes online in 2017, 2019, and 2021, respectively. Based on the events of 9/11 and the spectrum of emerging threats these new planes will be built with more security, communications, and other technological advances. Yet the objective will remain the same: to ensure that the president can travel safely and securely anywhere at any time

and while executing any and all duties at 40,000 feet in the air.

Hugo Evans

See also Marine One; 9/11 (2001); President as Commander in Chief; White House Military Office

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AIR MOBILITY COMMAND

Air Mobility Command (AMC) is the successor organization to the U.S. Air Force's (USAF) Military Airlift Command. This entry reviews the development of AMC and describes types of missions and aircraft.

Following the demise of the Soviet Union, the USAF conducted a wholesale restructuring of its various commands and organizations. During the Cold War, much of the USAF's warfighting potential rested in the Strategic Air Command, the Tactical Air Command, and Military Airlift Command. In 1992, the USAF reorganized these three commands into two: AMC and Air Combat Command. In this move, AMC received the majority of tanker and transport aircraft, while Air Combat Command received most of the fighters and bombers.

According to the May 2010 edition of *Air Force Magazine*, AMC's mission is to "provide rapid, global mobility and sustainment through tactical and strategic airlift and aerial refueling for U.S. armed forces." In this mission, AMC contains the bulk of the U.S. military's cargo and tanker aircraft assets. AMC provides airlift to all branches of the Department of Defense and other federal agencies and regularly supports the United Nations and the efforts of the international humanitarian community. In its assigned mission, AMC is tasked with

three functions: air mobility support, aerial refueling, and airlift. Not only does AMC provide the assets to move people and equipment, but it also manages, controls, and schedules airlift missions globally.

Functions of AMC

In its most visible role, AMC conducts airlift missions that support the full range of military operations at the strategic, operational, and tactical levels of war. Supporting these operations, AMC performs passenger and cargo movement, special air missions, aeromedical evacuation, and support to special operations forces. In conducting airlift missions, AMC operates a number of different aircraft, including the C-5 Galaxy, KC-10 Extender, C-17 Globemaster, KC-135 Stratotanker, and C-130 Hercules. The larger C-5 and C-17 aircraft are usually employed for strategic, intertheater airlift, while the KC-10 and KC-135 normally accomplish aerial refueling tasks. The smaller C-130s are largely used for intratheater and tactical level lift. While these assets provide the lion's share of lift capacity, the command also operates many smaller airframes like the C-9, C-20, C-21, C-32, C-37, and C-40 in operational support roles. These smaller aircraft are used for aeromedical evacuation, passenger movement, and executive transport. Furthermore, AMC is responsible for the two VC-25 aircraft known as Air Force One to support presidential functions.

Headquartered at Scott Air Force Base, Illinois, the command consists of both military and civilian personnel and numbers more than 130,000. AMC is composed of the 18th Air Force, 16 air wings, two airlift groups, and other specialized units and leverages active-duty USAF personnel as well as the Air Force Reserve and the Air National Guard. In addition, the command also utilizes the commercial airline capabilities of the Civil Reserve Air Fleet (CRAF). CRAF is an important element of AMC as it contracts civilian commercial aircraft and personnel to support AMC missions. This unique capability allows commercial aircraft to fly missions that exceed AMC's organic lift capability. With this capacity, AMC usually tasks CRAF with passenger movement to maximize the cargo lift capacity of military aircraft.

In its task to provide air mobility support, AMC conducts command and control functions for airlift operations, while also providing aerial port services,

aircraft maintenance, weather forecasting, and crash fire and rescue capabilities. AMC centrally manages all its global airlift missions from Scott Air Force Base in the Tanker Airlift Control Center. The Tanker Airlift Control Center provides real-time, in-transit visibility of AMC missions and aircraft. In addition to the centralized control, AMC also deploys teams to various theaters to help manage aircraft and airspace operations in forward areas. Due to its global mission, AMC often operates airfields in foreign countries while helping host nations manage and control their own airspace, facilities, and air traffic. In this function, AMC personnel often conduct airfield embarkation/debarkation services, enroute traffic control, and tower functions, and in many instances improve airfield facilities through construction projects.

In a unique role, AMC provides aerial refueling support globally and in all theaters of operations by use of the KC-10 and KC-135 aircraft. Given the worldwide scope of U.S. missions, aerial refueling allows aircraft to fly nonstop, while expediting the delivery of supplies or extending the range of various aircraft. In a tactical function, aerial refueling also allows fighter and attack aircraft to loiter over the battlefield longer while in support of combat operations. In this mission, AMC provides refueling support to all branches of the U.S. military and its allies. Currently, the USAF is looking to replace the fleet of aging KC-135s with the next generation of aerial refueling aircraft and at present has designated the project as "KC-X."

Supporting operations in Iraq and Afghanistan, AMC is one of the busiest organizations in the air force. In providing airlift support for both Operation Iraqi Freedom and Operation Enduring Freedom, by 2006 AMC moved 6.4 million passengers and delivered 3.9 million tons of fuel. As a result, AMC's movement totals surpassed those of the Berlin Airlift, making the ongoing operation the largest and longest airlift operation in history. As these operations and the Global War on Terrorism continue, AMC's airlift totals have, and will continue, to rise.

In addition to its military missions, AMC provides yeoman service to the international humanitarian community by providing airlift to peacekeeping and disaster relief operations. In the post-Cold War world, humanitarian operations have become a mainstay of AMC's functions. These include support for efforts in Rwanda, Bosnia, Somalia, Nepal,

Uganda, Belarus, and Tanzania, to name only a few. In recent years, AMC provided support for tsunami relief operations in 2004–2005, Pakistan earthquake and flood relief in 2009–2010, and Haiti earthquake relief in 2010. AMC also provides airlift and support for domestic emergencies like Hurricanes Katrina (2005), Andrew (1992), and Marilyn (1995), as well as flood relief in North Dakota (1997) and after the bombing of the Alfred P. Murrah Federal Building in Oklahoma City (1995).

AMC in the Future

AMC will continue to be an important element of American national power as it provides global reach in support of the national security strategy. Ongoing operations in Iraq and Afghanistan, as well as support for the Global War on Terrorism, will task AMC assets on a regular basis. Furthermore, in the foreseeable future, AMC will continue to support humanitarian and peacekeeping missions throughout the globe. As a result, AMC and the services it provides will remain an important element in America's discourse with the international global community.

John Curatola

See also Aircraft, Transport; Logistics; Transportation, Air

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AIR NATIONAL GUARD

Since September 1947, the Air National Guard (ANG) has been a reserve component of the U.S. Air Force. It was organized, trained, and equipped as a strategic reserve force. However, the ANG has evolved over its 60-plus-year history as an operational reserve force, operating on a daily basis with the active-duty air force in wartime and real-world steady-state operations. The ANG has more

than 107,000 members, about 21% of the total air force (Guard, Reserve, and active duty). Of all the missions in the air force, the ANG has 30% of the fighter, 30% of the airlift, and 35% of the air refueling missions. The ANG also performs 32% of command and control, 15% of rescues, and 13% of the command executive transport mission, as well as 5% of intelligence, surveillance, and reconnaissance and 5% of special operations. Since 1947, the ANG's combat capability and operations tempo continue to increase. This entry traces the development of the ANG to the present and discusses its missions and roles.

Background

The ANG's heritage predates 1947. Between the organization of the first National Guard observation squadron in 1916 and World War II, 29 observation squadrons were activated. These 29 units became the core of the aviation heritage of the new ANG, and its legacy continued with the 43 flying squadrons added to the ANG roster after 1947. Moreover, the ANG, like its Army National Guard brethren, continues its militia community-based tradition dating from colonial times.

Unlike the Air Force Reserve, the ANG is a dual-role reserve component with federal and state roles. Today, 89 ANG wings and more than 1,000 subordinate units are organized, trained, and equipped for the federal role during wartime conditions, but during peacetime, ANG units are under the control of the 54 governors of the states, territories, and District of Columbia, where they continue to be funded primarily by federal resources. While federal resources continue to support the ANG, in the state role, the ANG supports the governors during domestic emergencies like natural disasters, civil disturbances, various homeland defense missions, and special events.

The ANG received its baptism by fire during the Korean War. Sixty-seven flying squadrons and approximately 45,000 ANG members, or 80% of the force, were mobilized. Some units took 3–6 months to become combat ready, and some never did, but the ANG made a substantial contribution to the war effort. In response to its Korean War experience, senior ANG and air force leaders became seriously committed to building the ANG into an effective reserve component force. The ANG

received modern equipment and funding to create an effective fighting force.

When the 1961 Berlin Crisis occurred, President John F. Kennedy mobilized more than 21,000 ANG members from 28 squadrons. The ANG deployed 216 ANG fighter aircraft with support personnel to Europe to reinforce the North Atlantic Treaty Organization in Operation Stair Step, the largest aircraft deployment in ANG history. The entire deployment across the Atlantic Ocean occurred without the loss of a single plane.

The war in Vietnam stretched the air force's ability to maintain its commitments in Europe. As a result, the ANG assumed aerial refueling responsibilities for air force fighters in Europe from 1967 to 1977 in Operation Creek Party. It demonstrated that the ANG could sustain significant operational rotations overseas in support of the air force without resorting to mobilization. This rotational philosophy, using a volunteer force, remains virtually unchanged today.

With the drawdown of active-duty forces after the Vietnam War, some significant missions moved to the ANG. Air Guard KC-135 air refueling tankers began participating in the Strategic Air Command's nuclear alert force in 1976. In 1977, the ANG became the primary airlifters for U.S. Southern Command's Operation Coronet Oak, which continues today. From 1978 to 1990, rotating ANG fighter squadrons assumed responsibility for the air defense of the Panama Canal Zone (Operation Coronet Cove). The ANG participated in Operation Just Cause, the 1989 invasion of Panama to expel Manuel Noriega, its dictator, and to install a democratically elected president. In the 1990s, Air Guardsmen manned radar stations and flew fighter aircraft in Latin America to monitor and report suspected drug-running aircraft.

Turning Point

ANG fighters, tankers, airlifters, special operations, aeromedical evacuation, and security forces participated in the air campaign of the Persian Gulf War crisis of 1990–1991. During that time, 12,404 ANG members were mobilized and deployed to Southwest Asia, Europe, and other overseas locations, as well as serving in the continental United States.

Following the Persian Gulf War and the end of the Cold War, the ANG continued to operate worldwide as a totally integrated force with the active air

force, the Air Force Reserve, and jointly with all services and North Atlantic Treaty Organization forces. The ANG participated in several major operations involving humanitarian assistance, peacekeeping, and direct combat action. Some operations were extensions of those, like Coronet Oak, that involved the ANG earlier in South America. However, new operations in the 1990s were added to the growing commitment of ANG resources and capability. ANG flying and support units participated in maintaining the no-fly zones over Iraq, provided humanitarian assistance in Somalia and Rwanda, and supported peacekeeping forces in the Balkans and Haiti. Its airlift and tanker forces continued participating in the air force's global mobility operations on a daily basis. In 1997, the ANG assumed responsibility for manning First Air Force, which maintained the air defenses of the continental United States. President Bill Clinton also mobilized 4,870 Air Guardsmen during the Kosovo War in 1999.

The ANG participated in overseas federal missions to help alleviate the growing burden on active-duty air force personnel. For the ANG to meet its overseas commitments with its limited pool of aircraft and personnel, the ANG developed "rainbow" deployment packages consisting of multiple units of like aircraft to train and deploy together. These overseas missions demonstrated that the ANG was a valuable part of an operational total force. Its airlift capabilities, tankers, fighters, and expeditionary combat support units not only filled gaps in the active-duty air force but also deployed as a highly experienced and mature force whose members volunteered for overseas operations. In light of these operations, the ANG continued maintaining a high level of readiness for its state role.

The ANG played a critical role in the immediate U.S. response to the 9/11 terrorist attacks on America and the subsequent global military actions against those aggressors and their supporters. In the immediate aftermath of 9/11, the ANG improvised a greatly strengthened continental air defense system and bore the main burden of sustaining it. The combination of fighter patrols and 24-hour alerts at 26 ANG bases across the United States put heavy stress on the ANG fighter force in both training and readiness. Nevertheless, the wide geographic dispersal of its fighter units and its long-standing participation in the homeland defense mission made the ANG the right organization to execute the mission.

The ANG's aviation and support units also played critical roles in the wars in Afghanistan (Operation Enduring Freedom) and Iraq (Operation Iraqi Freedom). Flying and nonflying ANG units were deployed repeatedly to every operating base supporting those wars. When Operation Enduring Freedom began in October 2001, the ANG participated in the initial combat operations in Afghanistan and continued to participate in the mission. ANG airlift, tankers, A-10 and F-16 units, special operations, rescue, civil engineer, security forces, combat communication, and many other units have repeatedly deployed to the region over the course of that war.

When the United States invaded Iraq in March 2003, the ANG had 18,552 members on active duty who participated in the invasion and served in Afghanistan and other operations worldwide. The six ANG A-10 units participated in combat operations in Iraq and Afghanistan simultaneously.

During the invasion of Iraq, the only A-10 presence in Afghanistan was an ANG A-10 unit. In Operation Iraqi Freedom, the ANG also possessed unique capabilities critical to the war effort. The LITENING II targeting pod fitted to F-16C Block 30 fighters and a select number of A-10 aircraft provided air support for Joint Special Forces units operating in the western desert of Iraq looking for Scud missiles. In addition, ANG F-16C Block 30 aircraft provided a unique tactical reconnaissance capability for the coalition ground commanders in Iraq called Theater Airborne Reconnaissance System. This unique capability added stress to the ANG units' training requirements and preparations for overseas deployments. Intelligence, surveillance, and reconnaissance was also a small but growing capability the ANG deployed to Iraq, namely, in the collection and dissemination process via the remotely piloted aircraft (RPA) systems like the Predator.



Arming under the gaze of instructors, a team of airmen prepare for a convoy live fire exercise during the U.S. Air Force's Desert Defender area security operations course on Fort Bliss, Texas, June 30, 2010. The 6-week course is run by the Texas Air National Guard's 204th Security Forces Squadron. It prepares air force security forces for area security operations in Iraq and Afghanistan. Airmen deploy after graduation.

Source: Texas Air National Guard photo.

Besides the ANG deploying people and equipment to the wars in Afghanistan and Iraq, the ANG also performs other critical missions that support civil authorities, such as aerial fire fighting, through the Modular Airborne Fire Fighting System. In addition, one New York ANG C-130 unit provides airlift for the National Science Foundation called Operation Deep Freeze. All three ANG rescue units in Alaska, California, and New York provide critical search and rescue capability in their federal and state roles. In 1992, the ANG took on a new role in counterdrug (CD) operations. They modified 11 Fairchild C-26 Metroliner II aircraft for photo reconnaissance and aerial surveillance and redesignated the RC-26B for the CD mission. The RC-26 was so effective in providing detailed photographs of destruction caused by Hurricane Katrina that now the aircraft are used for combat operations in Southwest Asia. The ANG has performed other missions assisting civil authorities. For example, the first of some 6,000 U.S. Army and Air Guard volunteers began deploying in June 2006 to the U.S. border with Mexico under Operation Jump Start to help stem the flow of illegal migrants into the United States.

The ANG has also provided assistance to civil authorities in countless operations caused by natural and human-made disasters in the United States and abroad. Such missions are carried out using the same federal equipment and capabilities they use for combat. At home, the ANG typically performs such missions under the control of a governor. In a given year, ANG units respond to numerous calls for assistance for flood relief, suppression of forest fires, tornadoes, snow emergencies, hurricanes, civil disturbances, and labor strikes. During the summer of 2005, several hurricanes ravaged the Gulf Coast region of the United States. From August through November 2005, the ANG flew 4,132 airlift sorties in relief efforts for Hurricanes Katrina and Rita, carried 34,639 passengers and 11,496 tons of cargo, evacuated 2,046 patients from the region, and rescued 23,604 endangered people and moved them to local safe havens. In the summer of 2008, the ANG responded on a large scale to Hurricanes Gustav, Hanna, and Ike. In addition, the ANG deployed its Modular Airborne Fire Fighting System capability to Indonesia to fight forest fires and sent C-17s and C-5s to deliver relief aid to nations suffering from earthquakes.

Since the release of the Base Realignment and Closure law in May 2005, the ANG has grappled with significant challenges to its force structure to

meet the air force's critical expeditionary warfighting requirements, growing homeland defense responsibilities, and need to continue assisting civil authorities in dealing with natural disasters, illegal drugs, and terrorist threats. Since Base Realignment and Closure, the number of flying wings in the ANG has declined from 89 to 83. It is expected that many more flying missions will end primarily because of the massive retirement of older fighter, tanker, and airlift aircraft assigned to the ANG, which forced many units to merge into new and often nonflying missions such as cyber, intelligence, or command and control. Other units able to hang on to a flying mission adapted to the changing environment by becoming associate units with the active-duty air force or Air Force Reserve, sharing airplanes, facilities, and other resources.

The ANG as a unique federally funded, dual-role military organization serves the United States with a militia heritage dating back to 1636 and a combat-proven readiness and capability for current real-world overseas and domestic missions. This comes despite the continued reduction of aircraft being built and equally distributed throughout the total air force. Nevertheless, the ANG looks forward to future missions that include a greater portion of nontraditional flying missions.

David P. Anderson

See also Air Force, U.S.; Air National Guard; All-Volunteer Force; Iraq War (2003); Korean War (1950–1953); 9/11 Attack on Pentagon; Operations, Air; Posse Comitatus Act; Vietnam War; War in Afghanistan

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AIRBORNE UNITS

Airborne units are light infantry forces trained, equipped, and manned to deploy onto the battlefield via vertical insertion under parachute from an

aircraft. As these soldiers are delivered by individual parachute, so too can the immediate equipment of an airborne unit be delivered via paradrop. Large equipment parachutes are attached either to individual pieces of equipment—some can be quite heavy, including vehicles and artillery pieces—or to pallets of equipment such as food, water, ammunition, and other warfighting materiel. This entry discusses the training and leadership qualities of airborne soldiers and U.S. Marines and the procedures for an airborne operation.

The most well-known American airborne unit is the U.S. Army 82nd Airborne Division, though dozens of other smaller units also retain an airborne capability. The U.S. Army has six airborne brigade combat teams (BCTs), each with 3,750 soldiers. While *airborne* is an adjective describing such smaller units and their parachute-qualified forces, “the Airborne” usually means the 82nd.

Training

An American airborne soldier is trained at the U.S. Army base at Fort Benning, Georgia, where U.S. Army trainers, experts, and the managers of the American military’s program for airborne operations conduct the Basic Airborne Course. This 3-week course of basic military parachuting is built to generate large numbers of airborne soldiers each year. The course of instruction culminates in five jumps and is widely known simply as “jump school.”

On graduation from this course, newly trained airborne soldiers or U.S. Marines are authorized to wear the silver basic parachutist badge on their uniforms. Later parachute operations may authorize a member of the U.S. Navy or Marine Corps to wear the gold wings of the Navy-Marine Corps Parachutist badge, while U.S. Army soldiers may later qualify for Senior Parachutist or Master Parachutist badges. U.S. Army soldiers are authorized a star on their jump wings if they have jumped into a confirmed combat zone.

Procedures

An airborne operation is controlled by a jumpmaster inside the aircraft, who is in radio contact with one or more assistant jumpmaster(s) in the aircraft; the pilots, crew chiefs, or loadmasters of the aircraft; the drop zone controller and/or pathfinder (an airborne soldier sent ahead of the rest of the unit to mark drop

or landing zones) experts on the ground; and sometimes the airborne unit commander. The pilot flies a predetermined course above a drop zone, correcting for wind, and indicates to the jumpmaster the precise moment at which jumpers can begin to exit. This signal is often given via a green light inside the aircraft. The jumpmaster then orders the jumpers out.

Large airborne units are inserted via a static-line operation from either a helicopter or a fixed-wing aircraft. A static line is a thick strap of webbing, one per jumper, which at one end is attached to a drogue chute (a small parachute that deploys first) and at the other ends in a snap hook. This hook is fastened to a wire inside the aircraft. As the jumper falls away from the aircraft, his body weight tightens the static line, which in turn pulls out the drogue chute and deploys the full parachute. Parachutes for static-line operations are round or rectangular, with minimal forward airspeed on the round chutes provided by missing panels on one side, which provide for the jumpers to “fly” the parachute as an airfoil to a safe landing.

An airborne unit is generally inserted via static line at low altitudes, usually between 1,250 and 1,750 feet above ground level but sometimes as low as 500 feet above ground level. Such low-level insertion keeps jumpers grouped together in drop zones by preventing winds aloft or jumper mistakes from scattering the hundreds or thousands of jumpers involved in a large airborne operation, and it also minimizes the exposure time of jumpers helpless in the air.

Some airborne units have more highly trained individuals ready to conduct high-altitude parachute insertions. These units, which tend to be smaller, more specialized, and highly selective, include Army Special Forces, Marine Corps Force Reconnaissance, Delta Force, Navy SEAL, and the Army 75th Ranger Regiment. High-altitude, low-opening and high-altitude, high-opening operations, as their names imply, involve jumping from aircraft at high altitudes, often requiring the individual jumper to wear and breathe bottled oxygen. The jumper freefalls, sometimes for thousands of feet, and opens a higher performance parachute via a ripcord at a predesignated altitude to avoid detection and to fly it to a target zone.

Leadership

Airborne units are trained to operate independently and without resupply for several days. Such units can jump in and fight immediately or may be inserted

to take over an airfield for resupply and reinforcing operations via landing large transport aircraft. In the first days of Operation Iraqi Freedom in 2003, for example, members of the 173rd Airborne BCT executed just such a latter operation north of Baghdad.

Small unit leadership is crucial in such operations, and airborne units around the world pride themselves on producing tough and intelligent leaders. This small unit leadership is crucial not only for the airborne insertion itself, with its inherent dangers and requirement for physical bravery, but also for the independent operations to which these units are often assigned. It is important to note that the airborne capability is only one way to place a unit in its tactical position on the battlefield; though a unit may belong to, for instance, the 82nd Airborne, it is likely that it will fight as an infantry force in modern combat.

These units, by their nature and training, are very lightly equipped, and as light infantry, they do not pack the “punch” of a larger or heavier force. They are highly mobile and flexible, however, and on an enormous battlefield like that in Afghanistan, with its severe weather, treacherous mountains, and great distances between units, a force will often fight alone. Airborne units must make use of combined arms—the summoning, terminal guidance, and control of indirect and air-delivered fires as well as their own weapons—to fight unsupported.

In operations in Afghanistan as part of Operation Enduring Freedom, for instance, U.S. Army Airborne soldiers have retained their expertise in parachute operations, but far more often, they are used as light infantry forces spread across a vast, austere battlespace. French airborne forces at Dien Bien Phu in Vietnam in 1954 were cut off and surrounded in a valley, but they fought, often to the death, against a far larger enemy force. The French example is one of exceptional small unit leadership, esprit de corps, and camaraderie.

Perhaps American airborne units’ finest hour and a leadership example is that of the U.S. Army’s 82nd and 101st Airborne’s preinvasion jump into Normandy on the night before the June 6, 1944, Operation Overlord landings, now famous as the D-Day invasion. Hundreds of aircraft were dropping nearly 14,000 jumpers into a relatively small area, and pilots worried about alerting the German antiaircraft defenses as well as deconflicting with one another. Their drop aircraft scattered by altitude,

flak, poor navigation, and bad weather; individuals drifted widely; and units immediately lost integrity and scattered in the dark and behind German lines.

Some men fought for days with other units and officers before finding their own. Though a difficult insertion, the D-Day operation grew into legend in proving the Airborne’s resourceful small unit leadership, in which young officers and noncommissioned officers gathered up ad hoc teams of confused and scared soldiers and without guidance nevertheless executed the missions they had been assigned. This is a hallmark of airborne units: training to be cutoff and alone, lightly armed and supplied, and deep to the rear of enemy forces.

Stanton S. Coerr

See also Combined Arms; Force Reconnaissance, Marine; Germany; Infantry; Marine Corps, U.S.; Special Forces, Army; World War II

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AIRBORNE WARNING AND CONTROL SYSTEM (AWACS) AIRCRAFT

Throughout the history of warfare, military commanders have attempted to give their forces an advantage by minimizing the fog of war. To minimize the fog during modern air combat, air forces and navies throughout the world deploy Airborne Warning and Control System (AWACS) aircraft. These aircraft, converted from either cargo or commercial airliners, employ extremely long-range search radars. This allows highly trained mission specialists to control air operations by identifying hostile aircraft and ground targets and directing aircraft to those targets before they can threaten friendly air and ground operations in theaters around the globe.

This entry traces the development of AWACS aircraft and describes AWACS equipment, capabilities, operations, and crew.

AWACS Aircraft Development

Early Development

The U.S. Navy spearheaded early development of AWACS aircraft during the later stages of World War II. The need for these aircraft became apparent after the navy suffered large fleet losses thanks to Japanese kamikaze raids off Okinawa. Because of these losses, the navy tasked the Massachusetts Institute of Technology with developing a search radar set that could be deployed in an aircraft, thereby extending the range in which the navy could detect incoming enemy air raids. Codenamed Operation Cadillac, the result of this research was the AN/APS-20 search radar. To deploy the AN/APS-20, the navy paired the radar with a modified TBM Avenger torpedo bomber. Crewed by a pilot and a radar operator and known as the “Guppy” (thanks to the bulge on the bottom of the aircraft due to the radar dome), the TBM-3W could detect aircraft up to 100 miles away from the fleet. Following the use of the TBM-3W, the navy turned to the development of a dedicated AWACS aircraft during the postwar period. In the summer of 1945, the navy acquired 23 surplus B-17G heavy bombers. Redesignating them PB-1W, the navy outfitted these aircraft with the AN/APS-20 and crewed the aircraft with fighter directors.

Early Cold War AWACS Advances

Following the PB-1W, the U.S. Navy turned to the EC-121 to fill its need for a dedicated AWACS platform. Based on the Lockheed Super Constellation, the navy procured its first EC-121 Warning Star in 1949. These early models were outfitted with the APS-20 search radar as well as the APS-45 height finding radar. These early models were so successful that by the early 1950s, both the navy and the U.S. Air Force turned the EC-121 into the primary land-based AWACS aircraft of the U.S. military throughout the 1950s and 1960s. In addition, to provide the fleet with a carrier-borne AWACS capability, the navy debuted the E-1 Tracer in 1959. The Tracer, which was a converted Grumman S-2 Tracker antisubmarine warfare aircraft, had a crew of four

and featured the APS-82 air search radar placed in a sloped, saucer-shaped housing on the top of the aircraft. Current Aircraft

The current inventory of U.S. AWACS aircraft is a diverse group of technologically advanced aircraft that gives the United States and its allies an advantage during air operations. For the U.S. Navy, the Grumman E-2 Hawkeye gives the navy an organic AWACS aircraft that is truly the eyes of the fleet (*organic* means that the navy has a capable AWACS platform of its own and does not have to rely on another entity for AWACS coverage). The Hawkeye was first deployed in 1964. At first, the Hawkeye’s main search radar was the APS-96. Through the years, the navy has upgraded the electronics on the Hawkeye, and currently the navy’s E-2C variants are equipped with the APS-145 search radar. This unit is capable of detecting targets at 350 nautical miles and is capable of handling 40 hostile intercepts simultaneously. The APS-145 is also the centerpiece of the detection systems of the E-2D. This variant of the Hawkeye features upgraded avionics and electronics and allows the navy to conduct traditional air detection missions, perform maritime tracking and surveillance, and manage humanitarian relief efforts. The navy plans to deploy the E-2D to the fleet in 2015.

The U.S. Air Force relies on two AWACS aircraft. The primary AWACS platform of the air force is the E-3 Sentry. Developed in the mid-1970s, the E-3 was first deployed in 1978. The E-3 is based on the Boeing 707 and currently features the Grumman AN/APY-2 as its main search radar. This system has a range of more than 250 nautical miles and has the capability to perform various search patterns, including evaluating maritime targets. Finally, for the tracking of ground targets, the air force employs the E-8 Joint Stars. The Boeing 707 is also the basis for the E-8, and the aircraft employs the AN/APY-7 radar to detect ground targets up to 150 miles from the aircraft. There are currently 17 E-8s in the air force inventory, the last of which was delivered to the air force in 2005.

AWACS Crew Positions and Responsibilities

There is no doubt that technology plays a large part in AWACS operations. However, like every other

modern weapons system, the technology is there only to aid the human crew in carrying out their mission. This is especially true for an AWACS crew.

Crew Makeup

AWACS crews vary widely depending on the aircraft and the mission. For instance, the E-2 Hawkeye is crewed by five people. The cabin crew is made up of a pilot and a copilot, while the mission crew consists of a combat information center officer, an air control officer, and a radar operator. Conversely, the crew of the larger E-3 Sentry consists of four flight crew members (pilot, copilot, navigator, and crew chief) and from 13 to 19 mission specialists. These mission specialists are separated into a surveillance and a control section. Each section is manned by three to five specialists and is tasked with a distinct portion of the mission much like their navy counterparts.

Crew Responsibilities

Despite the difference in crew size, the responsibilities of both Hawkeye and Sentry crews are largely the same. During the average mission, the radar operators will interpret the radar picture by separating friendly forces from hostile ones. Then, when hostile forces are detected, either the air control officer or the weapons controller (on the Sentry) will direct friendly aircraft to intercept and engage the enemy air or ground targets.

AWACS Operations

AWACS mission profiles like the one above have been executed by the United States in every major conflict since the Cold War. In the 1950s, EC-121 Warning Stars formed the first line of defense for the United States against the possibility of Soviet bomber attack when the aircraft maintained two distant early-warning radar picket lines. The EC-121 also deployed to Vietnam in the 1960s and early 1970s and was tasked with tracking MiGs of the North Vietnamese Air Force. In the late 1970s and into the 1980s, U.S. Air Force and North Atlantic Treaty Organization (NATO) E-3s turned their attention to once again maintaining surveillance of the Soviet military.

AWACS missions continued after the conclusion of the Cold War. In 1990, during Operation Desert Storm, the U.S. Air Force E-3 force directed more than 120,000 allied sorties and is credited with

helping destroy 38 of 40 Iraqi MiGs. In addition, the E-3 was an integral part of Operation Northern Watch, a combined task force mission to enforce the northern no-fly zone over Iraq following the end of hostilities in the Persian Gulf. Finally, air force Joint Star aircraft detected the retreat and coordinated the destruction of the Iraqi army as it left Kuwait. AWACS aircraft have also found a place in operations in the post-Cold War era. In 1999, U.S. Air Force E-3 units flew 500 missions, where they directed offensive, defensive, and search and rescue air operations as part of NATO operations in Kosovo. In October 2001, NATO E-3 crews conducted operations over the United States following the September 11 attacks on the country. Finally, U.S. AWACS aircraft are an important cog in providing close air support to Allied forces in Iraq and Afghanistan. These operations, as well as those of their predecessors, illustrate that AWACS aircraft have been an important part of military operations since before the Cold War and will continue to be so into the 21st century.

Lee C. Kluck

See also Afghanistan; Air Force, U.S.; Boeing; Iraq War (2003); Lockheed Martin; Natural Disaster, Military Response to; Persian Gulf War; Vietnam War

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AIRCRAFT, ANTISUBMARINE

Until the 1950s, aviation had little effect in antisubmarine warfare (ASW), as it was next to impossible to spot a submerged submarine from the air. Technology limited air crews to eyesight (later aided by radio direction finders and radar) and experience to detect a submarine either surfaced or snorkeling to transmit radio signals or resupply air and/or stores. It wasn't until sonar was adapted to aviation that aviation earned its true place in ASW. Newer and more affordable submarine designs allow smaller countries and smugglers to expand undersea capabilities, pushing aviation ASW to the forefront. The ASW airframe designs are unique in that they must fly "low and slow" and by a patient pilot. This entry describes the types of missions and aircraft and discusses advances in technology.

ASW Airframes

Prior to the 1920s, basic airships and biplanes adapted into seaplanes, tended at sea by seaplane tenders, were used for ASW. As aviation technology advanced into the 1920s, the first true expansion of naval aviation research began to take shape. Long-range airframes (5,000 kilometers) designed for search and rescue and surface patrol, such as Consolidated PBY Catalina (the United States) and the Short Sunderland (the United Kingdom) "flying boats," were often assigned ASW missions. Throughout both the World Wars, task forces and convoys were the primary targets of submarines. Large numbers of aircraft were necessary to create an effective bubble around these targets. To expand the efficiency and compensate for the limited range of aircraft, convoys employed AVPs, escort—or "jeep"—carriers (CVEs) and capital warships as escorts. These ships provided numbers and various models of standard carrier-borne and small single-engine sea/pontoon planes to range out attempting to be more effective by detecting enemy submarines before they could get too close to the convoy.

During the 1950s and the Cold War, U.S./North Atlantic Treaty Organization (NATO) forces saw the need to expand aviation ASW for task force, coastline, and inland protection against the expansion of a Soviet strategic submarine threat. Advancements in sonar and digital electronics made sonar aircraft deployable, though with some limitation. The towed sonar array required tethering to its host, which created a drag coefficient too great for fixed-wing airframes. The newly developed rotary-wing helicopter, however, could hover and deploy the *dipping sonar* array to 100 meters below the surface with ease and could be easily deployed from helipads on many classes of ships. Popular helicopters still in use are the 1961 Sikorsky SH-3 Sea King (discontinued in the United States), the 1959 Kaman UH-2 Seasprite, the 1978 Agusta Westland Lynx, and the slightly larger 1979 Sikorsky SH-60 Seahawk. These airframes were very efficient in their original aerodynamic design; improvements in range and payload are the result of lighter and stronger structural materials, engine efficiency, and in-flight refueling. In addition, modern light-weight and smaller digital avionics and ASW hardware extended the service life of these older and well-designed airframes, allowing for multiple hard points (attachment or mounting points on any part of the airframe, e.g., under a wing, designed to carry a load) for ASW weapons.

Not having the World War II naval aviation experience of the U.S./NATO forces, Soviet/Russian ASW and political philosophies center on the fast-attack submarine. They do, however, maintain minimal ASW aviation assets and have a string of ASW helicopter designs. Size is a primary concern, so their primary shipborne designs have no tail rotor to allow them to fit into smaller spaces. Soviet/Russian helicopters include the 1958 Kamov 25 "Hormone" and the 1976 Kamov 27 "Helix," which has two top rotors. Today, as economic constraints are being placed on the world's militaries, the use of smaller drone helicopters like the popular DASH QH-50 is providing aviation ASW capabilities to smaller littoral patrol vessels.

As digital radio and its encryption technology advanced, so did sonar with the development of the sonar buoy (sonobuoy). Disposable and free floating, the sonobuoy transmits contact and environmental data to its host and is easily deployed by all airframe types as well as vessels. A deployed array of

several sonobuoys creates a coordinated free-ranging bubble below and around a task force convoy or brackets a target submarine. Originally developed for geologic exploration, magnetic anomaly detection (MAD) systems were being adapted for ASW toward the end of the Second World War. Though very accurate, MAD has limited range but, when coupled with a sonobuoy array, can find a bracketed submarine with pinpoint accuracy. The sonobuoy/MAD package revolutionized ASW and allowed for fixed-wing aircraft to reenter the ASW air fleet.

Short-range escort missions for a task force and/or convoy are primarily assigned to ship-based helicopters, fixed-wing vertical takeoff and landing, or vertical/short takeoff and landing like the Soviet/Russian 1975 Yakovlev Yak-36. Long-range patrols, such as polar ice-pack and coastal patrols, require land-based fixed-wing airframes. Fuel-efficient luxury liner airframes were chosen for their range and payload capacities. These large airframes allow space for multiple missions, expanded bracketing/attack ASW capabilities, and hard points for additional fuel tanks and weaponry. Their only

limitation is the aircrew fatigue common to all patrol aircraft, though land-based crews do fare better. The Russia Ilyushin IL-38 May, the NATO Lockheed P-3 Orion, and the British Aerospace Nimrod are some examples. Worth mentioning is the U.S. Navy's 1974 Lockheed S-3 Viking fixed-wing aircraft; this relatively small aircraft provided at-sea long-range ASW capabilities to U.S./NATO forces for three decades. It was replaced in 2009 by the more economical yet equally capable latest model SH-60, ending at-sea fixed-wing ASW for the U.S. Navy.

Information Technology

As can be imagined, the data packages created by the number of deployed ASW aviation, surface, and subsurface assets can be overwhelming. To coordinate the data and asset efficiency, each ASW aircraft is equipped with the Light Airborne Multipurpose System (LAMPS) integration computer. Used primarily by the U.S./NATO navy, it is an integral part of the anti-aircraft Aegis Combat System. LAMPS coordinates all linked ASW data from an area of



An air-to-air right-side view of an Air Antisubmarine Squadron (VS-31) S-3A Viking aircraft with an ASQ-81 magnetic anomaly detection probe extending from the tail section. The aircraft is assigned to the nuclear-powered aircraft carrier USS *Dwight D. Eisenhower* (CVN-69).

Source: U.S. Navy Photo.

operation and oceanographic-satellite and Sound Surveillance System reports from fleet command centers to generate targeting solutions for associated weapons assets.

The all-inclusive protection package focuses on a mission-dependent primary asset (coastline, convoy, cruiser, aircraft carrier, etc.) and coordinates surface, subsurface, and aviation units that range miles around the primary asset forming a protective bubble. The range and speed of aircraft to deploy a bracket is ASW's greatest asset. When an enemy submarine is detected in the bubble, the ranging LAMPS will dispatch aviation and other assets to the area. Once pinpointed, LAMPS then notifies and coordinates appropriate surface and subsurface assets to the area to rein the target into a "killing zone." On identification as an enemy, appropriate weapons are deployed to dispatch the target.

The capabilities of modern submarines encouraged navies to expand efforts in ASW weapon technology. The primary aviation ASW weapon at the time of this printing is the *aerial torpedo*. A single conventional warhead from any aerial torpedo or bomb/mine is not likely to sink a modern double-hulled submarine. The expectation is to cause enough damage to disrupt the mission until a surface vessel or submarine can dispatch the target with multiple warheads. Although a tactical nuclear warhead could sink a modern submarine, the Strategic Arms Limitation Talks agreements of the 1970s require them to be counted in a country's total nuclear arsenal, and therefore, they have for the most part been discontinued.

ASW aerial torpedoes, such as the smart and lightweight (between 600 and 800 pounds) Mark-46 (U.S./NATO), are under constant technological improvement. These torpedoes have computer-controlled active/passive acoustic guidance and countermeasure resistance; speeds are in excess of 40 knots, and ranges, though classified, can exceed 8,000 meters. The warhead is 100 pounds of poly-bonded high explosive. The target search signature and arming protocols are remotely preprogrammed by LAMPS into its guidance computer prior to entering the water. Deployment can be either by simply dropping them from any aircraft or by launching them from a separate delivery system, such as the antisubmarine rocket from a surface vessel. The *rising mine* such as the CAPTOR (encapsulated torpedo) has been discontinued by the United States

due to its poor performance; however, it remains in use by other navies. Deployed by an aircraft or vessel, it is a sonar-activated encapsulated torpedo. It is placed on the sea bottom as part of an array of several units, establishing a "kill zone." When activated by a passing submarine with the appropriate sound signature, it sheds its skin and is acoustically guided to the target as a torpedo. The premise is that several torpedoes of the array may be launched at a single submarine causing enough damage to sink it.

Modern ASW

Today, the design of ASW airframe architecture is at a relative standstill. Airframe design efforts are primarily focused on lighter and stronger construction materials and engine performance. The primary advancements are in ASW instrumentation technology, refining deployment and detection capabilities for aviation and surface and subsurface vessels. ASW is a team effort; all ASW assets must work together to stay ahead of submarine stealth technology. China, Russia, and many Third World navies are evolving away from the stand-alone ASW concept to a coordinated systems approach as both submarine and ASW technologies enter the free market, which includes an emphasis on significant high-tech aviation components making ASW more dependent on aircraft and their capabilities.

Michael F. Solecki

See also Aircraft, Patrol; Aircraft, Reconnaissance; Antisubmarine Warfare; Helicopters; Radar; Submarines; Torpedoes; Warfare, Submarine

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- The Global Security website is an excellent reference and background material for this topic: <http://globalsecurity.org>
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AIRCRAFT, ATTACK

Attack aircraft fulfill two primary roles. Their first role is air interdiction, disrupting the enemy's military capabilities before they can be brought to bear against the Allied forces. Their second role is the destruction of enemy ground units, whether independently or in support of allied ground units. In the modern world, there are few specialized attack aircraft. Most fighters can, if necessary, also provide ground support. It is easier to view aircraft as

platforms designed to deploy the weapons they are armed with. Most modern fighters contain the technology and versatility to deploy cannons and missiles against other aerial targets and cannons, bombs, mines, and air-to-surface missiles against ground targets. The primary difference between an attack aircraft and a bomber is the fact that bombers have longer range capabilities, can carry a larger payload of bombs, and lack the potential to deploy antiair weaponry. Fighters designed solely for aerial superiority are designed with speed and maneuverability in mind, lacking the durability and ruggedness necessary for ground assault. This entry provides a history of attack aircraft, their development and current uses, types of aircraft, and weapons used.

Attack Aircraft During the Two World Wars

World War I saw the birth of aircraft of all roles, with attack aircraft being used to target enemy trenches with machine guns or tanks and artillery with small bombs. Attack aircraft during this period relied primarily on speed as their means of defense. The small engines and limited understanding of aircraft design meant that light materials had to be used for the planes to perform, limiting survivability. Though they proved to be effective in combat, a large number were lost to antiaircraft and small arms fire.

Following the end of the First World War, the Allied Powers turned to the bomber as the primary weapon, giving attack aircraft a minor berth. The start of the Second World War saw the Allies entirely unprepared for the German mechanized army, supported by the large attack aircraft wing of the Luftwaffe. German attack aircraft, especially the Ju-87 Stuka dive bomber, supported the advancing army, destroying enemy fortifications and troop concentrations. Entering a near-vertical dive, the Stukas attacked with great accuracy while at the same time frightening nearby enemies with their Jericho Trumpets—sirens attached to their landing gear.

The Allies rediscovered attack aircraft entirely by accident. During the war, a number of interceptor and escort fighters began to strafe German positions to spend the remaining ammunition before returning home. Adding small bombs to fighters to further harass the German armed forces resulted in the creation of fighter-bombers, the Allied version of attack aircraft. Fighter-bombers were used to great effect before the D-Day landings, striking bridges, rail

lines, and airfields and occasionally providing close air support (CAS). At this stage, CAS was a secondary objective; targeting the enemy's logistical lines proved to be far more effective. The Western Allies' primary attack aircraft, the P-47 Thunderbolt, like its predecessors, relied on speed for survival. The Soviet Union, however, used a different approach. Its ground attack fighter, the Il-2 Shturmovik, was significantly slower than its contemporaries as a result of its heavy armament and armor. Armed with 20-mm cannon and thick armor plating, the Shturmovik was able to target enemy armor and was virtually immune to small arms fire.

During the war, attack aircraft were found to have some serious drawbacks. Designed primarily for ground attack, they lacked maneuverability or speed, necessitating a fighter escort to defend them. The Germans discovered this limitation of the Stuka during the Battle of Britain, while the former Soviet Union recouped losses through industry and sheer force of numbers. For the Allied fighter-bombers, survivability was less of an issue as the fighter-bombers were able to engage fighters if necessary, but their lighter construction made them less effective in the ground attack role.

Attack Aircraft During the Cold War Era

Following the Second World War, focus shifted to the newly developed intercontinental bombers and the use of nuclear weapons. A Tactical Air Command was established in the United States as a requirement of the establishment of the U.S. Air Force as a separate service, though this branch found itself largely ignored in favor of the nuclear bombers of Strategic Air Command. The limited effectiveness of ground attack fighters in the Korean War led credence to the argument that strategic bombers would be the only effective force in the postwar period. Laborers in North Korea negated the effects of attacks on the logistics lines by repairing rail lines and bridges with great speed. Similarly, a lack of adequate airfields in South Korea required the fighters to deploy from Japan, which, with limited intelligence, limited their ability to provide CAS. Following the Korean War, development of attack aircraft languished.

The Vietnam War allowed the air force to learn, yet again, the necessity of dedicated ground attack aircraft. The F-105, a single-strike nuclear fighter adapted to the ground attack role, was thin-skinned and poorly designed for this new purpose. Lacking

armor, redundant systems, and self-sealing fuel tanks, it was never designed to sustain ground fire. The F-4 Phantom, which replaced it, provided better survivability but was also not meant for ground attack. A large number of attack aircraft were lost to enemy anti-aircraft fire and surface-to-air missiles.

The Vietnam War saw the advent of the side-firing gunship. A plane circling a set point could accurately lay fire on a target for a period of time. C-47 transport aircraft were modified to carry three 7.62-mm miniguns and given the new designation AC-47 (for attack). The effectiveness of this design was rapidly noted in attacks on convoys, and the designs were further adapted. The C-130, a larger transport plane, was quickly adapted to this role. Given its size and the ability to carry larger weapons, it proved to be more flexible. Containing night vision technology and infrared, variations of the AC-130 contained larger 20- and 40-mm cannons, with some containing 105-mm artillery guns.

The Vietnam War also saw the beginning of the use of precision-guided munitions (PGMs). Laser-guided munitions were quickly found to be far more effective in targeting structures, such as bridges, and now granted the ability to attack targets in delicate areas, such as towns. Though laser guidance systems could not be used during periods of cloud cover or fog, they were able to increase bomb accuracy to within meters of the target. The lack of major conflicts during the late 1970s and 1980s allowed for the development of new technology for attack aircraft. The F-117 Nighthawk stealth fighter-bomber was a classic example. Utilizing stealth technology, night vision sensors, and laser targeting, it was able to deploy two laser-guided bombs with extreme precision. F-15Es and F-16s were upgraded to use Low Altitude Navigation and Targeting Infrared for Night pods, giving fighters the ability to operate at night. Coupled with the joint surveillance target attack radar system, which allowed for the surveillance and tracking of ground vehicles and aircraft, attack aircraft were now able to identify targets and destroy them with precision.

Attack Aircraft After the Cold War Period

These new technologies would be demonstrated during Operation Desert Storm, the Persian Gulf War (1991). Concentrated attacks on the Iraqi air defenses resulted in air superiority, allowing attack aircraft to

act with virtual impunity. The air force was then able to focus on Iraqi ground forces and their supply lines. Bridges were targeted and destroyed, reducing the Iraqis' ability to deploy and sustain their forces. Also, since tanks disperse heat at a slower rate than the desert sands, they were easy to identify at night, providing visible targets to planes equipped with infrared equipment. During the sustained air attack campaign that preceded the ground operation, Iraqi forces lost 1,400 tanks and 2,000 armored vehicles and artillery pieces. Compared with the air campaigns of the past, this was an unprecedented change.

Desert Storm also saw the deployment of the A-10 Thunderbolt II, colloquially known as the "Warthog." True to its name, it is an unattractive plane but perfectly suited for ground attack. In a design that emphasizes survival, the pilot sits in a titanium tub, with multiple redundancy systems and two engines strategically placed to muffle the heat signature. The plane saw great usage in Operation Desert Storm, using its 30-mm Gatling gun and guided antitank missiles against enemy tanks, troops, and fortifications. The design of the plane is such that it would still be capable of returning from a battlefield with a single engine running and having lost half of a wing.

Attack aircraft played a similar role in the North Atlantic Treaty Organization peacekeeping operation in Kosovo, Operation Allied Force, targeting the military forces and infrastructure of Slobodan Milosevic's regime, which was persecuting the Kosovo Albanians. This operation also saw the first use of Joint Direct Attack Munitions. A guidance package that is attached to unguided bombs to turn them into PGMs, Joint Direct Attack Munitions uses Global Positioning System tracking to strike its target in any weather and is accurate to within 10 meters.

Attack Aircraft in the 21st Century

Attack aircraft play a prominent role in the North Atlantic Treaty Organization peacekeeping operation in Afghanistan, as they did during the now completed Operation Iraqi Freedom in Iraq and Operation Unified Protector in Libya. Though the aircraft worked to cut their supply lines, they were more readily utilized for CAS missions, assisting soldiers by targeting enemy units directly. This capability is made possible by the use of intelligence, through the use of reconnaissance planes, satellite tracking, unmanned

aerial vehicles, or other sources. The ability to refuel planes in flight reduces any limitations of range and allows aircraft to remain on station for large periods of time, limited solely by vehicular endurance. However, in unconventional conflicts, such as those in Iraq and Afghanistan, it is difficult for planes to operate in areas where there is a large civilian presence. The risk of friendly fire incidents is high, and given the potential accuracy of the weapons involved, collateral damage is difficult to justify. Civilians are not forgiving of intelligence or mechanical faults.

At the moment, the A-10 and the AC-130 are the only dedicated attack aircraft in service in the U.S. Air Force. However, any aerial platform that can be equipped with ground attack weapons—air-to-ground missiles, guided or unguided bombs, and cannons—can be an attack aircraft. In the modern world, it is easier to think of planes as platforms, with their equipment and mission objectives determining the role that they play. To this end, the entire fleet of the U.S. Air Force can be considered attack aircraft. The U.S. next-generation fighter, the F-35 Lightning, is expected to be a multirole fighter, being able to take on the role of air superiority and ground attack with equal effectiveness. Other Western attack aircraft include the Royal Air Force Tornado and its replacement, the Eurofighter Typhoon. Russian attack aircraft include the Su-25 Frogfoot, the Su-27 Flanker, and the MiG-29.

Attack aircraft have come a long way from the fragile trench strafers of World War I and the fighter-bombers of the Second World War. Armed with cannons and PGMs, attack aircraft play an important role in weakening the enemy before they are engaged by friendly forces. With modern wars favoring unconventional guerrilla conflicts, attack aircraft excel at targeting mobile targets rapidly, often from ranges where the aircraft itself cannot be seen or heard. At the moment, the majority of attack aircraft are manned, with the split-second decision making of targeting left to a pilot or gunner. However, a growing number of unmanned aerial vehicles are assuming the attack role. Initially deployed as reconnaissance vehicles, many have been armed with precision missiles for the purpose of attack roles and are beginning to play a more prominent role in modern warfare. These platforms are likely to become even more commonplace in the current state of economic turmoil; they provide similar effects as attack aircraft but with a significantly

smaller budget. Similarly, it is more difficult to justify the use of bombers in unconventional wars where the enemy does not have major bases and cities to be targeted. Future platforms, such as the F-35, are designed to play multiple roles as such high costs for a specialized craft are no longer sustainable.

Radu Venter

See also Aircraft, Fighter; Helicopters

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AIRCRAFT, Bomber

Bombers are aircraft designed to attack land and/or sea targets by dropping gravity bombs or by launching air-to-ground missiles. Few military innovations have influenced the character of modern warfare as much as the bomber. Bomber aircraft have played a highly significant role in beginning, waging, winning, and preventing modern wars since their introduction in the earliest days of powered flight, and they continue to affect nearly every level of human conflict today. This entry discusses the history of bomber aircraft and early bomber advocates and the roles and strategic uses of bombers by the U.S. military from the early 20th century to the present.

Early Development

While the actual development of bomber aircraft occurred through a gradual process of experimentation, the idea of the bomber far predated the Wright brothers' first powered flight in December 1903. As early as 1847, the bombing of Vera Cruz from

hot air balloons was proposed during the Mexican-American War, and in 1849, the Austrian forces tried unsuccessfully to attack Venice with unmanned balloons loaded with explosives. In 1892, the French War Ministry contracted with the French aviation pioneer Clement Ader to develop a powered aircraft that could carry 75 kilograms of explosive instead of a second man and fly over a specific point. While the Wright brothers awaited the patent for their first aircraft in 1906, Captain William "Billy" Mitchell was lecturing on the uses of balloons and dirigibles for aerial bombardment at the U.S. Army Signal School at Fort Leavenworth, Kansas. Over time, advances in aviation technology gradually made these early visions for aerial bombing a practical reality.

While early military aircraft were seen primarily as a battlefield surveillance asset to support ground forces, early aircrews quickly saw possibilities for autonomous aerial attacks—many of the first "bombs" delivered from aircraft were improvised weapons like bricks and handheld grenades. The first documented aerial bombing was conducted on November 1, 1911, by an Italian pilot flying a surveillance mission against Turkish troops in Libya, the same year a crude mechanical bombsight was designed for U.S. Army Wright Flyer aircraft.

Bombers in World War I

Faced with the massive carnage of static trench warfare, World War I military leaders increasingly looked to bomber aircraft to return decisive mobility to the battlefield. German forces combined bomber attacks with targeted infiltrations of specially trained infantry troops using the *Sturmtruppen* (stormtrooper) tactics that would mature to become the Blitzkrieg tactics of World War II. In 1918, Colonel William "Billy" Mitchell designed a massive 1,400+ aircraft attack, including 414 bombers, against the St. Mihiel salient. The same year, Colonel Edgar Gorrell proposed "strategical bombardment" attacks against German key industrial targets, but the armistice came before they could be executed. By the end of the war, both sides had developed aircraft specifically for the purposes of aerial attack, and the era of the bomber began.

The Interwar Years

The period between World Wars I and II was one of dramatic innovation for bomber aircraft.

As the range, durability, power, and speed of aircraft improved, it became more and more feasible to propose long-range bombing missions far behind enemy front lines. Air power theorists like the Italian General Giulio Douhet proposed that future wars would be decided by “battleplane” bombers attacking enemy airbases and cities. Mitchell argued that bomber aircraft would make armies and navies obsolete, and he sought to prove his point by sinking the captured German battleship *Ostfriesland* and several obsolete U.S. battleships with Martin MB-2 bomber aircraft in a series of highly public demonstrations.

Mitchell’s advocacy for the preeminence of air power, and the need for an independent air service, was so strident and harsh that he alienated both critics and many would-be supporters. He resigned from the service after his court-martial in 1926, but not before his ideas had permeated the defense community.

Despite Mitchell’s controversial rhetoric, in 1924 the softer spoken Major General Mason Patrick was able to gain approval for General Headquarters Air Force, a wartime organization within the U.S. Army dedicated to using bomber aircraft as strategic weapons instead of solely as ground support assets. In subsequent years, the U.S. Air Corps Tactical School developed a doctrine designed to defeat enemies through direct air attacks against their critical war infrastructure. This doctrine also led to the development of highly specialized, multiengine, long-range bombers designed to fly at high speeds and altitudes, further separating the large “strategic” bomber from smaller “tactical” fighters (built primarily to shoot down other airplanes) and pursuit aircraft (aircraft with both fighter and ground attack capabilities). The development of heavy bombers like the B-17 Flying Fortress, B-24 Liberator, and B-25 Mitchell would later prove vital to Allied bombing efforts in World War II.

Mitchell’s *Ostfriesland* demonstration also left an indelible imprint on the U.S. Navy. Recognizing the potential of seaborne bomber aircraft, the U.S. Navy developed seaborne dive bombers and torpedo bombers specifically designed to attack enemy ships and developed aircraft carriers to launch and recover them.

World War II

Perhaps no war has been influenced as heavily by bomber action than was World War II. From the Stuka dive bombers attacking Polish troops in September 1939, through the atomic bomb attacks

on Hiroshima and Nagasaki in August 1945, bombers played significant roles in most of the decisive events of the war. The combination of long-range bombers and nuclear weapons both hastened the end of the war and set the conditions for the Cold War to come.

The close coordination between bomber and ground attacks in the Blitzkrieg attacks against Poland, the Low Countries, Scandinavia, and France enabled rapid German victories, leaving Britain as the sole remaining opponent of Germany in Europe by the summer of 1940. Faced with the geographic obstacle of the English Channel, Germany chose to cow Britain into submission with a bombing campaign that would later be known as the Battle of Britain. Despite earlier British fears about the Luftwaffe’s bombing capabilities, the combination of technological innovations in air defense, a strong national spirit, and German dissipation of their bombing effort resulted in a British victory and also became an early indication of the symbiotic relationship between bomber and fighter aircraft that would be tragically emphasized in subsequent Allied bombing campaigns.

On December 7, 1941, Japanese dive and torpedo bombers from four Japanese aircraft carriers struck the naval base at Pearl Harbor and airbases on Oahu, bringing the United States into the war more than 2 years after its start in Europe. In April 1942, the United States responded by bombing Japan with 16 U.S. Army B-25 bombers launched from the aircraft carrier USS *Hornet*, known afterward as the Doolittle Raid. While the actual raid itself was of limited tactical value, the psychological effects of the raid were widespread, bolstering morale in the United States and forcing Japan to dedicate significant additional personnel and resources to homeland defense.

With insufficient forces, equipment, and training to mount an amphibious invasion of Europe until June 1944, strategic bombing was one of the only options available for the British and Americans to strike directly at Germany. In 1943, American and British heavy bombers began the Combined Bomber Offensive (CBO) against industrial areas seen to be critical to the Nazi war effort. Without fighter escorts that had sufficient range to accompany the heavy bombers to and from their targets, Allied bombers suffered heavy initial losses from German air defenses. When bombing and navigational accuracy fell far short of prewar estimates, British bomber crews resorted to night area bombing of



A vintage B-25 Mitchell bomber flies near the National Museum of the U.S. Air Force at Wright-Patterson Air Force Base, Ohio, during a memorial flight honoring the Doolittle Tokyo Raiders, April 18, 2010. The reunion commemorated the anniversary of the Doolittle Raid, April 18, 1942.

Source: U.S. Air Force photo by Technical Sergeant Jacob N. Bailey.

German cities, including firebombings that destroyed Dresden and Hamburg. American bomber units used technical innovations like the Norden bombsight to pursue daylight precision bombing against key war-related infrastructure but continued to suffer heavy losses until long-range escorts like the P-51 Mustang were introduced. In the Battle of the Atlantic, B-25s armed with radar and depth charges eventually made it virtually impossible for German submarines to successfully interdict Allied shipping, even in remote waters. While controversies about the effectiveness of the Allied bombing campaign in Europe continue even today, most analysts and historians agree that it played *a* decisive role, even if not *the* decisive one, in defeating Nazi Germany.

Bomber aircraft played a decisive role in most of the key engagements of the Pacific campaign. U.S. Navy torpedo and dive bomber actions against the

Japanese navy at the Battles of the Coral Sea and Midway effectively ended the Japanese offensive drive in the Pacific, putting them on the strategic defensive for the remainder of the war. Under General George Kenney's leadership, American bomber crews in the Pacific were trained to skip bomb and strafe Japanese ships with locally modified long-range bombers, combining with the U.S. submarine interdiction effort to strangle Japanese shipping. Long-range B-29 Superfortress bombers began to directly attack the Japanese homeland with devastating firebombing attacks and destroyed the Japanese cities of Hiroshima and Nagasaki with atomic bomb attacks in August 1945. These attacks, combined with the cumulative effects of the Allied campaign, forced Japan to accept unconditional surrender terms in September 1945, bringing World War II to an official close.

By the end of World War II, the prewar theories that strategic bombing could end wars by itself remained unproven. But what had become apparent was that strategic bombing had played a key role in the defeats of both Germany and Japan and that the possibility of nuclear weapons delivered by intercontinental bombers had changed the character of war forever.

The Cold War

The United States emerged from World War II as the world's sole nuclear power, but it was soon joined by the Soviet Union, which exploded its own bomb in 1949 and reverse engineered confiscated American B-29 bombers to produce clone TU-4 Bull bombers to carry it. Until the development of the first intercontinental ballistic missiles in the late 1950s, nuclear armed bombers became the primary focus of the newly formed U.S. Air Force. Guided by General Curtis LeMay, the newly created U.S. Air Force's Strategic Air Command prepared to respond

to a potential Soviet nuclear bomber attack at a moment's notice, with combinations of U.S. nuclear bombers on continuous ground and air alert.

Korea

The U.S. experience in Korea disavowed previously popular theories that nuclear weapons had made conventional warfare obsolete and gave further evidence that strategic bombing on its own was not likely to end wars. Despite strategic bombing attacks throughout Korea, the North fought on, and China entered the war on North Korea's side in late 1950 despite the fact that the United States had nuclear bombers and China did not. Using conventionally armed B-29s in Korea also exposed the vulnerability of World War II-era bombers to modern air defenses, and Strategic Air Command quickly developed faster and higher flying jet bombers like the B-47 Stratojet and B-52 Stratofortress to ensure the viability of the U.S. nuclear deterrent. Korea



Strategic Air Command B-47 Stratojet bombers. The B-47, the world's first swept-wing bomber, normally carried a crew of three—pilot, copilot (who operated the tail turret by remote control), and an observer who also served as navigator, bombardier, and radar operator.

Source: U.S. Air Force.

also highlighted the importance of bomber aircraft detailed for close support of ground forces, a lesson that was learned but largely forgotten by Vietnam.

Vietnam

Bombers played a significant, albeit indecisive role during the U.S. involvement in Vietnam. Operation Rolling Thunder, a 3-year bombing campaign against North Vietnam, applied graduated levels of punishment to coerce the North to cease armed aggression and end its support of the Viet Cong insurgents in the South. While the campaign did produce some tactical successes, the ultimate failure of Rolling Thunder was a strategic one, attempting to apply limited attacks against an enemy fighting an unlimited war of national survival. Later in the war, U.S. bombers supporting the South Vietnamese were able to forestall the North Vietnamese Easter Offensive of 1972, even after major U.S. ground forces had pulled out of South Vietnam, and the massive B-52 raids of Operations Linebacker I and II were sufficient to compel the North Vietnamese to return to the negotiating table.

With the introduction of laser-guided bombs and missiles, Vietnam marked the beginning of precision bombing, but it also highlighted continuing problems using air force bombers to provide close air support (CAS) to ground troops. These lessons learned were incorporated into the design of ground attack capable fighter bombers like the A-10 Thunderbolt, F-16 Fighting Falcon, and F-15E Strike Eagle.

Post-Vietnam Era

Facing a growing Soviet numerical superiority in Europe, U.S. forces had to find new ways to improve quality with limited quantities of combat forces. While B-52 bombers would remain on nuclear alert as they had for much of the Cold War, the supersonic B-1 Lancer was designed to penetrate below Soviet radar defenses to deliver nuclear weapons. New medium bombers like the FB-111 Aardvark would use laser-guided bombs to strike Soviet forces and logistics chokepoints before they could be brought to bear on lesser numbers of North Atlantic Treaty Organization (NATO) forces. Additionally, the United States was secretly developing stealth technologies to make aircraft practically undetectable by radar, resulting in the F-117 Nighthawk and B-2 Spirit bomber.

In 1986, provocations by Libya, including ties to a terror bombing that killed two U.S. servicemen in

West Berlin, prompted U.S. policymakers to order a swift military response. During Operation El Dorado Canyon, U.S. FB-111 bombers based in England and carrier-based strike aircraft bombed targets in Libya, including direct attacks on the Libyan leader Muammar Qaddafi. After the raid, Libyan provocations were generally curtailed, giving additional credence to theories that in the right circumstances, bombing might create decisive effects without the use of ground forces.

Operation Desert Storm

As the anti-Iraq international coalition formed in response to Saddam Hussein's 1990 Iraqi invasion of neighboring Kuwait, a cell of U.S. Air Force air power theorists led by U.S. Air Force colonel John Warden was developing a new way to use the air weapons originally designed to fight the Soviet Union in Europe. Warden's "Checkmate" planners proposed that by using parallel, precision air attacks to bomb key nodes of the Iraqi air defenses, leadership, communications, key infrastructure, and military forces, the Iraqis might be compelled to withdraw from Kuwait even before a ground offensive was initiated. This plan, eventually adopted as the Desert Storm air campaign, pounded Iraqi targets for more than a month before ground operations began and set the stage for the successful ejection of Iraqi forces from Kuwait in less than 100 hours of ground combat. Daily media briefings showing footage of cruise missiles and laser-guided bombs flying into the windows of enemy bunkers not only highlighted the new precision capabilities brought about by advances in technology but also may have given many an inflated impression about the effectiveness of precision bombing in generating decisive political effects.

After Desert Storm

In the wake of Desert Storm, precision aerial bombing was largely seen as a low-risk, high-reward method to create desired political outcomes. Precision weapons coupled with new Global Positioning System (GPS) technology greatly increased the likelihood that the intended target, and only the intended target, would be struck, and with the addition of the B-2 stealth bomber in 1989, it seemed more and more likely that the United States would practically be able to strike at its will. U.S. bombers and cruise missiles quickly became the weapon of choice to

coerce intransigent leaders in Bosnia (1994, 1995), Afghanistan (1998), Sudan (1998), and Iraq (1996, 1998), despite the fact that such bombings seldom achieved lasting political results. The limitations of an “air-alone” strategy were dramatically highlighted in the 1999 NATO-led effort against Serbian ethnic cleansing in Kosovo—Operation Allied Force. For 78 days, NATO forces bombed targets in Kosovo and Serbia, going far beyond the 2–3 days of strikes as originally planned. While only a few B-2 missions flown from the United States utilized the new GPS-guided Joint Direct Attack Munition, GPS input to the navigational systems of older bombers like the B-1 and B-52 greatly increased the accuracy of even unguided bombs, allowing U.S. bombers to cut Serbian runways with short strings of Vietnam-era Mark 82s that would previously have only been used in an area bombing role. NATO’s campaign over Kosovo was ultimately successful, but it also highlighted several significant limitations of precision bombing. The accidental bombing of the Chinese Embassy with Joint Direct Attack Munition highlighted that precision in prosecution did not equal precision in targeting and could not prevent all accidental collateral damage. The inability of NATO aircraft to stop Serbian ethnic cleansing demonstrated the limitations of air attacks against dispersed ground forces among civilian populations. Finally, the shoot down of an F-117 demonstrated that stealth was not a guarantee of survivability in the modern antiaircraft threat environment, and the F-117 was retired soon afterward.

Post-9/11 Global War on Terrorism

In the wake of al Qaeda’s September 11, 2001, attacks on the United States, the United States was faced with the challenge of eliminating their operations in remote Afghanistan and toppling the Taliban government that had given them sanctuary. To do this, U.S. forces rapidly adopted a strategy of assisting the native resistance Northern Alliance forces with a combination of special operations air controllers on the ground, calling in strikes from bomber aircraft to attack Taliban defenses. With the new precision allowed by GPS-guided bombs, even the Cold War legacy bombers like the B-52 became highly effective CAS platforms, and at times, the mere sight of its contrails curtailed al Qaeda and Taliban activities. Remotely piloted aircraft,

or RPAs (labeled at the time as unmanned aerial vehicles), quickly became high-demand assets for their full motion video capabilities, and as weapons were added to them, they were increasingly used simultaneously as surveillance and bomber aircraft. Through a combination of RPA direct attacks against the al Qaeda and Taliban leadership and CAS for Northern Alliance offensives, the remaining Taliban and al Qaeda elements were forced to retreat to distant areas in Afghanistan and Pakistan, where they would continue their resistance to the new Afghan government for years.

The decision to overthrow the Iraqi regime in 2003 called once again on the U.S. bomber fleet, which through a combination of interdiction bombing and CAS missions helped the coalition forces to rapidly topple Saddam Hussein’s regime. Irregular warfare continued long after the capture and execution of Hussein and, with almost constant on-call interdiction and CAS missions, quickly became the new reality over Iraq for years after the initial invasion.

The Present and Future of Bomber Aircraft

At present, the U.S. strategic bomber force continues to be composed of the B-1, B-52, and B-2 stealth bombers, with only the latter two retaining nuclear weapon delivery capability.

RPAs continue to be used for sensitive bombing missions in the current overseas contingencies, and multirole fighter bombers like the A-10, and the F-16 and the F-15E Strike Eagle. The F-35 program, currently under development, will serve as the replacement for the current legacy fighter bombers. While there is no currently specified program for a next-generation bomber, the U.S. Air Force is examining a range of next-generation, long-range strike options. Possible future options include combinations of stealth manned and unmanned bombers armed with hypersonic cruise missiles, large- and small-diameter precision-guided weapons, massive ordnance penetrator warheads, directed-energy weapons, or weapons dispersing high concentrations of small, high-velocity projectiles.

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See also Bombs, Gravity; Bombs, Nuclear; Bombs, Smart; Strategy, Air Power; Strategy, Nuclear



Members of the 509th Aircraft Maintenance Squadron at Whiteman Air Force Base in Missouri prepare a B-2 stealth bomber for Operation Odyssey Dawn, the U.S. part of the international military operation in Libya that sought to enforce UN Security Council Resolution 1973 during the initial period of March 19–31, 2011.

Source: Photo by Senior Airman Kenny Holston.

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AIRCRAFT, FIGHTER

The fighter aircraft is an aircraft principally designed to be employed in combat against other aircraft to secure control of the air. It is the primary means by which air superiority is gained and by which ground forces, naval fleets, or other air assets may prosecute tactical or strategic operations with a measure of protection from enemy air attack. The modern

fighter is a relatively small, single- or twin-engine design, crewed by one pilot. Fighter-interceptors generally possess greater range and are more likely to be twin engined and twin crewed. The fighter's design characteristics include high speed, high rate of climb, maneuverability, and effective avionics and weapons suites. The fighter aircraft, in all its permutations, has remained an integral part of air forces since World War I. This entry reviews the roles and capabilities of modern fighter aircraft, tracing their evolution from World War I to the present.

World War I, 1914–1918

The fighter grew out of the necessity to deny enemy reconnaissance aircraft free range of the airspace over the battlefield. Pilots initially fired pistols at each other or took aloft rods, chains, and almost anything else that could be thrown at their opponents, but the fighter aircraft was properly born when scout airplanes were outfitted with fixed machine guns. For sighting and structural reasons, guns were optimally placed near the centerline of the aircraft, but this presented the technical challenge of shooting through the propeller. The adoption of interrupter or gun-synchronizer gear, which allowed bullets to pass harmlessly through the spinning propeller blades, solved the problem. The first practical fighter to employ such an arrangement, the German Fokker Eindecker, dominated the skies until other aircraft such as the Sopwith Pup and Camel were similarly equipped. Aeronautics progressed rapidly through 1918, with speeds reaching 135 miles per hour, heavy-caliber machine guns being taken aloft, and, in the guise of the fighter-bomber, light bombs being effectively employed against troop formations.

World War II, 1939–1945

War accelerated the pace of aeronautical development and expanded the roles played by fighter aircraft in combat. Building on the developments of the interwar years, fighters progressed from wood structures with fabric coverings to metal structures with stressed skin (monocoque), low-winged streamlined bodies, retractable landing gear, and supercharged piston engines producing upward of 2,500 horsepower. Such fighters could reach speeds of 450 miles per hour and climb past 40,000 feet. The war saw the return of the fighter-bomber concept of World War I,

initially in the guise of the German Messerschmitt Me 109—dubbed *Jagdbomber*—followed by the Hawker Hurricane, Curtiss P-40 Warhawk, and most notably the Republic P-47 Thunderbolt. In fact, the classic fighters of the war such as the North American P-51 Mustang, Supermarine Spitfire, Focke-Wulf Fw 190, and Lockheed P-38 Lightning were all employed in bombing at some point.

The variety of armament proliferated with the variety of missions. Batteries of machine guns and cannons of 30-millimeter size were effective against ground targets and bomber aircraft, while the widespread use of unguided rockets increased the fighter-bomber's lethality. Sweeps into German-occupied Europe by Allied fighter-bombers decimated troop formations and paved the way for the Normandy landings. In the fighter-escort role, the Mustang mounted external fuel tanks to accompany heavy bombers from Britain to their German targets, ending the terrible losses suffered by the strategic bombardment forces.

Technological Advances

Radar revolutionized the air war by extending the range at which enemy aircraft could be detected. Used to great effect during the Battle of Britain, radar allowed the marshaling of limited Royal Air Force fighter resources to effectively repel the Luftwaffe onslaught. Radar eventually found its way aboard night fighters, such as the twin-engine Northrop P-61 Black Widow. The war also saw the introduction of jet propulsion and swept wings. The German Messerschmitt Me 262 showed a great performance advantage over its piston-engined counterparts but entered service too late and in too few numbers to have an effect on the war.

The Cold War Era, 1945–1991

Speeds increased significantly in the immediate postwar period. The experimental Bell X-1 broke the sound barrier on October 14, 1947, and soon after, the prototype of the North American F-86 Sabre fighter broke through Mach 1 in a shallow dive. Hereafter, supersonic flight defined all succeeding fighter designs. The navies of the world lagged in the introduction of jet engines and swept wings primarily out of concern for their suitability to aircraft carrier operations. Combat experience soon forced their hand.

The Korean and Vietnam Wars

The emphasis on nuclear warfare and misilery profoundly influenced fighter designs of the 1950s and 1960s. The requirements for a high dash speed, altitude, range, and missile load, and a complex avionics suite triumphed over an earlier era's maneuverability, pilot visibility, and simplicity. The assumptions inherent in Cold War-era fighter design were challenged during the Korean War, where the simple and robust Soviet MiG-15 acquitted itself well against all U.S. fighters save the F-86. But it was not until the Vietnam War that combat experience definitively showed that many of the age-old principles of air warfare—long considered obsolete in the nuclear age—remained in fact relevant. Missile armed fighters, such as the McDonnell Douglas F-4 Phantom, were hastily outfitted with gun armament, and nuclear fighter-bombers, such as the Republic F-105, were pressed into service in the conventional bomb-dropping role with mixed results. A serious reassessment of fighter design and air war tactics took place in the wake of the Vietnam War.

The "Teen Fighters"

The resulting rethink leveraged America's lead in propulsion technology, microcircuitry, and advanced production materials to produce the "teen series" line of fighters. The new fighters emphasized good maneuverability, superior transient performance, a high thrust-to-weight ratio, and, in an ode to dog-fights past, good pilot visibility and an internally mounted gun. The aircraft that emerged during the 1970s set the fighter standard for a generation and more. The U.S. Navy's fleet defense fighter, the Grumman F-14, was first out of the gate. This complex two-crewed interceptor introduced the state-of-the-art AWG-9 radar—capable of tracking 24 targets simultaneously and engaging 6 at a time—and the 100-plus-mile ranged AIM-54 Phoenix air-to-air missile. Its broad U.S. Air Force equivalent, the McDonnell Douglas F-15, represented a no-holds-barred attempt to recapture America's lead in fighter design. The F-15 featured high maneuverability, an excellent avionics suite, and two powerful turbofan engines that allowed it to set a number of international time-to-climb records. It has established an enviable combat record of 104 kills to 0 losses in air-to-air operations.

The "High/Low Mix"

Both the F-14 and F-15 proved superbly capable but prohibitively expensive. A solution presented itself in the production of large numbers of lower cost complementary fighters as part of the "high/low mix." The U.S. Navy's McDonnell Douglas F/A-18 and the U.S. Air Force's General Dynamics F-16 emerged as a result. Although initially intended as the "low" end of the mix, both designs evolved over subsequent decades into fine fighter-bombers as capable in many areas as the "high"-end fighters. Irrespective of their position within the high/low matrix, the four designs featured similar armament in the form of the 20-mm M61 six-barreled Gatling gun (capable of 100 rounds per second rate of fire), the short-range infrared-guided AIM-9L/M Sidewinder missile, and the medium-range AIM-7M/P Sparrow semi-active radar homing missile. The teen fighters continue to undergo progressive updates featuring improved engines, avionics, and weapons systems. The highly effective AIM-120 AMRAAM (Advanced Medium-Range Air-to-Air Missile) has replaced the Sparrow missile, while the Sidewinder currently in use is the AIM-9X variant. The F-14 was retired from service in 2006, but the remaining teen fighters are not only in service but continue in production, primarily for export customers.

International Developments

In the late 1970s, the Soviet Union responded to developments in American fighter design with an ambitious and broadly comparable high/low mix of its own. The Sukhoi Su-27 air superiority fighter and Mikoyan MiG-29 fighter-bomber were the result. Both were very maneuverable, but the Sukhoi particularly was possessed of an extraordinarily large weapons suite and very long flying range. Both designs initially suffered from a lack of advanced avionics but have in recent years undergone considerable updates of their radar and weapons systems. The French Dassault Mirage 2000, another late-1970s product, was a fine interceptor that, by way of a two-seat variant, evolved to undertake the strike-fighter role. European efforts of the period are best represented by the multinational Panavia Tornado produced as a first-rate strike fighter and a sophisticated but somewhat underpowered interceptor.

Post–Cold War Period

The post-1989 period saw remarkable technologically driven change shape the capabilities and roles of the fighter aircraft. The revolution in micro-circuitry, apparent even before the conclusion of the Cold War, elevated in importance the avionics of aircraft to the same level, if not higher, as their aerodynamic performance. Detection and targeting systems on board fighters and external platforms such as the E-3 Airborne Warning and Control System and E-8 Joint Surveillance Target Attack Radar System, combined with the widespread availability of aerial refueling, resulted in a manifold expansion of the combat capabilities of fighter aircraft. The Low Altitude Navigation and Targeting Infrared for Night navigation and targeting system and related LITENING and Sniper XR systems have given the fighter a potent strike capability, equally effective in day or night and in adverse weather. Married with precision-guided munitions, the modern fighter is a powerful weapon indeed, endowed with the destructive power of dozens, if not hundreds, of World War II-era heavy bombers.

But the real revolution in fighter design occurred with the introduction of low-observable, or stealth, technology that allowed aircraft to operate with relative impunity within a sophisticated integrated air defense environment. The now retired Lockheed F-117 pioneered stealth in an operational fighter design and found wide employment in major combat operations such as the 1991 Persian Gulf War and the 1999 Kosovo War. Its fusion of stealth and precision weapons reset air warfare back to the “big sky” environment of the preradar era. Stealth has proven so effective that every subsequent new U.S. fighter and bomber design has incorporated low-observables as a primary design requirement.

Fifth-Generation Fighters

Recent new generation fighters have improved on many of the aerodynamic qualities of their predecessors while adding stealth, sensor fusion (integrated avionics), active electronically scanned array (AESA) radars, and sustained supersonic flight (supercruise). Occupying the lower end of this new spectrum of capabilities are the European Dassault Rafale, Eurofighter Typhoon, and Saab Gripen. The high end is the domain of the Lockheed Martin

F-22 Raptor, while the middle finds the F-35 and, possibly, the Russian Sukhoi T-50. The F-22, a single-seat twin-engine fighter, blends these new so-called fifth-generation fighter traits particularly effectively, while adding the capability of poststall maneuvering. Its ability to operate at very high altitudes (60,000 feet) and high sustained speeds (Mach 1.5+) imparts on its weapons a tremendous kinematic advantage, while denying it to others. The Raptor is primarily an air superiority fighter, but in line with recent trends toward multirole capability, it can employ air-to-ground Global Positioning System-guided munitions. Another stealth aircraft, the single-seat and single-engine F-35, will serve alongside the F-22 in the U.S. Air Force and in the air forces of many export customers as primarily a strike-fighter capable of significant air-to-air operations. The F-35 will achieve even greater levels of sensor fusion than the Raptor but will not enjoy that aircraft’s high-altitude/high-speed capabilities or its poststall maneuverability.

Future Directions

The astounding rise in the capability of fighters has been accompanied by an equally astounding rise in their cost. Few nations can now afford to develop world class fighters indigenously. The costs of developing the Eurofighter Typhoon were shared between four European nations—Italy, Spain, Germany, and Great Britain—but have nevertheless proven prohibitive. Rising costs have likewise forced the U.S. Air Force to settle on 187 Raptors, a much reduced number from the originally planned 750 aircraft. The price tag for fighter aircraft has forced an almost universal acceptance that the modern fighter must be multirole capable—equally proficient in air combat as it is in strike. Modern sensor fused avionics, multifunction displays, and advanced targeting systems make the true multirole fighter possible. The F-35 design concept takes this philosophy to the next level by providing a single platform for three disparate requirements: a U.S. Air Force fighter-bomber, a navy carrier-capable strike fighter, and a U.S. Marines short takeoff/vertical landing fighter-bomber. This ambitious program relies on unprecedented levels of avionic sophistication, advanced aerodynamics, and cutting-edge manufacturing techniques to satisfy the F-35’s disparate mission requirements. Beyond the F-35, it is increasingly likely that unmanned platforms will take over the

role of the fighter, continuing a trend begun in the 1970s but accelerated in operations over the skies of Afghanistan and Iraq.

Mils Farmus

See also Airborne Warning and Control System (AWACS) Aircraft; Aircraft, Attack; Aircraft, Bomber; Bombs, Smart; Missiles, Air-to-Air

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AIRCRAFT, PATROL

Maintained by navies and air forces throughout the world, patrol aircraft are tasked with supporting other combat platforms by performing maritime reconnaissance and intelligence gathering as well as antisubmarine and antisurface warfare. The capabilities of patrol aircraft have evolved; however, as the U.S. military and its allies have shifted their focus away from watching large “blue water” (high seas capable) navies to combat against global terrorism, patrol aircraft have come to provide long-range reconnaissance for ground forces. This entry describes missions and features of patrol aircraft from World War I to the present.

Combat History

World War I

The U.S. Navy patrol aircraft made their combat debut during World War I. During that conflict, naval aviators operated seaplanes from bases in the British Isles, France, and Italy. From these bases,

navy patrol aircraft flew more than 3 million miles of patrol missions and sank 12 enemy submarines using a mix of machine guns and various aerial bombs.

World War II

Following the combat experiences of navy patrol aircraft in World War I, the interwar period saw the development of new monoplane patrol aircraft that cemented the importance of patrol aircraft within the U.S. Navy during World War II due to their versatility. In the Atlantic, the PBY Catalina and the PBM Mariner, armed with a mix of aerial depth bombs and airdropped torpedoes, were an integral part of allied antisubmarine warfare (ASW) operations against the Nazi U-boat threat. Conversely, in the Pacific, the PBY Catalina was a mainstay as a reconnaissance aircraft. The most famous example of this was the role the Catalina played in finding the Imperial Japanese Navy prior to the Battle of Midway.

Cold War Era

U.S. Navy patrol aircraft performed many important missions against the Soviet navy during the Cold War period. At the core of these operations were surveillance flights against the Soviet surface fleet and ASW operations against a formidable mix of diesel-electric and nuclear-powered submarines. To perform these missions, the navy developed a fleet of patrol aircraft, with the capability to fly long ranges, that were equipped with a variety of sensors and new weapons that ensured that U.S. Navy patrol aircraft were capable of meeting any threat from the Soviets for more than 50 years.

Early Cold War Patrol Aircraft

The early Cold War period saw the U.S. Navy once again use a mix of seaplane and land-based aircraft. The land-based Lockheed P2V Neptune entered service with the navy during the late World War II period. The emergence of the Neptune was due to a series of upgrades in the late 1940s and throughout the 1950s to all aspects of the Neptune including, perhaps most importantly, its ASW suite. These upgrades saw later models of the Neptune feature both passive and active sonar, magnetic anomaly detection equipment, and new search radars.

On the seaplane side, the navy also relied on the Martin P5M Marlin seaplane during the early Cold War period. The Marlin featured a range of 2,880 nautical miles and a cruising speed of 150 miles per hour, was equipped with a host of electronics to help with surface and submarine detection, and could employ a variety of weapons such as bombs and torpedoes housed on wing nacelles and inboard pylons.

Late-Era Cold War Patrol Aircraft

Despite the capabilities of both the Neptune and the Marlin, the Lockheed Martin P-3 Orion quickly overshadowed both aircraft. Based on the Lockheed Martin L-188 Electra airliner, the P-3 became operational in August 1962. An early variant of the aircraft had a combat radius of 4,700 nautical miles, was outfitted with the most advanced electronics suite available for a patrol aircraft at that point, including upgraded search radars and passive and active sonar, and could deliver 23,250 pounds of munitions. With these characteristics, the early models quickly proved their worth when they conducted patrols as part of the navy's quarantine during the Cuban Missile Crisis.

The performance of the P-3A during the missile crisis proved the worth of the P-3 as the U.S. Navy's patrol aircraft of the future, and the aircraft went through various upgrades throughout the Cold War to maintain its frontline status. The culmination of these efforts was the P-3C, which entered service with the fleet in 1969 and was the primary patrol aircraft for the navy throughout the rest of the Cold War period.

Post-Cold War Era

The P-3 in the Post-Cold War World

With the end of the Cold War, the patrol community of the U.S. Navy has had to adapt to new missions, including operations in the littorals and providing reconnaissance for allied ground forces. During the Persian Gulf War (1991), the venerable P-3 performed blockade and identification operations that harkened back to the Cuban Missile Crisis. Orion operations continued in Iraq and Afghanistan. In Afghanistan, the P-3 provided timely information regarding the position of Taliban and al Qaeda fighters to Special Operations forces and fighter-bomber aircraft during Operation Anaconda in the spring of 2002. Then, during the Iraq War, the

P-3 once again conducted command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) for coalition forces at sea and on land. Finally, U.S. and international force P-3s have been used routinely on antipirate operations off the coast of Somalia.

The S-3 Viking in the Post-Cold War World

Patrol aircraft are not just limited to land-based operations. Originally designed by Lockheed as the U.S. Navy's primary carrier-borne antisubmarine warfare aircraft, the S-3 Viking found a role in the post-Cold War navy as a carrier-borne patrol aircraft. This mission saw the Viking performing nontraditional surveillance, intelligence, and reconnaissance during the first 9 years of the Global War on Terrorism. This took the aircraft to such theaters of operation as Afghanistan until the navy phased out the aircraft completely in 2009.

Future Patrol Capabilities

Although the P-3 has provided the U.S. Navy with 48 years of service, the navy has begun the process to replace the Orion. The aircraft tapped to do so is the P-8 Poseidon. Based on the Boeing 737-800ERX, the Poseidon will have an operational range of 1,200 nautical miles, a station time of more than 4 hours, and an open mission concept that will allow it to perform many different tasks, and it will be capable of being armed with torpedoes, mines, and cruise missiles. The navy hopes that these capabilities will allow its patrol force to be an important part of the service for years to come.

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See also Afghanistan; Boeing; Global War on Terrorism; Iraq War (2003); Navy, U.S.; North Atlantic Treaty Organization; Persian Gulf War

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AIRCRAFT, RECONNAISSANCE

Aerial reconnaissance aircraft are flying platforms designed to use their aerial perspective to provide superior tactical and strategic reconnaissance for militaries. Aerial reconnaissance began as cameras attached to hot air balloons and evolved to purpose-built planes to take images of troop movements, locations of weapons caches, and other important military intelligence to further tactical and strategic operations. These aircraft have experienced constant development since the advent of powered flight; in recent decades, new technologies have moved to the fore, taking on an ever-expanding role in aerial reconnaissance. Satellites launched into space are used to spy on targets from their orbits above the earth. Remote-controlled drones represent the latest tool in the U.S. Air Force's arsenal for both gathering intelligence for the air force and striking enemy targets, with no risk of American lives. With the increasing significance of nonstate actors and the ongoing efforts to limit global terrorism, it is clear that aerial reconnaissance platforms will continue to play a vital role for the foreseeable future. This entry discusses the evolution of aerial espionage and examines modern reconnaissance platforms.

Early History

Even before the origins of powered flight, militaries utilized aerial platforms for the purpose of gathering reconnaissance. During the U.S. Civil War, for instance, both Northern and Southern forces enlisted balloons to gain an aerial perspective of enemy troop positions in the hopes of improving tactical positioning. Following the Wright brothers' first successful powered flight in 1903, the brothers sought to sell the U.S. military on the

value of a mobile aerial platform. In 1909, the Wright Military Flyer became the first military aircraft, joining the U.S. signal corps as a reconnaissance platform. Until World War I, reconnaissance remained the primary role for military aircraft, working to determine enemy troop movements and supply lines and functioning as artillery spotters.

World War I witnessed a massive expansion of military flying, as all of the major combatant powers rushed to use aerial platforms for military gain. In fact, the advent of fighter—or pursuit—aircraft began as an effort to shoot down enemy reconnaissance platforms. During the war, reconnaissance remained perhaps the most important role for aircraft, with platforms such as the Albatros CI and RAF R.E.8 playing key roles.

During the interwar period, military powers around the world continued to develop reconnaissance platforms, with both land- and sea-based forces seeing the continued need for mobile, aerial platforms. These continued developments ensured that both the Allied and the Axis powers would field a variety of important reconnaissance aircraft during the Second World War. During that conflict, seaborne flying boats such as the British Short Sunderland, American PBY Catalina, and Japanese Kawanishi H6K4, as well as the German land-based Focke Wulf Fw 200 Condor, played vital roles in both the Atlantic and Pacific theaters, hunting for enemy submarines, searching for convoys and other ships, and tracking naval movement. Over land, planes such as the German Fieseler Fi 156 Storch, British De Havilland Mosquito, and American F-6C (the reconnaissance version of the famed P-51 Mustang) served ably, tracking troop movement, photographing proposed targets for tactical and strategic bombing, and functioning as bomb damage assessment platforms.

The Cold War era saw the continued significance of aerial reconnaissance, with platforms evolving to fly higher and faster for self-protection and to provide a wider field of view for cameras and other imaging equipment. During this period, however, reconnaissance platforms grew more specialized as distinct reconnaissance roles emerged, such as maritime patrol, high-altitude reconnaissance, close air support, and strategic reconnaissance. In the U.S. arsenal, the P3 Orion came to serve as the primary maritime patrol aircraft and submarine hunter, while converted fighter aircraft such as the Republic

RF-84F Thunderflash and RF-101 Voodoo served in land-based roles. At the same time, smaller piston-engined aircraft like the Rockwell OV-10 Bronco provided tactical reconnaissance and immediate support for troops on the ground.

The Cold War period also witnessed the emergence of strategic reconnaissance platforms such as the Lockheed U-2 and SR-71 Blackbird. These aircraft were specifically designed to fly at high altitude and overfly the Soviet Union to gather vital strategic information. This was a risky mission, however, as demonstrated by the Soviet Union's successful downing of American U-2 pilot Francis Gary Powers in 1960. Those risks, coupled with the increasing sophistication of satellite technology, gradually resulted in a transition to satellite-based strategic intelligence.

The Post-Cold War Era

In recent decades, there has been a more general shift in aerial reconnaissance from manned vehicles to unmanned aerial vehicles or UAVs. This shift came from the collapse of the Soviet Union. Without the Soviet Union, politicians were loath to spend money on more bombers, fighters, and reconnaissance planes. In 1990, the air force printed a white paper titled "The Air Force and U.S. National Security: Global Reach-Global Power." This paper outlined the air force's new strategy for preparing itself for the next century of aerial combat, with a focus on speed, range, and flexibility. The thrust of the paper was "controlling the high ground." The high ground in this scenario outlined by the U.S. Air force (USAF) was space, through the use of surveillance satellites. The surveillance planes it already had in service, such as the E-3 AWACS and E-2C Hawkeye, remained key elements in gathering intelligence for frontline commanders to make crucial decisions but played an ever-decreasing role in strategy.

While reconnaissance satellites could provide incredible intelligence, there were considerable drawbacks to using satellites. The image quality was affected by weather, and the satellites' orbits were difficult to alter once they were initially set. Having to wait for the satellite to eventually line up with the target could be time-consuming, and even then, there was no guarantee that the intended target would remain stationary. As such, the USAF increasingly turned to UAVs to get reliable intelligence in

target areas without risk of losing U.S. service members to enemy fire.

UAVs possess a unique attribute in the air force's arsenal—the ability to acquire reliable, accurate intelligence from target areas without making the difficult request to move satellites outside their orbits and without risking pilots' lives in potentially high-risk missions. The idea of the UAV was first introduced in the 1950s, but they were shelved in favor of manned reconnaissance planes because the equipment used on these UAVs was time-consuming to process. Initially, UAVs suffered from a number of problems. For instance, existing film-developing technologies worked well for stationary targets like bases or factories, but proved impracticable for targets that were mobile. It simply took too long for the film to develop for "real-time" or "instant" intelligence for things like troop movements. Without these substantial technological upgrades, UAVs could not be utilized effectively in the field. The technology to make UAVs a viable military asset would not be available for another four decades.

Modern Reconnaissance Aircraft

By the 1990s, the technology related to UAVs caught up with how the air force intended to use UAVs in wartime scenarios. UAVs first saw extensive action in the Persian Gulf War. Advances in computer processing allowed for better and complex navigation control systems. Breakthroughs in miniature video cameras improved the resolution quality of images and video taken during reconnaissance flights. The advent of Global Positioning System navigation finally allowed for accurate navigation in real time. This new technology enabled the UAV to be the military asset the air force originally envisioned. The air force experimented with smaller robotic UAVs in 1991, during Operation Desert Storm, with the BQM-147 Exdrone and FQM-151 for reconnaissance missions. However, these drones were not as useful as the larger UAVs due to technological constraints—their onboard black-and-white cameras lacked the resolution to clearly pick out details in a desert setting. In addition, these drones had a short operating range that limited their use considering that most of the fighting was done away from areas safe for human operators. These smaller drones were updated with newer technology during the 1990s, and by the early 2000s, with the engagements in

Iraq and Afghanistan, technology had advanced to the point where the smaller drones proved useful in searching for possible enemy ambushes, for improvised explosive devices (IEDs), and for patrolling the perimeters of American and allied airbases. While all American military branches had RQ-2 Pioneer drones and used them for a variety of purposes, the air force primarily used the drones as decoys for the Iraqi military so that manned aircraft flying behind them could knock out parts of the Iraqi surface-to-air missile sites.

In the wake of September 11, 2001, UAVs were used extensively by the USAF and the Central Intelligence Agency for reconnaissance missions. The UAVs used the most were the MQ-1 Predator and the RQ-4 Global Hawk. Both platforms were initially used for intelligence gathering only; however, a hunter-killer version of the Predator was eventually developed by the USAF for tactical strikes. Predator drones make for an impressive and versatile platform for both reconnaissance and hunter-killer missions because the Predator is tiny compared with a regular aircraft and generates much less heat than a conventional airplane, thus making it less likely to be detected by enemy sensor arrays. The Predator can loiter over target areas for greater time periods and can use its laser designator to paint bombing targets in lower and more dangerous altitudes, while the bomber flies in a safer altitude away from enemy anti-aircraft defenses until it drops its payload.

The Global Hawk is a pure reconnaissance UAV. It operates at high altitude and has been extensively used in Iraq and Afghanistan. Although it is difficult to detect, the Global Hawk is not stealthy. Much of what makes UAVs so effective is the instant communication between pilot and platform. Initially, UAVs had to be piloted in-theater in order to be effective. However, with advances in satellite technology, UAVs could now be operated remotely half a continent away. That ability, combined with advances in stealth, propulsion, and airframe technology, has ensured the increasing utilization of new UAVs like the MQ-9 Reaper around the world.

Even with the technological advancements made in UAVs and in satellites, manned reconnaissance planes still played a crucial role in America's military. U-2s and other manned platforms played key roles in the wars in Iraq and Afghanistan and continue to occupy an important place in the ongoing conflict against global terrorism. Additionally,

manned platforms like the P-3 continue to perform vital service in roles unsuitable for UAVs. It seems clear that the UAV will continue to expand its intelligence-gathering role in the immediate future, but satellites and manned aircraft will also continue to provide valuable service. Regardless of the platform, however, it seems clear that aerial reconnaissance will continue to play a key role for militaries around the world in years to come.

John Michael Brace Jr.

See also Aircraft, Bomber; Aircraft, Fighter; Intelligence, Geospatial; Unmanned Aerial Vehicles

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AIRCRAFT, TRANSPORT

Although they do not receive as much publicity as other combat-oriented aircraft, transport aircraft play an integral role in modern military operations by allowing nation-states to deploy large amounts of people and materiel to a theater of operations in a timely manner to complete a variety of missions. For the United States, these missions include transporting combat units, support forces, and their equipment into combat. Moreover, a major mission for U.S. transport aircraft is the transportation of humanitarian personnel and supplies into disaster areas around the world. To complete these missions, the Air Mobility Command of the U.S. Air Force maintains a diverse fleet of small, medium, and large transport aircraft to meet any contingency. This entry reviews the history of U.S. transport aircraft, including the types of aircraft and their capabilities, and discusses combat and humanitarian missions from World War II to the present.

Combat History

World War II

Although the concept of transporting materiel via aircraft had been around since the earliest days of the air age, the mass transport of people and materiel for military use was not pioneered until World War II. During that conflict, all of the major combatants maintained transport aircraft fleets that were tasked with transporting service members and their equipment into combat and shuttling spare parts, clothes, food, and combat replacements from rear areas to the front lines.

For the United States, throughout the conflict, the fleet of Douglas C-47 Dakota, Douglas C-54 Skymaster, and Curtiss C-46 Commando aircraft performed missions throughout the European and Pacific theaters.

European Theater

In the European Theater of Operations, the primary combat role of U.S. transport aircraft was to carry allied airborne forces and their equipment into combat. The first allied airborne operation occurred in November 1942. At that time, American C-47s delivered elements of the 82nd Airborne Division to drop zones in North Africa to mixed results. Following operations in North Africa, U.S. transport aircraft were again in action in July 1943, when the Allies invaded the island of Sicily. For the Sicily operation, dubbed Operation Husky, 226 Dakotas carried elements of the 82nd Airborne Division into combat. In addition, 137 more Dakotas towed gliders full of British paratroops. Transport aircraft also carried paratroops into combat during the U.S. invasion of Italy. After the Italian operation, 900 U.S. transport aircraft carried more than 20,000 allied paratroopers into combat during the invasion of Europe in June 1944. After the invasion of Europe, airborne forces flown by U.S. transport aircraft were at the forefront of the allied advance into southern France. During that operation, in August 1944, U.S. transport aircraft delivered almost 9,000 paratroops, jeeps for transportation, artillery pieces, and more than 2 million pounds of equipment in 987 flights. With the two invasions of France completed, the Allies turned to the airborne to consolidate their positions on the continent during September 1944. At the forefront of this operation was the

battle-tested American Troop Transport Command. This time, in the largest allied airborne operation to date, 1,500 C-47s carried 20,000 paratroops and their equipment to drop zones in occupied Holland during Operation Market Garden. Finally, in March 1945, a total of 1,572 C-46s and C-47s carried the U.S. 17th Airborne Division and the British 6th Airborne Division and allied glider units to drop zones across the Rhine River into Germany.

Pacific Theater

In the Pacific Theater of Operations, U.S. transport aircraft had a dual mission. On the one hand, much like their work in Europe, the Allies used transport aircraft to deliver airborne forces into combat against the Japanese. The first of these missions occurred in September 1942. At that time, 79 Dakotas of the 54th Troop Carrier Wing carried the 503rd Parachute Infantry Regiment, which the allied command tasked with capturing the airfield at Nadzab Port Moresby in conjunction with an Australian offensive against Lae Port Moresby. Following the Nadzab operation, the 54th Troop Carrier Wing was again in action in July 1943. This time, 30 aircraft carried elements of the 503rd to drop zones on Noemfoor Island in western New Guinea during Operation Table-Top. Finally, throughout 1944–1945, units with the 54th and 317th Troop Carrier Wings continued to carry the 503rd Parachute Infantry Regiment and units of the 11th Airborne Division on operations in the Philippines and Japan.

On the other hand, apart from the use of transport aircraft to haul airborne troops, an important part of transport operations in the Pacific was the supply operations over the Himalayas run by the Army Air Corps in the China-Burma-India Theater of Operations. Known as “flying the Hump,” General Claire Chennault’s American Volunteer Group flew the missions until the Army Air Corp’s Air Transport Command took over the flights in October 1942. The operations themselves were flown in all types of weather by myriad U.S. transport aircraft, including the C-46 Commando, C-47 Dakota, C-54 Skymaster, and B-24 Liberator. In the end, throughout the course of the war, transport aircraft in the China-Burma-India Theater of Operations delivered more than 650,000 tons of supplies and were vital in transporting wounded

allied troops to better equipped medical facilities farther from the front.

Cold War–Era Military Operations

The Berlin Airlift

The first major U.S. airlift operation of the Cold War occurred from June 1948 until late September 1949. Known as the Berlin Airlift, “Operation Vittles” was the delivery of food, coal, and medical supplies to Berliners who lived behind the Soviet zone of occupation after the Soviets blockaded the road system into Berlin. Throughout the operation, U.S. aircraft operated around the clock, with only breaks for maintenance and fuel. All told, transport aircraft of the U.S. Air Force delivered 1.5 million tons of supplies while flying 189,963 flights using mainly C-47 Dakota and C-54 Skymaster aircraft.

Korean War

Following the Berlin Airlift, the next U.S. transport operation in the Cold War period occurred during the Korean War. Much like the rest of the U.S. military, the air force’s Combat Cargo Command (CCC) was unprepared for the beginning of the conflict. The command rebounded, however, to perform important tactical airlift missions during the duration of the war.

To begin, U.S. transport aircraft flew supply missions in support of the Pusan Perimeter. Moreover, in October 1950, C-47s and new twin-tailed Fairchild C-119 Flying Boxcars dropped the 187th Regimental Combat Team onto drop zones at Sukchon and Sunchon, South Korea. Following the delivery of the 187th, the CCC returned to resupply efforts. During 12 days of operations in support of beleaguered U.S. Marines in the Chosin Reservoir, C-119s delivered 1,483 tons of supplies and evacuated 4,600 casualties. Finally, in March 1951, 173 CCC aircraft delivered 3,487 members of the 187th to drop zones near Munsan-ni, South Korea.

Vietnam War

During the Vietnam War, a new breed of transport aircraft, including the Fairchild C-123 Provider, the Lockheed C-130 Hercules, C-141 Starlifter, and C-5 Galaxy, and the Douglas C-133 Cargomaster, performed both strategic and tactical air supply missions for the U.S. military.

On the strategic level, U.S. transport aircraft flew missions deploying U.S. troops and equipment from the United States to bases in South Vietnam. Of particular note is the use of 88 C-141 jet transports and various other transport aircraft to haul an infantry brigade from Hawaii into direct combat at Pleiku, South Vietnam, in 1965. In addition, in 1967, 369 C-141s and 22 C-133s deployed the 101st Airborne Division from Fort Campbell, Kentucky, to Bien Hoa, South Vietnam. Finally, in 1972, the heavy-lift-capable, jet-powered C-5 Galaxy delivered 49 tanks from Japan to Da Nang, South Vietnam.

Tactically, throughout the war in Vietnam, the C-130 Hercules performed numerous missions. In 1967, in keeping with the tradition of U.S. transport aircraft, 13 C-130s delivered members of the 173rd Airborne Brigade in the only combat jump of the Vietnam War. U.S. transport aircraft were also vital in the survival of the U.S. combat base at Khe Sahn in January 1968. During that operation, U.S. transport aircraft delivered replacements and 150 tons of cargo a day and evacuated Khe Sahn’s wounded. Finally, in 1972, all-weather supply drops by C-130s helped break the siege of An Loc, South Vietnam.

Post–Cold War Era Operations

Following the Vietnam War, U.S. transport aircraft continued to provide strategic and tactical transport support to U.S. forces during operations in Grenada and Panama. However, U.S. transport aircraft truly distinguished themselves in the post–Cold War era during military operations in the Middle East and Afghanistan, as well as performing humanitarian operations throughout the world and in the United States.

Persian Gulf War

In 1990, in response to the Iraqi invasion of Kuwait, the U.S. relied on air force C-141s as well as KC-10 Extender and KC-135 Stratotanker aircraft to move troops and supplies from the United States to bases in the Persian Gulf. In all, these aircraft moved more troops and equipment farther and faster than any time in the history of U.S. transport efforts. Finally, once the deployment of U.S. troops was complete, the C-130 flew more sorties than any other aircraft in the war. Operations during the Persian Gulf War were varied and included supplying allied units, moving units to flank the Iraqi Army, and delivering orders to units in the field.

Operations Enduring Freedom and Iraqi Freedom

Transport aircraft of the air force's Air Mobility Command currently support U.S. forces in Afghanistan and previously supported U.S. forces in Iraq. Transport missions in these theaters include the strategic transportation of troops and equipment from the United States using jet-powered C-17 Globemaster aircraft and the aeromedical evacuation of injured troops from these theaters using specially equipped aircraft. Moreover, using the venerable C-130, transport crews provide tactical movement to allied units. The completion of these operations has led to the Air Mobility Command accumulating some impressive operational statistics. As of 2009, the Air Mobility Command has transported 8.89 million passengers, 3.67 million tons of cargo, and 134,989 patient evacuations in a total of 524,085 flights.

Humanitarian Operations

In addition to the combat operations that U.S. transport aircraft have carried out in the post-Cold War period, from 1947 U.S. transport aircraft have accomplished various humanitarian operations. Like the military operations, humanitarian operations have been diverse and carried out throughout the world.

Domestically, U.S. Air Force transport aircraft have carried out a variety of humanitarian operations. Throughout the post-Cold War period, air force transport aircraft have delivered supplies to hurricane and flood victims, including transporting 14,600 passengers, 300 patients, and 686 loads of material during operations in support of Hurricanes Katrina and Rita. Apart from material transport, U.S. transport aircraft have been implemented by the U.S. Forest Service to fight wildland fires. Finally, specially equipped C-130 aircraft are used to collect data on hurricanes and tropical storms in the Atlantic and Pacific.

U.S. transport aircraft also conduct humanitarian operations internationally. Recently, these operations have centered on disaster relief. As an example, in 2005, U.S. transport aircraft flew 273 flights delivering 15,294,000 pounds of material in support of Pakistani earthquake relief efforts. U.S. transport aircraft were also at the forefront of relief efforts following the December 2004 tsunami in South Asia.

Finally, in 2008, U.S. transport aircraft delivered 200,000 pounds of supplies to earthquake victims in China and 1.1 million pounds of supplies to victims of tropical cyclone Nargis.

Current U.S. Transport Aircraft

The current inventory of U.S. transport aircraft includes aircraft that are tasked with strategic and tactical airlift operations. For these operations, the air force relies on three dedicated transport aircraft. The C-5 Galaxy, one of the largest military aircraft in the world, has a maximum carrying capacity of 270,000 pounds and has the ability to load and offload military grade vehicles using front and rear cargo hatches. The C-5, first deployed in 1969, is currently going through a major engine upgrade that will allow it to remain a strategic airlift asset into the 21st century. The air force also uses the C-17 Globemaster for strategic airlifts. The air force first deployed the Globemaster in 1995. The aircraft has a short takeoff and landing capability and can carry 170,900 pounds of cargo, 102 troops, or 36 litters (stretchers) and 54 ambulatory patients. Finally, for tactical delivery of cargo and troops, the air force relies on the C-130. Debuting it in 1956, the air force currently operates four models of the C-130. The E, H, and J models are capable of transporting any combination of 16 container delivery system bundles, six open cargo pallets, 74 litters in an aeromedical evacuation role, 92 combat troops, or 64 paratroops. In addition, the air force currently operates upgraded J model aircraft with increased carrying capacities in all of the above areas.

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See also Afghanistan; Air Force, U.S.; Air Mobility Command; Airborne Units; Iraq War (2003); Korean War (1950–1953); Lockheed Martin; Natural Disaster, Military Response to; Persian Gulf War; Transportation, Air; Vietnam War; World War II

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AIRCRAFT CARRIERS

An aircraft carrier is a ship capable of handling aircraft that take off and land on its deck. In 1909, the French inventor Clement Ader presented the idea of a ship that carried aircraft. The U.S. Navy began studying and testing this concept in the same year. During the interwar period between World War I and World War II, the U.S. military developed its first actual aircraft carriers. World War II was a turning point in the use of aircraft carrier technology. Carriers replaced battleships as the main ships utilized in fleets, as evidenced in several key battles fought in the Pacific. However, the role and importance of aircraft carriers in war was debated and contested in the decades after World War II. During the Cold War, the U.S. Navy worked on developing increasingly advanced carriers. The creation of supercarriers allowed jet aircraft and planes with nuclear weapons to take off from their angled decks. In the decades after the Cold War, the U.S. Navy continued to update their carrier systems to increase their flexibility in terms of mobility and warfare capabilities. Throughout these conflicts, air power has continually been reaffirmed as a vital aspect of warfare. Today, supercarriers are all nuclear powered, and they typically operate as part of a Carrier Strike Group along with cruisers, destroyers, submarines, and supply ships.

Aircraft carriers symbolize America's role as a superpower. They currently serve as American territory, which frees the United States from relying on overseas land bases in other countries, thus establishing an expansive American presence around the world. This entry examines the history, technology, and roles of aircraft carriers, from World War II to the present.

World War II

World War II was a turning point for the incorporation of aircraft carriers into the U.S. military. During the early 1940s, the U.S. Navy debated whether carriers should remain in the battle line with battleships or move independent of them. Advocates of keeping aircraft carriers in the battle line with battleships thought that battleships were the most important part of the fleet. They saw aircraft carriers as protecting battleships from enemy aircraft, since planes could scout for the battleships, and they believed that a change in position would make aircraft carriers vulnerable to enemy ships. Eventually, however, the U.S. Navy sided with the proponents of independent aircraft carrier action, who recommended using carriers offensively with small ships escorting them.

The U.S. military realized the critical importance of utilizing aircraft carriers after the Japanese attack on Pearl Harbor, during which five American battleships were destroyed by Japanese planes based on fast carriers. By 1942, aircraft carrier forces further proved their role in winning the war in the Pacific. For example, the Battle of the Coral Sea was the first naval battle in history where ships did not directly engage one another and all of the fighting featured carrier-based aircraft. During the war, the U.S. military continued to build new and larger carriers, which played a key role in supporting the U.S. victory and helped ensure American postwar naval supremacy. Since navies take years to develop, American victory in World War II, coupled with American industrial power, meant that other countries did not have a chance to compete with America's supremacy in naval aviation.

After the Army Air Force's strategic bombers dropped atomic bombs on Hiroshima and Nagasaki, the navy's fast carriers seemed vulnerable to the new nuclear warfare and were believed by many to be of diminished importance. To keep up with these new

developments, as well as the emerging jet age, the navy drafted plans for the construction of a supercarrier with the capability of launching jet aircraft-carrying nuclear weapons. However, as a result of interservice rivalries, Congress halted construction of the first supercarrier, the USS *United States*, in 1949.

Cold War

During the Cold War, the U.S. Navy developed aircraft carrier technology capable of launching jet aircraft and conducting nuclear warfare. The Korean War revived the importance of the aircraft carrier, although this was unclear in the early stages of the war. The North Korean Air Force lagged far behind the air power of the United States. Responding to the possible threat of Soviet intervention and after the North Korean seizure of air bases in South Korea, the United States was forced to fly aircraft from bases in Japan. As a result, American aircraft needed to refuel after a short amount of flying time over Korea, which increased the importance of nearby carrier-based aircraft that could spend more time and fuel on their missions. Carriers served several roles during the war. *Essex*-class carriers still provided air support for ground forces defending Pusan. Later, carriers were used to distract attention from Inchon and to drop napalm on the Inchon area before it was invaded. Helicopters also took off from carriers, and they offered supplies, reconnaissance, and medical evacuation, among many other assignments.

Three new British technologies, steam catapults, mirror landing aids, and angled flight decks, came into use on carriers during this time period. Steam catapults allowed for launching jet aircraft (which needed to achieve much higher takeoff speeds to become airborne), while mirror landing aids reflected lights to help pilots land at higher speeds. In 1952, angled flight decks were developed and then tested on USS *Midway*. These decks helped jet aircraft stop and avoid crashing into parked aircraft, since jet tailhooks did not always catch on arresting wires. Supercarriers were also built with larger decks to offer more stability and to provide a larger landing area for aircraft.

After the Korean War, the United States learned that despite having recently experienced the total warfare of World War II, limited wars remained a very real possibility. Furthermore, aircraft carriers offered the nation a way to move forces quickly to

reach any international conflict and assert American power. In the mid-1950s, the navy developed new classes of carriers. Regardless of interservice rivalries between the air force and navy over whether aircraft carriers or land-based bombers were better equipped to drop atomic bombs, Congress offered funding for the navy to build *Forrestal*-class carriers that were capable of launching nuclear attacks and could carry more fuel than World War II-era *Essex* ships. Soon afterward, the first nuclear-powered aircraft carrier, the USS *Enterprise*, was built, ultimately being commissioned in 1961. It would later be utilized in six tours for the Vietnam War. Another example of the United States establishing a military presence in this period was during the Cuban Missile Crisis in October 1962, when President John F. Kennedy sent aircraft carriers to establish a naval quarantine around Cuba.

The Vietnam War proved the flexibility and mobility of aircraft carriers. Presidents Dwight D. Eisenhower and John F. Kennedy sent U.S. aircraft carriers to the South China Sea during their administrations. The use of aircraft carriers escalated in 1964, when the USS *Ticonderoga* and USS *Constellation* were used for strikes in the wake of the Gulf of Tonkin incident. In March 1965, carriers participated in Operation Rolling Thunder. Aircraft carriers were also utilized throughout the war for bombing missions. One major loss in the war occurred in 1967, when the USS *Forrestal* caught fire and killed more than 100 sailors. The damage from this fire also came at a tremendous financial cost, as the cost of repairs was more than 70 million dollars. Even after the war ended, U.S. aircraft carriers retained a presence in the region of Southeast Asia.

Post-Cold War

After Vietnam, the U.S. Air Force developed new aircraft; these new advancements, that is, precision air power, were then tested in Operation Desert Storm. The technological developments of the 1990s occurred amid decreasing defense spending, which led to a decline in the number of deployable carrier battle groups and cut funding for programs. After the development of the nuclear-powered *Nimitz*-class carriers in the 1960s, no new major technological developments were made to aircraft carriers for more than 30 years.

The nature of most post–Cold War conflicts was that of U.S. interservice collaboration and multinational joint operations. In the case of the Persian Gulf War, the U.S. Air Force, Navy, and Marines cooperated in joint operations. America’s global presence was shown through the Gulf War example, as U.S. aircraft carriers were within striking range of Iraq when Saddam Hussein invaded Kuwait and the carriers were capable of being ready for combat within hours. In Operation Desert Storm, the U.S. Navy faced new challenges and discovered that its command and control equipment was unprepared for the organization of large-scale air operations. For example, communication systems were slowed by the small amount of data they could handle and files took hours to be delivered. After the war, the U.S. Navy updated its systems to rectify this problem. When the U.S. Navy decommissioned many ships in the wake of the Persian Gulf War, it retained a more technologically advanced fleet for the 21st-century wars in Afghanistan and Iraq.

Global War on Terrorism

The terrorist attacks on September 11, 2001, again shifted the history of the aircraft carrier. In this new form of global war on terrorism, carriers are increasingly important because of their ability to be readily available to reach remote, landlocked regions. The two major conflicts after these attacks, Operation Enduring Freedom and Operation Iraqi Freedom, offer evidence of the sophistication and advancement of U.S. carrier air power since the Persian Gulf War. Operation Enduring Freedom, which began on October 7, 2001, in Afghanistan, was initially fought primarily with air power from carriers since there were no land bases available with a reasonable proximity to the area. The U.S. Navy showed improvements in naval aviation since the Persian Gulf War through their more precise naval bombing. During Operation Iraqi Freedom in 2003, the navy shifted many of their operations from analog to digital.

In the early 21st century, the U.S. Navy announced a new design called the next-generation carriers, or CVN-21. Set to be completed around 2015, these carriers will have larger decks, improved electrical systems that will lower life cycle costs, and adaptable infrastructure that will adjust to future technologies. Today, aircraft carriers are U.S. territory

that can reach the most remote regions of the world, and they allow the United States to assert their diplomatic and military aims on a global scale. Carriers have proved their flexibility in being utilized for a variety of missions and for diverse types of aircraft, as well as adapting to technological advancements.

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See also Korean War (1950–1953); 9/11 (2001); Persian Gulf War; Vietnam War; World War II

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AIRLAND BATTLE DOCTRINE

AirLand Battle was a doctrine developed by the U.S. Air Force and Army that leveraged the warfighting competencies from both services in a coordinated manner. This doctrine focused on attacking the enemy’s second and third echelons in depth with both air and ground assets, in addition to fighting along the forward edge of the battle area (FEBA). This entry reviews the developments leading up to AirLand Battle and discusses its features and tenets.

The 1970s: Field Manual 100-5

Following the Vietnam War, the U.S. Army looked to revise its doctrine while providing focus for future operations. In the 1970s, General William DePuy,

commanding general of the army's Training and Doctrine Command (TRADOC), was eager to reorient the army following the humiliation of the U.S. withdrawal from Vietnam and ordered a rewrite of all army publications. As a result of this effort, the army published Field Manual (FM) 100-5 in 1976, which sought to redefine battle and establish a foundation for future army operations. Observing the October 1973 Arab-Israeli War and taking lessons from the battlefield, FM 100-5 framed the concept of "Active Defense," which focused army operations at the FEBA and relied largely on firepower. Focusing on the threat of the Warsaw Pact, FM 100-5 outlined a doctrine that sought to destroy the massive armor columns of the Eastern bloc in the main battle area as they attacked in successive armored echelons.

When published, the 1976 version of FM 100-5 was the subject of much controversy. Critics argued that it focused too much on attrition style, firepower-centric warfare at the tactical level. Additionally, others thought that the concept outlined in 100-5 was too defensive in nature and failed to consider the attributes of movement and maneuver. Commanders also questioned the army's ability to "recock" itself after the first Warsaw Pact echelon was destroyed and before the second and third echelons arrived.

In 1977, General Donn A. Starry succeeded DePuy as the commander of Training and Doctrine Command and began an effort to revise the 1976 version of 100-5 and address the issues raised by its critics. As a corps commander in Europe, Starry thought that U.S. forces needed to expand their scope beyond the FEBA and look at the "extended battlefield." With this extended battlefield concept, Starry believed the army needed to focus on a deeper area of operations, with corps commanders looking to influence an area up to 150 kilometers deep. Instead of defending at the FEBA, the army needed to affect a larger area to defeat the superior numbers of the Warsaw Pact.

To reduce enemy combat power, Allied forces would use deep artillery fires and attack helicopters to reduce enemy combat power before it reached the FEBA. Most important, the army required the support of air power to assist in the destruction/attrition of Warsaw Pact second and third echelon forces. As a result, the air force would contribute to the effort with fixed-wing attack aviation, in what was termed *battlefield air interdiction*. The new concept

held that all echelons of the enemy's assault columns were attacked simultaneously along the axis of advance and not just engaged once they reached the FEBA. Through deep attack, by the time the second and third echelons reached the FEBA, they would already be severely reduced and lack the combat power to continue the assault. Simultaneity of action was the key idea with deep fires creating conditions for victory. In 1982, the army published a new version of 100-5, which introduced this new concept as "AirLand Battle."

Tenets of AirLand Battle

While the new concept expanded the battlefield, AirLand Battle also contained tenets that reshaped the way the army fought. AirLand Battle looked above the tactical level of war and focused on the operational level. The new 1982 version of 100-5 had the army focus less on the main battle area and the tactical-level fight and look at the larger operation within a given theater and not just one single battlefield. The new concept required the integration of air and land power to affect Warsaw Pact forces in and behind the FEBA. This integration required surface fires and air-interdiction assets working in close coordination. The idea of a deep attack was a cornerstone of AirLand Battle and included not only kinetic fires but also inoffensive electronic warfare and deception. As a result, AirLand Battle outlined the rebirth of operational-level art by connecting larger theater-level objectives and incorporating multiple military assets and capabilities in a coordinated effort. In this vein, AirLand Battle was based on better joint operations that required greater synchronization between the air force and the army.

Furthermore, AirLand Battle also required a different mind-set for the individual soldier. Active defense was a methodical battle that did not leverage the individual qualities of Western soldiers. AirLand Battle relied more on a soldier's initiative and expected troops to take action against the enemy when the situation presented itself. The German concept of *auftragstaktik* or mission-type orders was important as soldiers were given the commander's intent without being told specifically how to conduct the mission. Thus, subordinate commanders were free to develop their own plans and methods of attack. As a result, the concept focused not so much on weapon systems and attrition-style warfare but saw leadership

in a fluid environment to be just as important as fire and maneuver. The concept sought to use operational tempo and speed as a weapon.

In August 1990, the Iraqi leader Saddam Hussein's troops invaded Kuwait, and the United States and a coalition force responded to deter an invasion of neighboring Saudi Arabia. The military buildup was known as Operation Desert Shield. By January 1991, it had become clear that Saddam would not withdraw his troops, and Operation Desert Storm began with aerial bombardment of Iraq. When Desert Shield became Desert Storm in 1991, the basic structure of AirLand Battle served as a blueprint for the concept of operation. Deep strikes by air force aircraft, coupled with long-range artillery fire, the multiple-launch rocket system, and attack helicopters, destroyed or reduced Iraqi troop formation before coalition forces crossed the line of departure. The coalition forces utilized deception by staging the 5th Marine Expeditionary Brigade in the Persian Gulf, causing the Iraqis to concentrate much of their defensive power on the shores south of Kuwait City. Electronic warfare jammed Iraqi air defense assets and disrupted command and control capabilities. Last, VII Corps's (the army unit deployed in Desert Storm) sweeping armor envelopment, an offensive maneuver designed to attack the enemy's rear, in the west forced the surrender or withdrawal of Iraqi army elements in short order. By employing deep fires in a coordinated effort along with deception and maneuver at the operational level of war, Iraqi forces were quickly defeated. Many military thinkers affirm that Desert Shield/Desert Storm validated the concept of AirLand Battle and set the stage for future U.S. military operations.

Subsequent to the 1991 victory and as the United States entered the 21st century, FM 100-5 was superseded by FM 3-0, *Operations*, in June 2001. This newer publication still embraced many of the tenets of AirLand Battle by emphasizing joint operations and "Full Spectrum Operations." By specifically addressing these ideas, the United States recognized the value of operational-level synergy, simultaneity, and unity of effort first framed by AirLand Battle. These concepts serve as cornerstones for contemporary military operations.

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See also Operations, Air; Persian Gulf War

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AL QAEDA

Designated a Foreign Terrorist Organization by the U.S. Department of State, al Qaeda is a militant Islamic organization whose strategic objective is the establishment of a unified state by violence throughout the Muslim world governed according to Islamic law. Forged by Osama bin Laden and other foreign fighters who resisted the Soviet invasion of Afghanistan in the 1980s, al Qaeda is responsible for multiple terrorist attacks around the world dating back to 1992. Culminating on September 11, 2001, 19 al Qaeda terrorists hijacked commercial airliners to crash them into the World Trade Center in New York City and the Pentagon in Washington, D.C. Following the terrorist attacks on September 11, the United States initiated an international counterterrorism campaign with the intent to eliminate al Qaeda and other terrorist organizations. This entry discusses the origin of al Qaeda and examines the terrorist activities of al Qaeda and al Qaeda-inspired terrorists, such as the 9/11 attacks on the United States and bombings across the world.

Origin

Al Qaeda's roots as a terrorist organization grew out of the insurgency that resisted the Soviet invasion and occupation of Afghanistan in the 1980s. During the Afghan war, bin Laden, a Saudi Arabian born into a wealthy Yemeni family, helped finance, recruit, transport, and train Islamic foreign fighters to expel the Soviet Army. Bin Laden and his associates believed that the Soviet defeat at the hands of the Afghan resistance was an Islamic victory over one of the world's two super powers. Fueled by this

victory, bin Laden hoped to redirect the fight toward overthrowing regimes deemed “non-Islamic” and expelling Westerners and non-Muslims from the Muslim countries.

The invasion of Kuwait by the Iraqi army in 1990 would offer bin Laden a chance to reunite the victorious resistance fighters from the Afghan war to defend Saudi Arabia. Despite his favorable reception by the royal family, the Kingdom of Saudi Arabia rejected bin Laden’s offer of fielding an Islamic Army of Afghan veterans in favor of a U.S.-led coalition. Entrusting the defense of the cradle of Islam and its two holiest cities, Mecca and Medina, to non-Muslims infuriated bin Laden. This fermenting rage against apostate regimes, like the Saudi Royal Family, spurred bin Laden to exercise the lessons learned in the Afghan war to recruit, train, and finance Muslim fighters to begin the violent expulsion of the United States from the Islamic world in order to establish a unified state throughout the Muslim world governed according to Islamic law.

When bin Laden began recruiting fighters in Saudi Arabia, the royal family exiled him. At the invitation of an Islamic cleric and political figure, Hassan al-Turabi, bin Laden was granted safe haven in Sudan, where he would work to raise money and train Islamic fighters for conflicts in the Balkans, Chechnya, Kashmir, and the Philippines. In Sudan, he would expand his wealth through the ownership of Sudan’s most profitable businesses, including construction, manufacturing, currency trading, import-export, and agricultural enterprises. During his time in Sudan, a number of terrorist attacks against U.S. targets began to be credited to bin Laden pressuring the Sudanese government to broker his return to Afghanistan.

Offering financial support to their militia, bin Laden returned to Afghanistan in 1996 under the protection of the Taliban government. In Afghanistan, bin Laden found himself in the company of other Muslim exiles, specifically Dr. Ayman al-Zawahiri, the founder of the Egyptian al Jihad group, and Mohamed Atef, a veteran guerrilla commander. Under the religious and political tutelage of Zawahiri, bin Laden issued an Islamic edict, “Declaration of Jihad on the Americans Occupying the Country of the Two Sacred Places,” promising violent action against the Americans unless they withdrew from Saudi Arabia. Through his wealth and a system of training camps, bin Laden would form an army of Islamic fighters to carry out violence against the United States. Backed by this army

of several thousand and endorsed by other Islamic terrorist groups, bin Laden would issue another Islamic edict in February 1998 under the banner of the World Islamic Front titled “Statement of Jihad against Jews and Crusaders,” saying it was the duty of all Muslims to kill U.S. citizens, civilian and military, and their allies everywhere. This edict would initiate al Qaeda’s global campaign of violence and propaganda against secular Muslim regimes and Western occupiers of Islamic lands. Al Qaeda’s objectives included the following: returning to a “pure and authentic” Islam as practiced by the Prophet Mohammed in order to bring back glory and prominence to Muslims, overthrowing regimes deemed to be non-Islamic, expelling Westerners and non-Muslims from Muslim countries, and establishing a unified state throughout the Muslim world governed according to Islamic law by working with a network of like-minded Islamic militant organizations.

Activities

Al Qaeda initiated its global terrorist campaign on August 7, 1998, with simultaneous attacks on the U.S. embassies in Kenya and Tanzania killing 224 people. The U.S. retaliated on August 20, 1998, with guided missile strikes against suspected training camps in Sudan and Afghanistan. Subsequently, the U.S. State Department would designate al Qaeda as a Foreign Terrorist Organization in December 1999. In October 2000, al Qaeda targeted the USS *Cole*, docked in the port of Aden, Yemen, killing 17 U.S. sailors and injuring 39 others. In its most devastating attack, 19 al Qaeda terrorists simultaneously hijacked four commercial airliners to crash them into the World Trade Center in New York City and the Pentagon in Washington, D.C. (the fourth airliner crashed in the Pennsylvania countryside following assaults on the hijackers by passengers). According to the *9/11 Commission Report*, these attacks resulted in the deaths of 2,973 people from more than 70 countries, including the 343 firefighters and 60 police officers who responded to rescue those trapped in the World Trade Center. In response to these attacks, the U.S. would launch the “Global War on Terrorism” to eliminate al Qaeda and its safe havens through military campaigns in Afghanistan and elsewhere.

In March 2003, the U.S.-led military coalition overthrew the Iraqi regime of Saddam Hussein in

response to the regimes' violation of 16 UN Security Council resolutions targeting its weapons of mass destruction program. The ensuing occupation of Iraq by coalition forces would spur an insurgency that would mimic the Afghan War of the 1980s and attract foreign fighters to expel yet another Western military in a Muslim country. One particular Jordanian militant, Abu Musab al-Zarqawi, whose operations wreaked havoc in Iraq, pledged allegiance to bin Laden in 2004, establishing al Qaeda in Iraq.

With its central leadership in disarray due to U.S. military operations in Afghanistan, 2004 would mark a change in the operations of al Qaeda. In March 2004, 3 days before Spain's general elections, commuter trains in the capital of Madrid were targeted by al Qaeda-inspired terrorists, killing 191 people and injuring 2,000. While not directly sponsored by al Qaeda, the Madrid bombers would mark the transition of al Qaeda as an organization to an ideology. Inspired by al Qaeda's ideology of violent extremism, the Madrid bombers succeeded in influencing the Spanish elections that would result in the withdrawal of Spanish forces from the coalition in Iraq.

Al Qaeda's trademark simultaneous terror attacks would be employed again by Muslims emboldened by the teachings of bin Laden and angered by British involvement in the Iraq War. On July 7, 2005, four al Qaeda sympathizers would detonate bombs targeting the London public transportation system, three on underground trains and one on a bus. Fifty-two people were killed, and 700 were injured in the attacks.

Despite their failures, several attempted terror attacks linked to al Qaeda could have had devastating effects. In December 2001, Richard Reid tried to detonate a shoe bomb on a flight from Paris to Miami. In August 2006, 24 British citizens linked to al Qaeda plotted to blow up 10 planes using liquid explosives. In June 2007, British police discovered two car bombs in London that al Qaeda-linked perpetrators failed to detonate; a third vehicle burst into flames at Glasgow Airport the following day when terrorists attempted to explode its bombs. In December 2009, a Nigerian man attempted to detonate a bomb in his underwear on a flight from Amsterdam to Detroit; the alleged bomber admitted his link to al Qaeda. In October 2010, British authorities thwarted a plot by Yemenis linked to al Qaeda, who concealed two bombs inside computer printers transiting the United Kingdom aboard planes bound for the United States.

Al Qaeda as a network of global Islamic terror organization is linked to various other terrorist attacks. An October 2002 bombing of nightclubs in Bali, Indonesia, killed 202. November 2005 bombings at American hotels in Amman, Jordan, killed 57. Al Qaeda in the Islamic Maghreb claimed responsibility for the deaths of 60 people in two suicide attacks at UN offices in Algiers, Algeria. Baitullah Mehsud, an Afghan Taliban leader with ties to al Qaeda, assassinated former Pakistani Prime Minister Benazir Bhutto in December 2007 in Rawalpindi, Pakistan. In June 2008, a car bomb exploded outside the Danish Embassy in Pakistan, killing six; al Qaeda claimed responsibility as retaliation for political cartoons depicting the Islamic prophet Muhammad.

Organization

Terrorism experts characterize al Qaeda's organization as a venture capital firm; al Qaeda provides funding, contacts, and expert advice to various militant groups and individuals all over the Islamic world. It used its safe haven in Afghanistan as a base to centrally plan and coordinate terrorist operations around the world. From these training camps, al Qaeda created a network of geographically dispersed cells and individuals equipped with a wide array of relevant terrorist skills. Weapons training, surveillance, covert reporting, physical training, and false document production were combined with fundamentalist Islamic training. Al Qaeda's training emphasized self-sufficient operations where terrorist cells could operate independent of central command and control. In its early years, it is suggested that al Qaeda trained more than 5,000 fighters in its Afghanistan training camps. These fighters were led by a hierarchical leadership and decision-making body known as the consultative council. This council was a vertical leadership structure providing strategic direction and tactical support to a horizontal network of compartmentalized cells.

As result of the military, intelligence, and law enforcement operations in support of the Global War on Terrorism, al Qaeda's core capacity for conducting large catastrophic operations has been assessed by intelligence officials to have been degraded. Estimates suggest that an al Qaeda core of several thousands has dwindled to nearly a hundred. Nearly half of the core al Qaeda senior leadership has been killed or captured. However, the former

director of the Central Intelligence Agency, George Tenet, warned of a transition into an autonomously operating collection of regional networks infected by al Qaeda's violent agenda. Al Qaeda has evolved into an ideology, with bin Laden and his deputy Zawahiri playing significant roles as propagandists who exploit modern mass communications.

In the forefront of this transition was the terrorist group al Qaeda in Iraq. Al Qaeda in Iraq was one of the more successful branches of al Qaeda from 2004 to 2007 during the insurgency following the U.S.-led invasion of Iraq in 2003. Led by al-Zarqawi, al Qaeda in Iraq was formed primarily of fighters from neighboring Islamic countries who targeted the U.S. military, Iraqi civilians, and foreign workers with marketplace bombings, kidnappings, beheadings, improvised explosive device ambushes, and urban guerrilla warfare. Al Qaeda in Iraq's operations also marked the rise in al Qaeda's propaganda machine as a tactic in its violent struggle; the group extensively employed videodiscs, audiotapes, and the Internet to disseminate images of its dramatically choreographed terror attacks to the world.

Al Qaeda in the Arabian Peninsula was formed by veterans of the Afghan war against the Soviets who fled Saudi Arabia to Yemen. This branch of al Qaeda has been responsible for suicide bombings, shootings, kidnappings of foreign civilians, and several failed bombing attempts targeting commercial passenger and cargo airplanes.

Al Qaeda in the Islamic Maghreb is a pseudo-branch of al Qaeda based in North Africa. It is unclear whether this branch takes direct orders from the al Qaeda leadership or merely espouses its ideology and acts independently in its region of influence. In a similar vein, Islamic terrorist groups in Southeast Asia, notably the Abu Sayyaf Group and Jemaah Islamiyah, are sympathetic to the cause, and their operatives received training and funding at al Qaeda camps in Sudan and Afghanistan.

Death of Osama bin Laden

On Monday, May 2, 2011, the United States launched a raid against a compound in Abbottabad, Pakistan, codenamed Operation Neptune Spear. The raid, carried out by 79 commandos, pilots, tactical intelligence collectors, and a dog from the U.S. Joint Special Operations Command, ended in the death of the al Qaeda founder and leader.

At the conclusion of the raid, U.S. forces took bin Laden's body to Afghanistan for forensic identification before burying it at sea within 24 hours of his death. In the exploitation of the compound, U.S. personnel removed 2.4 terabytes of computer hard drives, documents, DVDs, thumb drives, and "electronic equipment" for later analysis.

John P. J. DeRosa

See also Iraq Insurgency (2003–2011); 9/11 (2001); 9/11 Attack on Pentagon; 9/11 Commission; Terrorism

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ALLIANCES

Alliances are diplomatic or military arrangements made between nation-states, either formally or informally, to increase cooperation for security from outside aggression. Alliance building has maintained a large presence in the history of sovereign states from ancient history, a prime example being the Delian League of ancient Greece, to the modern period, the North Atlantic Treaty Organization (NATO) being the best modern example of an alliance system at work. Alliances were traditionally viewed by policymakers as essential tools to maintain a balance of power between competing states and are still seen in this light in today's global society. This entry describes some basic characteristics of alliances and their historical development over the course of the 20th century.

Characteristics of Alliances

Alliances often share several basic characteristics. First, alliances seek to enhance the power of the individual state while also helping to stabilize the international order. A prime example of this characteristic were the alliances put into place by Otto von Bismarck in the aftermath of the Franco-Prussian War of 1870–1871,

most notably the Dual Alliance in 1879 and the Triple Alliance in 1882, to help strengthen the new German state's position in Europe as well as to provide a counterbalance to any renewed French attempts to regain what had been lost in the 1870–1871 conflict. Second, alliances provide for the restraint of allies. This function has often been one of the most important of alliance systems, particularly in ensuring that the actions of one ally state do not endanger the security or jeopardize the interests of another.

Alliances can also be defined by their specific attributes. Alliances can be categorized by type (e.g., military), membership (bilateral or multilateral), class (offensive, defensive, or nonaggression), and scope (regional or international). For example, the ANZUS Treaty signed in 1951 between the United States and Australia and Australia and New Zealand represents a multilateral, defensive, military, regional alliance structure. These attributes are, however, not immutable and can change given circumstances and the needs of individual states involved.

Alliances are also often based on shared interests between individual states and an exchange of benefits. This is not to say, however, that each alliance represents equality between member states. Often one member state can be seen as the dominant force in the alliance relationship owing either to its military or to its economic strength. This is especially true in bilateral alliances such as ANZUS, where the United States maintains a position of control in the alliance.

Alliances are also often based on some form of ideological solidarity between the member states. These ideological ties can be central to the alliance structure, such as the anticommunist nature of the Southeast Asia Treaty Organization (SEATO), or they can provide only a loose connection between the allying states, such as the 1940 Tripartite Pact between Nazi Germany, Fascist Italy, and Imperial Japan. Alliances have maintained their importance in modern foreign policy making and still represent one of the principal actions individual nations carry out to provide security from external threats as well as internal security.

Alliances and World War I

Alliances prior to 1914 had generally been flexible and were created to achieve limited aims. Many of the alliances struck between European nations in the 18th and 19th centuries were principally aimed at maintaining a balance of power between the states of

the continent. They were, in other words, designed to fragment military power rather than to concentrate it. However, increased tensions between the major powers of Europe in the early 20th century, spurred on by a naval arms race between Great Britain and Germany, growing nationalism in the Balkans, and the quest for colonies, helped transform the alliance system from one designed to prevent war to one that actually increased the chances of war beginning.

World War I saw the major powers of Europe divided into two major alliance groups—the Triple Alliance and the Triple Entente. The Triple Alliance (1882–1914) was a defensive alliance between Germany, Austria-Hungary, and Italy. This categorization of the alliance as defensive was the primary reason why Italy did not formally enter the war on the side of its alliance partners in 1914 since it was deemed that Germany and Austria-Hungary had initiated the fighting. During the war, the Ottoman Empire would replace Italy as the third member of the Triple Alliance. The Triple Entente was composed of France, Russia, and Great Britain (1907–1917) and was affiliated with Japan and the United States during the war, although neither nation was ever a formal member of the Triple Entente alliance system. Both alliance systems were premised on the idea of allied states coming to the aid of their alliance partners in the event of the outbreak of hostilities. This negated the freedom of action for each of the individual states and created a highly unstable state of affairs. The rigid nature of the alliance system that had been created by 1914 virtually ensured that even the most minute diplomatic disruption would lead to conflict between the great powers, which is what occurred with the outbreak of hostilities between Austria-Hungary and Serbia in the aftermath of the assassination of the Austro-Hungarian crown prince, Franz Ferdinand, on June 28, 1914. The alliance machinery brought Germany into support of its ally, which necessitated a response from Russia, thereby triggering France's alliance obligations to its partner. World War I appeared to many observers to have been an almost unavoidable conflict, given the nature of the alliances that had been built in the 30 to 40 years prior to 1914.

The Grand Alliance and World War II

The similarities between the alliance systems of World War I and World War II are marginal at

best. The alliances of 1914 were codified in a way that the alliances between the major powers that took part in World War II never were. The Grand Alliance between the United States, Great Britain, and the Soviet Union was more loosely centered on an ideological opposition to the totalitarian governments of Nazi Germany, Fascist Italy, and Imperial Japan than on a traditional balance-of-power model. Another important difference was that the Grand Alliance was the product of the war itself rather than the alliance being a precipitating factor in the conflict, as had been the case in 1914. Prior to 1941, many in the American diplomatic and military policy-making establishment considered the Soviet Union to be no different from Nazi Germany and, in some instances, an even greater threat. The most basic expression of the aims of the Grand Alliance was outlined in the Atlantic Charter drafted by President Franklin Roosevelt and Prime Minister Winston Churchill during the Atlantic Conference (August 9–12, 1941). The eight points of the statement issued by the two leaders focused the ideas of self-determination, lowering of economic barriers, and disarmament after the war had concluded. The Atlantic Charter would become the basis for what became popularly known as the United Nations during the war, the broad alliance of nations engaged in the war against the Axis Powers, and would provide the starting point for several of the important post-war international organizations, such as the United Nations and the General Agreement on Tariffs and Trade, to name a few.

While the Atlantic Charter provided an underlying rationale for the Grand Alliance, the machinery of fighting the war generally fell to the Combined Chiefs of Staff (CCS), composed of the British Chiefs of Staff Committee and the American Joint Chiefs of Staff. This represented another important differentiation between World War I and World War II. With the CCS, the United States and Great Britain created a tightly integrated command and staff structure to formally coordinate military operations and the allocation of war materiel. The overarching Grand Alliance was a much looser association between the Big Three and more closely mirrored the looser alliance that the Allied powers had at the end of World War I. The CCS was formed in February 1942 to facilitate closer planning between American and British military forces and to prepare plans for the eventual invasion of continental Europe. The roots

of the CCS came out of joint American-British talks held between January and March 1941 and the Arcadia Conference (December 22, 1941 to January 14, 1942), held in Washington, D.C. The CCS generally only fully met during wartime conferences such as Casablanca or Teheran. During other periods, the British military was represented by its Joint Staff Mission permanently situated in Washington. Notable figures involved with the CCS include the U.S. general George C. Marshall and the British field marshal Sir John Dill.

While the CCS oversaw the development of global Allied strategy, regional commands became the lowest level expression of the Grand Alliance. These regional commands blended military, diplomatic, and political concerns and were placed under the overall command of a supreme commander. The first such attempt at creating a combined regional command occurred in early 1942 with the formation of the American-British-Dutch-Australian Command (ABDA) to deal with the threat of Imperial Japan in Southeast Asia and the Dutch East Indies. ABDA was placed under the overall command of the British general Sir Archibald Wavell. ABDA was only in existence for several weeks and failed to stem the tide of the Japanese advance, but it provided a useful blueprint for the creation of future Allied regional commands. Prominent successors to ABDA included in Europe the Supreme Headquarters Allied Expeditionary Force (SHAPE), commanded by the U.S. general Dwight Eisenhower; the Southwest Pacific Area (SWPA), commanded by the American general Douglas MacArthur; and the South East Asia Command (SEAC), under the overall command of the British admiral Lord Louis Mountbatten as Supreme Allied Commander.

World War II was a seminal event for the United States in understanding the importance of alliance building. Prior to 1941, the United States had often acted as a unilateral power in world affairs. Even during World War I, President Woodrow Wilson had decided that the United States would be an “Associated Power” rather than a formal “Allied Power.” When the war ended in 1945, a whole new generation of American diplomatic and military leaders had gained firsthand practical experience in alliance building. This new skill set would immediately be put to the test as tensions between the Western powers, primarily the United States and Great Britain, and the Soviet Union grew

dramatically even before the final shots of World War II had been fired.

Alliances and the Cold War

The ideological struggle between the United States and the Soviet Union in the 45-year period after World War II became the primary factor in the formation of alliances globally. Both sides sought, much as Otto von Bismarck had after the Franco-Prussian War, to enhance their own individual security while trying to limit the growth of their opponent's power. Coming out of World War II, American leaders recognized that the conventional strength of Soviet military power represented a distinct threat to Western Europe. To counter this, American and Western European leaders turned to the creation of a series of mutual defensive alliances to serve as a potential deterrent to Soviet aggression. The first step toward the creation of an alliance network to contain Soviet power occurred in 1948 with the signing of the Brussels Pact between Great Britain, France, and the Low Countries. This was a multilateral, mutual defensive alliance designed to act as a bulwark against communism in postwar Western Europe as well as against the possibility of a resurgent Germany. The Brussels Pact was envisioned as being a purely European affair. However, as the division of Europe between the Western Powers and the Soviet Bloc became more stark, members of the Brussels Pact, in particular the British, became more alarmed about the ability of the western European nations to stand up against Soviet military power. It was suggested that the Brussels Pact be expanded to become a more Atlantic focused organization, thereby bringing the United States into the equation of western European defense. This move by the western European powers found a receptive audience with American policymakers. In the aftermath of U.S. involvement in the Greek civil war in 1947 and the issuance of the Truman Doctrine, the United States had taken on a much more hard-line attitude toward dealing with the Soviet Union.

Talks between the Brussels Pact nations and the United States and Canada began almost immediately after the signing of the Brussels Pact. On April 4, 1949, the North Atlantic Treaty was signed between the United States, Canada, the five Brussels Pact nations, and Iceland, Spain, Portugal, Italy, Norway, and Denmark. This became the foundation for the

creation of the North Atlantic Treaty Organization (NATO). Key to NATO was the inclusion of a mutual defense clause that treated an attack against any one member as an attack against all member nations. However, at American insistence, it was decided that each member nation would be able to decide the level of support it would offer rather than being locked into any single course of action. Admittedly, NATO also helped further fuel the Cold War between the Western Powers and the Soviet Bloc. In response to NATO, the Soviet Union in 1955 formed the Warsaw Pact, a mutual defensive alliance system of the Soviet Union and its seven Eastern European satellite nations.

The 1950s saw alliances take on a central role in American Cold War policy during the administration of President Dwight Eisenhower. One of the principal focuses for Eisenhower was controlling the blossoming American military budget. Along with his secretary of state, John Foster Dulles, Eisenhower introduced what was known as the New Look defense policy. The New Look placed increased emphasis on America's atomic arsenal to offset Soviet conventional strength. An equally important aspect of the New Look was an increased focus on the creation of alliance systems to hem in the growth of Soviet power. This focus led to the Eisenhower era being known as a period of "pactomania," with the United States concluding 42 separate alliances during Eisenhower's 8 years in office. Some of the alliances struck in this period continue to form important relationships for the United States today, such as the 1951 ANZUS alliance with Australia.

Not every alliance created by the United States and the Western Powers during the Cold War proved to be as effective as NATO or ANZUS. A prime example of an ineffective alliance was the Southeast Asia Treaty Organization (SEATO), created in 1954. This was intended as a collective defensive alliance system between Western Powers such as the United States and Great Britain and regional nations such as Thailand, the Philippines, and Australia. SEATO was created to become a Pacific version of NATO in that it was primarily intended to contain the spread of communism in Southeast Asia, in particular to isolate Communist China. However, this was the end of the comparison between the two alliance systems. SEATO did not provide for a clear, coordinated response from member nations in the event of an attack on a member nation in the same way

that NATO did. A joint, unified command structure, like NATO's, was never created, and most member nations contributed little in the way of military support to the alliance. This led to SEATO being ineffective almost from the moment of its inception. SEATO's first major litmus test occurred during the 1960–1961 Laotian civil war. Internal disagreements over the appropriate level of response from SEATO members led to the alliance doing nothing. This demonstrated the impotence of the system in meeting its stated goals of providing security from communist aggression in the region. SEATO's major contribution was that it provided one of the rationales for increased American unilateral military involvement in Southeast Asia after 1960, particularly in Vietnam.

Alliances in the Post–Cold War Era

Through the end of the 20th century, the alliance systems created by the United States and the former Soviet Union remained in place and acted as one of the primary ways by which nations identified themselves. One prominent example that ran counter to this was the temporary alliance arranged by President George H. W. Bush and Secretary of State James Baker to challenge the Iraqi invasion of Kuwait in 1991. American leaders made it clear that they would act only in concert with a broad array of both traditional and regional partners. This led America into cooperation with nations previously at odds with American policy in the Middle East, such as Syria, as well as restraining its traditional ally Israel from acting to upset the delicate nature of this temporary alliance system.

However, the rapid collapse of the Soviet Bloc in the early 1990s was the central issue to many among the Western Powers and raised the question of whether or not the alliance systems of the Cold War era remained a necessity. Events in the 1990s, though, supplied a new rationale for the continued existence of the most important Cold War alliance system, NATO. In 1999, NATO undertook a sustained bombing campaign to halt the ethnic conflict in Kosovo. NATO's stated goal was to force Serbian forces, seeking to forcefully retain Kosovo, out in order to allow UN peacekeeping forces to move into the region. The bombing campaign, coupled with the unwillingness of Russia to come to the aid of

Serbia, led to the acceptance of a cease-fire in June 1999 and the establishment of a UN peacekeeping force, mingled with NATO forces, in Kosovo.

NATO also maintained its importance for American diplomatic and military policy in the aftermath of the terrorist attacks against the United States on September 11, 2001. In the aftermath of the attacks, NATO invoked Article 5 of the alliance, which stated that any attack against one member represented an attack against all members and that the United States could rely on the support of NATO nations after it was shown that the attack had originated from abroad. In October 2001, the North Atlantic Council, the main decision-making body of NATO, determined that the attacks by al Qaeda satisfied this requirement since the terrorist organization was being sheltered by the Taliban regime in Afghanistan. This decision provided the rationale for NATO support for the U.S. invasion of Afghanistan, although the alliance did not take a lead role in the military operations as it had in Kosovo.

NATO demonstrates the continued importance of alliances to nation-states in today's world. It continues to be a cornerstone of American diplomatic and military planning in world affairs and remains the most successful of the alliances struck in the 20th century.

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See also ANZUS Security Treaty; Coalition, Warfare; Kosovo Intervention; North Atlantic Treaty Organization

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ALL-VOLUNTEER FORCE

Concurrent with the ending of conscription in 1973 by the United States was the development of the all-volunteer force (AVF), which depends on individual voluntary enlistment to fill the ranks of the military. While the United States relied wholly or partially on conscription to fill the military during the World Wars and from 1948 until 1972, the United States traditionally relied on voluntary enlistment. Opposition to the war in Vietnam and to the inequities in the conscription system ended the national consensus on conscription and brought a return to a completely volunteer military. This entry discusses the evolution of the U.S. AVF from 1969 to the present.

Background

In March 1969, President Richard M. Nixon created the Commission on an All-Volunteer Armed Force, with the former secretary of defense Thomas Gates as chair, to study the plausibility of ending conscription and, instead, relying solely on volunteers. While some board members had reservations about the possibility of relying on volunteers during wartime, the committee believed that maintaining a peacetime military with volunteers was possible and even desirable. The committee reasoned that the large population of the United States made universal military service unnecessary and impractical and, as a result, conscription placed a large burden on a relatively small percentage of the population. Additionally, the mounting discipline problems among draftees, especially in the U.S. Army, led some army leaders to seek a different means of acquiring soldiers. The committee reported that the military could be sufficiently manned only if volunteer recruits were enticed with higher pay and other reforms.

In 1971, President Nixon signed legislation establishing the AVF. That September, Congress extended the government's authority to draft into 1973 but at the same time began to substantially increase military pay. The increases were especially felt in the lower enlisted grades, the grades held by most conscripts and first-term enlistees. All branches were apprehensive about ending conscription. Very few senior military officers in the early 1970s had ever served in the military without a draft. Although most draftees served

in the army, the draft spurred voluntary enlistments into the air force and navy. Additionally, the reserves of each branch, including the National Guard, were fully manned through the negative incentive provided by the draft, since service in the Guard or Reserves made a man ineligible for conscription.

Despite the preparations laid for the AVF, recruitment proved difficult throughout the remainder of the 1970s. The branches, especially the army, contracted with professional advertising firms to sell the military as a career option. The military began offering incentives to entice young men, such as the new Montgomery G.I. Bill, and programs, such as the Army College Fund, in an attempt to lure single-term soldiers. The services also began to target minorities and women for recruitment, groups not previously courted for military service.

Following the 1979 collapse of détente (the period during the Cold War when there was a “thaw” in the strained Soviet-U.S. relations), President Jimmy Carter received from Congress a reinstatement of registration with Selective Service by men between 18 and 25 years of age, although no resumption of conscription took place. Congress has since periodically debated abolishing registration and cutting all funds for Selective Service or, alternatively, reinstating conscription.

During the administration of Ronald Reagan (1981–1989), the military more fully adapted to the AVF. Much of the Reagan defense buildup went for quality-of-life issues, such as improved pay and better base facilities, and in general for making military service an attractive career for enlisted people, rather than just something to be endured for a few years. Many of the barracks built between 1940 and 1943, with a projected usable life span of about 6 years, were finally torn down and replaced with more modern housing, which resembled college dormitories more than traditional barracks. Such changes would continue into the 21st century, with the implementation of programs such as the army's Better Opportunities for Single Soldiers, which aimed at ending the large gulf in off-duty life experience by married soldiers and single soldiers who lived on post.

Total Force Policy

Foreseeing a drop in active-duty soldiers after the switch to the AVF, the army began a major reorganization, dubbed the Total Force Policy, that would

force mobilization of some of the reserve components in the event of a large war. Divisions included one brigade from the Army National Guard, which allowed the army to maintain 16 divisions after the end of the draft. Some support functions were placed mainly or wholly in the Army Reserve, freeing up more positions in the Regular Army for combat arms.

One of the more controversial trends since the end of the draft has been the increased dependence on private contractors to provide many functions once performed by soldiers. This dependence has been especially pronounced since the end of the Cold War in 1990. Functions from providing meals to teaching Reserve Officers' Training Corps to providing security at bases have increasingly been contracted to civilian firms. While contractors lessen the need for soldiers for mundane tasks, they have only the right to self-defense, and if they participate in actual combat, they lose any legal protection given to military personnel in a combat zone under the Geneva Conventions.

Most analyses of the AVF agree that it has been a success, especially after its first decade. Despite a wide public perception that the quality of recruits dropped under the AVF, the average soldiers in the AVF are better educated, are more physically fit, and have fewer legal problems than their civilian counterparts. The percentage of enlisted soldiers with high school diplomas rose from 45% in 1973 to more than 90%. Only about 10% of enlistees come from the lowest income bracket, while 50% of enlistees come from middle-income families. The framers of the AVF envisioned a mixture of single-term and career soldiers; the trend has been toward more career soldiers. Despite initial misgivings about depending on the AVF during war, the war that began in 2001 has been fought using the AVF. Recruiting became more difficult in the first years of the war, but increased benefits and a declining economy assisted in allowing recruiters to meet quotas. At the same time, retention rates remained high, allowing the military to man its units.

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See also Recruitment, Enlisted; Recruitment, Officer

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AMBUSH

An ambush is a deliberate attack designed to utilize the element of surprise in delivering concerted and coordinated fire from concealed positions on an enemy in a position that affords him little opportunity to protect himself or return effective fire. Depending on the terrain and time afforded to the attacker, an ambush can be organized hastily or as a deliberate and well-organized attack. Positions with various responsibilities are assigned when setting an ambush, and a design is made as to how the ambush will be initiated so as to ensure the element of surprise. An ambush is initiated when the enemy crosses into the kill box of the ambush, the area that allows the ambush to deliver the most effective fire on the enemy.

An ambush is ideally set on terrain that either forces the enemy across open or restricting terrain or affords the attacking force advantageous terrain. When properly set and executed, an ambush can be the most effective tactic utilized by an attacking force seeking primarily to destroy an enemy force. It inflicts the most casualties on the enemy while ensuring that only minimal casualties are sustained by the attacker. While missions, time, and terrain do not always allow for an ambush to be set, any opportunity to do so will dramatically increase the attacker's probability of success. This entry describes the types of ambush, elements of an ambush, and ambush formations.

Types of Ambush

Ambushes are broadly categorized as either near or far ambushes. A near ambush is generally classified as one that places the opposing forces within hand grenade range from one another. The advantage of a near ambush is that it allows for effective small arms fire to be concentrated on the enemy. The disadvantage is that it places the ambushing force in a position that allows

the enemy to react more easily and inflict casualties on the attacker. A far ambush takes place out of hand grenade range with the enemy. It permits the use of indirect fire assets (mortars and artillery) on the enemy from a greater distance so as not to allow the enemy to effectively react to the ambushing force. Near and far ambushes can be combined to deliver both direct and indirect fire onto the enemy.

Elements of an Ambush

Any type or formation of ambush generally includes three elements to carry out various tasks during the setting and executing of the ambush: (1) the assault, (2) support, and (3) security. The assault element initiates the ambush by fire, assault, or a combination of the two. The support element is responsible for fixing—maintaining—the enemy in the kill zone. It is important to fix the enemy in the kill zone so as to allow the ambush to effectively engage and destroy its targets. The support element can also be responsible for calling indirect fire assets onto the enemy in the kill zone. Depending on how the ambush is initiated, the assault and support elements may work in concert with one another. Once the ambush has reached the limits of its effectiveness and destroyed as much of the enemy force as possible, the objective can be secured. Once this is done, the assault and support elements can conduct treatment of casualties and prisoners and can carry out any other actions essential for the objective. The security element protects the area around the ambush and provides a secure area for the other two elements to function within. It can also be responsible for protecting an avenue of withdrawal or an objective rally point. In essence, the security element is the most important as it protects the integrity of the ambush as a whole.

Ambush Formations

When preparing an ambush, the situation dictates how the elements of the ambush will be placed. A deliberate ambush can be placed when a position has been predetermined and enough time is afforded. When the enemy has already been sighted, a hasty ambush must be effected, thus limiting the preparedness and consequent effectiveness of the ambush. A number of ambush formations can be employed.

The linear ambush is formed parallel to the enemy's path of travel. The support and assault

elements are arranged side by side and produce a flanking fire into the kill zone.

The L-shaped ambush is formed along a bend in the enemy's path of travel, ideally a road, path, or stream. The support and assault elements each occupy a leg of the angular position and produce both flanking fire, or fire delivered on an enemy flank from a position to the side of that enemy, and enfilading fire, in which weapons fire can be directed along the longest axis of a formation, into the kill zone.

The V-shaped ambush is formed when the assault and support elements deploy on opposite sides of the enemy's path of travel, forming a V. This ambush is capable of producing both enfilading fire and interlocking fire or crossfire.

Terrain and enemy activity are the primary considerations for leadership when dictating ambush formations.

K. P. Bracken

See also Arms, Small; Small Unit Cohesion; Squad Leadership

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AMERICAN BATTLE MONUMENTS COMMISSION

The American Battle Monuments Commission (ABMC), established by Congress in 1923, is an agency of the executive branch of the federal government. Eleven commissioners appointed by the president form the policy-making body of the organization, whose commemorative mission includes designing, constructing, operating, and maintaining permanent American cemeteries in foreign countries; establishing and maintaining U.S. military memorials, monuments, and markers overseas where American armed forces have served since April 6, 1917, and within the United States when directed by public law; and controlling the design and construction of permanent U.S. military monuments

and markers by other U.S. citizens and organizations, both public and private, and encouraging their maintenance. This entry discusses the history and activities of the ABMC.

World War I

American war losses were substantially less than those suffered by other nations during the First World War, with total overseas casualties for all service branches documented at 116,516, including other-than-battle deaths, such as flu victims. In 1917, policymakers decided that those who died in Europe would be interred there, and no attempt would be made to return their bodies to the United States until after the close of hostilities. Consequently, in the war's aftermath, the U.S. Army's Graves Registration Service was left to identify, exhume, and register burials in more than 2,000 cemeteries across the Western Front, where the dead had been temporarily buried. Many of the war dead lay in isolated graves, and some were never found, while others were completely destroyed during battle, resulting in a search and reburial process that continued for years.

When the armistice was signed in 1918, it brought an end to the horrific 4-year global conflict, and with it came rapid and unexpected change to the United States. This transformation left political officials, the military, and the public unprepared and vaguely reluctant to accept the enlarged role the United States would play in postwar international affairs; it also raised uncertainty as to how best to memorialize the recent war. A result of this collective ambivalence was the reconfiguration of traditional remembrance practices as new rituals were created to more closely respond to a changing society.

Even before the armistice, attempts at collective memorialization began to flourish across the former battlefield as American military units improvised hastily built monuments of field stones and concrete to mark their campaigns. However, they became an inconvenience to French farmers, and without maintenance, most quickly deteriorated. Once peace was formally declared, military officials methodically researched and marked the American Expeditionary Forces' achievements, anticipating future commemorative plans. By 1920, the need for central supervision of overseas memorials was evidenced by the large number of markers that overrepresented some divisions, while other units went unrecognized. Moreover, the army's battlefield researchers claimed

that the historical accuracy of these markers was highly questionable. In the absence of any regulatory body, it was feared that a haphazard arrangement of monuments, similar to those erected on the Civil War landscape at Gettysburg, would be repeated.

Most agreed that something had to be done to memorialize the war and its human cost, and although memorialization was proceeding on local and state levels within the United States, there was no consensus as to what form the overseas remembrance should assume. The war's achievements remained ambiguous to many Americans, and distant battlefields meant restricted access to the traditional sites of mourning and remembrance. Moreover, the War Department's eventual decision to repatriate the identified war dead, at the request of next of kin, had resulted in scattered burials both in the United States and overseas, in private and national grounds, essentially contributing to fading memories of the war.

To remedy the situation, President Warren G. Harding signed the bill into law that created the American Battle Monuments Commission on March 4, 1923. John J. Pershing assumed chairmanship over the new organization, which was appointed to initiate and oversee the construction of a grand scheme of national monuments on the former battlefield. A republican senator, a Gold Star Mother, and three civilians (each representing the national veterans associations) completed the commission's early membership, along with one active-duty military officer who served as secretary.

Throughout the 1920s and into the following decade, the ABMC worked in consultation with the Commission of Fine Arts and several leading architects of the period to construct an American landscape of national cemeteries and monuments in several locations across Europe. The result merged remembrance of the dead with foreign policy objectives that alluded to the ascendancy of America's power and the glory of its victorious armies. In 1934, a presidential executive order transferred the eight World War I cemeteries to the ABMC and made it responsible for the design, construction, operation, and maintenance of future permanent American military burial grounds on foreign soil.

World War II and the Cold War

The victory and peace commemorated after what was termed *the war to end all wars* would prove fleeting, and by 1941, the United States was drawn

into another world war that would result in 405,399 American casualties. As in the previous war, the dead were found buried in hundreds of temporary military cemeteries. Once peace was declared in 1945, permanent sites were selected, and under the authority of the ABMC, a commemorative overseas program was carried out that included the construction of several monuments and permanent American overseas cemeteries with chapels.

For those who remained buried overseas, the United States declared that permanent cemeteries would not be established in either Germany or Japan, because these nations had been former enemies, although Italy was deemed a suitable site because it had joined the Allies during the war. Other sites were considered unacceptable because they were geographically inaccessible or because it was felt that parents and widows would be unwilling to allow their next of kin to remain buried on remote islands or places where hazardous forces of nature made them unsuitable candidates as the final resting places for the fallen American service members. Although the United States fought its next two wars in Asia, not Europe, the government was reluctant to place permanent burial grounds in the Third World, particularly in Asia, mirroring the ambivalence many Americans felt toward these regions.

The ABMC Today

Nearly 60 years would pass before a National World War II Memorial would be officially opened to the public in 2004. Logically, it seems that the memorial should have been built before, not after, the memorial to the veterans of the Vietnam War was opened in 1982 (and maintained by the National Park Service) and prior to the congressional legislation passed in 1986 that authorized the ABMC to establish a Korean War Veterans Memorial. However, on May 25, 1993, President Bill Clinton signed Public Law 103-32 authorizing the ABMC to construct a memorial in the United States to honor the veterans of World War II and commemorate American participation in the war.

On June 6, 2007, 3 years after the World War II Memorial was completed in the United States, a new \$30 million Visitors Center was dedicated by the ABMC at the American cemetery in Normandy, France, during the commemoration of the 63rd Anniversary of D-Day. The decision to build the interpretive site here was largely in response to the

veneration for the Second World War that peaked with the release of Steven Spielberg's hit film *Saving Private Ryan* in 1998 and with Tom Brokaw's bestseller *The Greatest Generation*. It remains the ABMC's most visited cemetery, receiving approximately 1 million visitors each year, and is often used as a backdrop for presidential visits and commemorative speeches.

Decades after its inception, the ABMC still maintains the monuments and cemeteries built to commemorate the First and Second World Wars, but the federal agency's commemorative mission has expanded to encompass 24 overseas military cemeteries that serve as resting places for almost 125,000 American war dead; Tablets of the Missing, which memorialize more than 94,000 U.S. servicemen and -women; and 25 memorials, monuments, and markers.

Each year, the ABMC receives thousands of visitors and public inquiries, many seeking assistance to facilitate visits or to locate individual grave sites. The organization provides a variety of services to meet these requests that include travel advice to the sites, photos of headstones and Tablets of the Missing, arrangements for floral decorations placed at graves, Honor Roll certificates, and the best modes of travel to cemeteries and memorials.

Lisa M. Budreau

See also Cemeteries, Military; War Dead, Disposition of; World War I; World War II

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AMERICAN LEGION

The American Legion is the largest veterans' organization in the United States, with a 2009 membership of about 2.4 million members organized in 14,000 posts in 51 U.S. departments and 4 outside the United States. This entry describes the history of the American Legion and its advocacy efforts on behalf of veterans and their families.

Founded in 1919 by and for the veterans of World War I, the American Legion has gradually extended its eligibility criteria to cover honorably discharged veterans who served in World War II, Korea, and Vietnam and interventions in Grenada, Lebanon, and Panama, and to active-duty personnel or those honorably discharged since the beginning of the Persian Gulf War in 1990. Since its inception, the legion has emphasized veterans' affairs, a strong defense, and the promotion of patriotism as central areas of interest. Its policies are set by the annual national convention, whose delegates are elected by the rank and file. Convention delegates elect the leadership on an annual basis. Between conventions, a national executive committee functions as the governing body, supported by a permanent staff at the group's national headquarters in Indianapolis and a legislative office in Washington, D.C.

The American Legion has been an important contributor to federal policy regarding veterans' affairs. Following World War I, the group was instrumental in the creation of the Veterans' Bureau (later called the Veterans Administration; in 1989, the Veterans Administration was elevated to U.S. Cabinet-level status, and it became the Department of Veterans Affairs [VA]). The American Legion played a key role in the establishment and codification of benefits as well as in the push for a federal bonus to World War I veterans during the interwar period. Its greatest achievement came with the passage of the legion-drafted Servicemen's Readjustment Act of 1944 (the G.I. Bill of Rights). Besides the act's oft-noted social and economic effects on postwar America, it also provided a template for the extension of benefits to subsequent groups of veterans. In addition, the legion has mounted an ongoing defense of veterans' benefits that the group insists are unbreakable obligations not to be confused with ordinary social legislation.

Legionnaires have been consistent advocates of military preparedness, especially the creation of large citizen-soldier reserves. The development of a

system of universal military training remained the legion's top defense priority from its beginning until the campaign fizzled out in the 1950s. The group's innate opposition to communism and conviction that the outbreak of World War II was the result of U.S. isolationism and unpreparedness made it an ardent backer of the anticommunist foreign policy of the Cold War decades. The crumbling of public support for the American commitment to the Vietnam War during this period became a particular source of frustration and concern within the legion.

Apart from veterans' affairs and national security concerns, the legion has pursued a range of patriotic and community endeavors, from the American Legion Baseball League to high school oratorical contests to disaster relief. Its patriotic commitment to "Americanism" occasionally led to clashes with groups that the Legionnaires considered unpatriotic or harmful to the American society, such as pacifists or those believed to be sympathetic to America's enemies.

Changes in the criteria for eligibility have enabled the legion to transcend generational change. The great influx of World War II veterans more than doubled membership, which reached its historic high point in 1946. Contrary to initial expectations that Vietnam veterans would shun established veterans' organizations, they have come to represent the largest single group within the American Legion and dominate leadership positions. Their participation has offset some of the losses of World War II veterans and kept membership totals relatively stable into the first decade of the 21st century.

In the post-Cold War period, the legion vigorously opposed the reduction in force during the 1990s as detrimental to national security as well as a cause of hardship for those involuntarily separated from service. It has continuously pushed for a full accounting of American prisoners of war and soldiers missing in action of past wars, especially the Vietnam War, and has promoted awareness of this issue whenever possible. In line with its traditional patriotic emphasis, the legion has taken a special interest in the prohibition of flag desecration and campaigned vigorously for a constitutional amendment to that effect throughout the 1990s and into the first decade of the 21st century. Echoes of the frustration with critics of the Vietnam War can be found in the legion's insistence on home front unity as key to success in the wars in Afghanistan and Iraq.

Its primary focus remains veterans' affairs. The group has been adamant about the need to make

VA spending conform to the needs of veterans rather than budgetary considerations. The legion has pursued the enactment of a set of reforms known as the “G.I. Bill of Health” to increase access to VA health care for veterans and their dependents as well as to ensure the future viability of the system. It has also carried on a lengthy campaign for recognition of the effects of exposure to the herbicide Agent Orange on Vietnam veterans and fought to gain recognition of service-connected disabilities among veterans of the Persian Gulf War.

The improvement of access to education in part by closing the gap between G.I. Bill benefits and ever-increasing costs of higher education has been another major concern. A legion-assisted “Desert Storm G.I. Bill” first introduced in 1992 failed to pass, but in 2008, the successful Post-9/11 Veterans Education Assistance Act greatly increased stipend amounts and addressed other inequities in the system. Pension issues, in the form of so-called concurrent receipt legislation, became a priority issue for the legion in the early 2000s. The effort aimed to eliminate the prohibition on simultaneously receiving VA disability benefits and military pensions and thus removing what the American Legion considers an unfair penalty levied on military retirees. At the grassroots level, it initiated new community programs to support returning veterans of wars in Afghanistan and Iraq as well as the families of deployed personnel.

Morten Bach

See also Benefits, Veteran; Medical Disability, Veteran; Veterans Affairs, Department of; Veterans of Foreign Wars

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recognition of the independent United States. The conflict originated in a decade-long dispute over the extent of the British Parliament’s authority over the colonies. The political debate eventually escalated to armed hostilities, as the British government used force in an effort to impose obedience on the colonists, while the colonists first fought to retain control over their domestic affairs and later for independence. Despite suffering numerous military defeats, the Americans won several key victories and gained crucial assistance from France in 1778. A year later, Spain entered the war as an ally of France, and the Netherlands joined the fight against Britain in 1780. These interventions transformed a struggle between Great Britain and its colonies into a global war that shattered the British Empire, created a new republic in the former American colonies, and inspired later revolutions in France and Latin America. This entry examines the causes of the revolution, traces the course of the war, assesses the factors that led to American victory, and discusses the implications of the revolution.

Causes of the Revolution

Throughout most of the colonial period, British officials paid little attention to domestic affairs in their North American colonies, a policy called “salutary neglect” that virtually left the colonists to govern themselves. In these circumstances, colonial legislatures assumed increasing local authority. By the mid-18th century, the colonial assemblies considered their authority in domestic affairs equal to that of the British Parliament.

After the French and Indian (Seven Years’) War ended in 1763, however, the need to reduce the British government’s debt led officials in London to assert more control over the colonies. Wartime expenses had doubled Britain’s national debt. Unable to raise taxes further in Britain, where the average subject paid 25 shillings annually, King George III’s ministers sought additional revenue from the colonists, who as the least taxed members of the British Empire paid an average of only 6 pence per year in imperial taxes.

In 1765, Parliament passed the Stamp Act, which taxed newspapers, legal documents, and other paper goods in the colonies. The act marked the first ever effort by Parliament to impose a direct tax on the colonists and sparked a storm of protest. The colonists argued that only their own legislatures could

AMERICAN REVOLUTION

The American Revolution, a war waged between Great Britain and 13 of its North American colonies, began in 1775 and ended in 1783 with the British

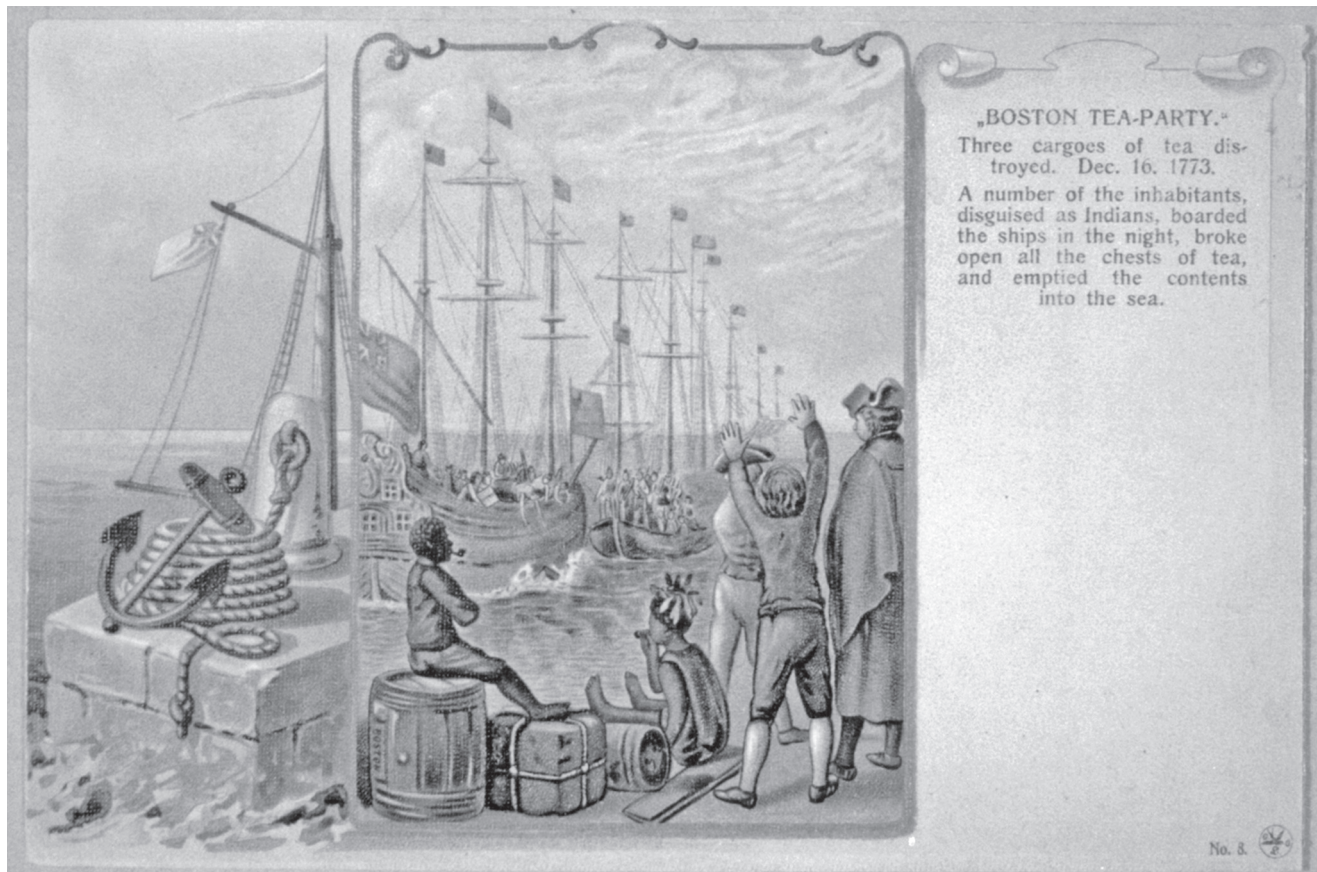
impose such internal taxes and that the Stamp Act was therefore unconstitutional.

Opposition to “taxation without representation” was fueled by the colonists’ political ideology, which was heavily influenced by the writings of a marginal group in Britain known as “Radical Whigs” or “Commonwealth Men.” The Radical Whigs believed that the king’s ministers would use a corrupted Parliament to provoke wars, thereby increasing debt to justify increased taxation and the creation of a standing army. Once subjects accepted the loss of their property through taxation, the ministers would make further impositions on the people’s liberty, using the army to crush opposition, until the people were reduced to slavery. The pattern of events leading to the Stamp Act—the French and Indian War, heavy debt, and direct taxation of the colonists to support a military garrison in North America—lent credence to the Radical Whigs’ theory. British arguments that Parliament represented the entire empire, and that therefore the colonists

were “virtually” represented in the British legislature, failed to sway the colonists.

Colonial resistance to the Stamp Act took many forms, including petitions demanding the act’s repeal, a boycott of British goods, and, occasionally, violent protests. In 1766, Parliament repealed the act. Another British attempt to raise revenue in the colonies, the Townshend Acts of 1767, which imposed customs duties on paper, tea, and other items, met with similar opposition. It proved impossible to collect the Townshend duties, and Parliament repealed all of them in 1770, except the tax on tea.

Parliament’s passage of the Tea Act in 1773 sparked yet another crisis in British-colonial relations. The act was not directed specifically at the colonists but, instead, was intended to prevent the financial collapse of the East India Company, an event that British officials feared might create an economic crisis in Britain. The Tea Act reduced the tax on tea to help the company increase its sales. However, the colonists, influenced by Radical Whig



Boston Tea Party.

Source: Library of Congress Prints and Photographs Division, Washington, D.C.

ideology, believed that the tax reduction was a ploy to deceive them into paying the tax and thus sacrificing the principle of opposing taxation without representation. On the night of December 16, 1773, a crowd in Boston boarded three ships and dumped their cargoes of tea into the harbor.

British officials responded to the “Tea Party” with punitive action. Parliament passed the Coercive Acts, which closed the port of Boston and replaced the civilian governor of Massachusetts with General Thomas Gage, commander in chief of the British Army in North America. By targeting Massachusetts, British leaders expected that the Coercive Acts would intimidate other colonies into submitting to British authority. Instead, the other colonies feared that they would suffer a similar fate, causing 12 colonies (all except Georgia) to send representatives to the First Continental Congress in Philadelphia to formulate a united policy against the British. The Congress convened on September 5, 1774, petitioned the king and Parliament for a repeal of the Coercive Acts, and agreed to boycott imports from Britain.

The Outbreak of War

With tensions high, Gage hoped to forestall armed conflict by seizing the colonists’ stockpiles of munitions. On April 19, 1775, 700 British troops sent to seize a magazine (a storehouse for weapons and ammunition) at Concord clashed repeatedly with Massachusetts militia. As news of the raid spread, several thousand militiamen from across New England gathered and within days besieged Gage’s army in Boston. The Second Continental Congress, having convened in May, assumed control of the troops and on June 15 appointed George Washington commander in chief of the new Continental Army. Washington was made subordinate to the Congress, thus establishing the American tradition of civilian control over the military.

Meanwhile, colonists engaged in another battle against the British forces after the militiamen occupied a position in Charlestown that threatened the British hold on Boston. In the June 17 Battle of Bunker Hill, the British dislodged the colonists in a series of frontal attacks that cost British forces 1,100 casualties.

While Washington organized the troops at Boston, Congress dispatched another army to invade Canada in the hope that the French population

would join the rebellion. On December 31, the British general Guy Carleton repulsed a colonial assault on Quebec.

The War in the North

On March 17, 1776, the British evacuated Boston after Washington occupied Dorchester Heights overlooking the city. The new British commander, General William Howe, sailed to Halifax, Nova Scotia, where reinforcements brought his strength to more than 30,000 troops, many of whom were German soldiers hired by the British government and called “Hessians” by the colonists. Howe then moved to attack New York. The city would provide a naval base and give the British control of the southern end of the strategic Hudson River–Lake Champlain corridor to Canada. Before the fighting resumed, the Continental Congress, having decided that reconciliation with Britain could not be achieved on terms acceptable to the colonists, declared independence on July 4. The delegates also believed that as an independent nation, the United States stood a better chance of gaining foreign assistance in their struggle against Britain.

Washington anticipated Howe’s objective but was forced to divide his army of 25,000 men between Long Island and Manhattan so that Howe could not land at either place unopposed. Howe landed on Long Island and, on August 27, attacked the American forward position at Brooklyn. The Americans were routed, but Howe chose not to attack the second American line. On the night of August 29, Washington evacuated Long Island. After an unsuccessful attempt to open negotiations with the Americans, Howe moved again in September, forcing Washington to abandon Manhattan. Following clashes at Harlem and White Plains, Washington retreated across the Hudson.

With his force reduced to 6,000 men by casualties, desertion, and lack of support from the dispirited militia, Washington retreated across New Jersey and crossed the Delaware River to safety in Pennsylvania. Howe then halted his campaign and dispersed his troops in garrisons around New York City and across New Jersey.

Realizing that the string of military defeats and the loss of New York City and New Jersey had devastated American morale, Washington decided that action had to be taken to restore the desperate situation. He crossed the Delaware during the night

of December 25 and attacked the Hessian garrison at Trenton the next day, killing or capturing more than 1,000 Hessians. Washington then eluded a British force dispatched from New York and struck the British post at Princeton on January 3, 1777. These successes caused Howe to abandon most of New Jersey and revived American morale.

In planning the British campaign for 1777, Howe proposed that his army march from New York to Philadelphia in the spring. This move would force Washington to commit the Continental Army to the defense of the rebel capital, theoretically allowing Howe to eliminate both symbols of American resistance. General John Burgoyne suggested invading New York from Canada via the Hudson-Champlain corridor to seize Albany and isolate New England from the other colonies. British officials approved both plans. Contrary to many accounts, there was never a plan for Howe to advance up the Hudson in support of Burgoyne; however, Burgoyne's campaign was predicated on Howe moving quickly against Philadelphia, thus preventing Washington from reinforcing the American army in New York.

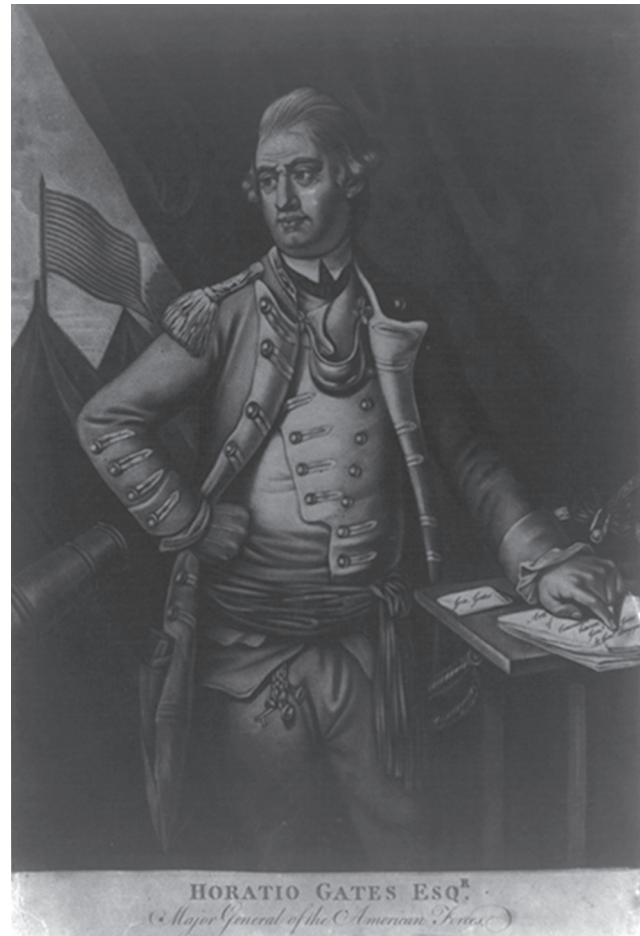
Instead of marching directly to Philadelphia, Howe squandered weeks trying to lure Washington into a decisive battle in New Jersey. Washington avoided combat, and Howe moved to Philadelphia by sea. On September 11, Howe defeated the American army posted behind Brandywine Creek and, after further maneuvering, occupied Philadelphia without opposition.

Howe dispersed his 15,000 troops, leaving about 8,000 at Germantown north of Philadelphia. Washington attacked Germantown on October 4 with his entire force of 11,000. The initial assault broke the British line, but Howe's troops regrouped and forced Washington to withdraw. Nevertheless, Howe's successes did not end American resistance.

Meanwhile, Burgoyne's 7,000 troops captured Fort Ticonderoga and then plodded southward, slowed by their own baggage train and American obstructions. When Burgoyne approached Saratoga, he found his way blocked by 7,000 Americans under General Horatio Gates, who was continually receiving reinforcements. Burgoyne twice tried to move past the American left flank but was defeated on September 19 and again on October 7. British general Sir Henry Clinton advanced northward from New York in a futile effort to aid Burgoyne, who surrendered his army on October 17. Gates's victory

proved one of the most decisive of the war, as it eliminated an entire British army, offset the morale effects of the American failures in Pennsylvania, and, most important, convinced the French government to enter the war on the American side.

French intervention changed the character of the war from a colonial struggle for independence to a global conflict between European powers. Howe, criticized for his dilatory movements, resigned and was succeeded by Clinton. Unable to hold New York and Philadelphia and still comply with orders to dispatch 12,000 troops to Canada and the West Indies, Clinton evacuated Philadelphia. Washington, his army having recovered from the harsh winter at Valley Forge, attacked the British



Horatio Gates, Esquire, major general of the American forces.

Source: Library of Congress Prints and Photographs Division Washington, D.C. (Published as the act directs by John Morris, January 2, 1778, in London, England).

rear guard at Monmouth, New Jersey, on June 28; the battle ended in a draw.

Most of the fighting in the north then shifted to the frontier. Loyalist and Native raiding parties struck devastating blows against settlements in New York and Pennsylvania in 1778. The Americans countered with a foray into present-day Indiana by Colonel George Rogers Clark in 1778–1779 and a larger expedition against the Iroquois in 1779 under Major General John Sullivan.

The War in the South

Although French intervention restricted the forces the British had available to employ against the Americans, officials in London refused to remain on the defensive in North America. Instead, they shifted their attention on the South, where they believed smaller British forces could take the offensive with support from the numerous Loyalists and Native Americans in the region. British leaders also expected the large numbers of slaves in the South to divert the attention of the American militia, who would be more focused on preventing slave insurrections than on opposing the British army.

Clinton began redirecting the British military effort from the North to the South in November 1778, when he dispatched 3,000 troops from New York to Georgia. On December 29, the British defeated American forces outside Savannah and occupied the city. In September 1779, the American Southern army under General Benjamin Lincoln joined a French fleet and army in an effort to retake Savannah, but a Franco-American assault on October 9 was repulsed with heavy losses.

The successful defense of Savannah convinced Clinton to expand Southern operations by attacking Charleston, South Carolina. The city and its 6,000 defenders surrendered to the British on May 12 in the worst American defeat of the war. British forces then occupied the interior of Georgia and South Carolina.

Congress ordered Horatio Gates to take command of Continental troops in the South. Gates received reinforcements from militias from North Carolina and Virginia and moved against Camden, the key British base in the South Carolina interior. Gates planned to occupy a strong position north of Camden while American partisans severed the supply line to Charleston, thus forcing the British

to evacuate Camden and securing North Carolina from invasion. Lieutenant General Charles, Earl Cornwallis, left in command in the South when Clinton returned to New York, marched to strike Gates. In the August 16 Battle of Camden, Cornwallis decisively defeated the Americans, resulting in Gates's dismissal from command.

Cornwallis then invaded North Carolina, but American militia destroyed a force of Loyalist militia covering his left flank at King's Mountain on October 7. The blow forced Cornwallis to withdraw into South Carolina and virtually ended British efforts to employ Southern Loyalists in support of regular troops.

Gates's successor, General Nathanael Greene, assumed command of the Southern army in December. Greene sent a detachment under General Daniel Morgan into northwestern South Carolina to check Loyalist forces there. As Greene hoped, Cornwallis also divided his army, sending 1,100 men under Lieutenant Colonel Banastre Tarleton to strike Morgan. Tarleton attacked Morgan at the town of Cowpens on January 17, 1781, and was routed. Morgan then withdrew to avoid a confrontation with Cornwallis's main force. Cornwallis set off in pursuit, but Morgan joined Greene and the Americans retreated into Virginia, barely escaping Cornwallis.

After receiving reinforcements, Greene returned to North Carolina. Cornwallis attacked the Americans at Guilford Courthouse on March 15 and drove Greene from the field, but the British suffered heavy losses and withdrew to Wilmington. Greene then made one of the most important decisions of the war. Rather than follow Cornwallis, he marched into South Carolina, where the 5,000 British troops were widely dispersed.

In April, Greene began a 4-month campaign in which his Continental troops, supported by South Carolina partisans under Francis Marion, Thomas Sumter, and Andrew Pickens, wrested control of most of Georgia and South Carolina from the British. Although Greene's Continentals suffered defeats at the Battle of Hobkirk's Hill on April 25 and at the siege of Ninety Six in June, Greene kept the British forces occupied, while the partisans captured isolated British posts, cutting the line of communication between Charleston and the interior. The British fell back to the environs of Charleston and Savannah, and a final effort to hold a line along the

Santee River in South Carolina ended after Greene inflicted heavy casualties on the British army at the Battle of Eutaw Springs on September 8.

Cornwallis, meanwhile, decided that the best way to secure Britain's hold on Georgia and the Carolinas was to march to Virginia and force that state to submit to British rule. In Virginia, Cornwallis united his army with a 5,000-man British expedition operating along Chesapeake Bay. After a series of devastating raids failed to force Virginia's submission, Cornwallis moved his army to Yorktown. Washington saw an opportunity to win a decisive victory by trapping Cornwallis and marched French and American troops to Virginia. A French fleet defeated the Royal Navy in September, closing the sea route to Yorktown, while 18,000 French and American troops surrounded Cornwallis's 8,000 men. Cornwallis surrendered on October 18. His defeat marked the end of major fighting, as Parliament resolved to halt offensive operations against the Americans. On September 3, 1783, British and American representatives signed the Treaty of Paris, ending the war and recognizing the independent United States.

Costs and Controversies

The war involved a major portion of the American population as well as significant manpower from France, Britain, and the German states whose troops the British hired. About 230,000 North American colonists served in the Continental Army, and an even greater number in the militia. Peak French strength in America was approximately 8,000, not including soldiers serving in the West Indies. British troop strength in North America reached its maximum of 56,000 in 1781, although a large percentage of these men were engaged in operations against the French and Spanish rather than the Americans. British forces were augmented by some 30,000 hired German soldiers, by thousands of American Loyalists, and sometimes by fugitive slaves, a few of whom bore arms. The British made several efforts to entice slaves to assist them with promises of freedom, hoping to simultaneously deprive the colonists of a portion of their labor force while freeing British soldiers for combat as African Americans assumed the duties of teamsters, engineers, and laborers. Native Americans also contributed several thousand men to the fight, with most serving with the British.

Casualty figures are unreliable. An estimate of 5,200 British and 7,000 American regulars killed in battle is widely accepted, although these numbers certainly understate actual losses. In the aftermath of battle, officers on both sides often found it difficult to determine whether men listed as missing had been killed, captured, or deserted. Recordkeeping was especially poor in the militia, where men frequently came and went at will. Reports of Native losses are sketchy. Both sides tended to underreport their own losses while exaggerating enemy casualties, so that the actual human cost of the war remains uncertain.

Historians generally agree that the American military leadership was a decisive factor in winning independence. Washington recognized the importance of preserving his army as a symbol of resistance and generally avoided battle except on favorable terms. Although he lost most of the battles he fought, Washington displayed an unerring sense of timing that enabled him to win crucial victories when they were most needed, as at Trenton and Yorktown. Greene's strategy in the South, and in particular his ability to coordinate Continental operations with partisan forces, has only recently been recognized as having contributed greatly to American success.

Historians have only recently begun to address the roles that Native Americans and African Americans played in the conflict. When the Natives were discussed, it was usually in terms of whether or not the colonists and British should have employed Native allies; historians now agree that Natives were independent actors with a stake in the outcome of the conflict. As a result of policies instituted by the British government beginning in 1763 that sought to preserve Natives' land and prevent trade abuses, most Natives chose to support the British.

Early histories of the revolution either omitted slaves' roles or stressed their loyalty to American masters. Recent work has demonstrated that thousands of slaves saw the war as an opportunity to escape bondage. In the North, most slaves believed that freedom could most likely be obtained through military service in the Continental Army. In the South, where most states refused to permit slaves to perform military service, the majority of African Americans sought freedom by supporting the British.

Another debate concerns the strength of Loyalism. Many historians have asserted that Loyalists were few and consisted mainly of royal officials and

the wealthy elite. More recent studies suggest that Loyalists represented a fairly typical cross-section of American society, although consensus on their numbers and contributions to the British remains elusive. Furthermore, many individuals and some groups, such as the Quakers, opted for neutrality. The American rebels labeled such neutrals Loyalists, making it difficult to draw distinctions between neutral colonists and the many passive Loyalists who refused to declare themselves when British forces were not present to protect them.

Another issue still unresolved concerns the composition of the Continental Army. Much scholarship suggests that most Continental soldiers came from impoverished classes. Recent research has challenged this view, at least in New England, where both Continental and militia soldiers appear to have reflected the larger society. In Virginia, however, studies show that a disproportionate number of that state's soldiers came from the lower classes.

America's experience in Vietnam in the 1960s inspired historians to examine other dimensions of the revolution, including the American militia's effectiveness. While many historians had dismissed the militia as ineffective because militiamen often performed poorly in open battle against British regulars, John Shy argued that the militia made crucial contributions to American success by suppressing Loyalist insurgents and defending the frontier from Native American attack, thus freeing the Continental Army to focus on its British adversary. Russell F. Weigley, focusing on the militia's employment as a partisan force, demonstrated its effectiveness in harassing British detachments and supply lines.

Historians continue to debate the extent to which the revolution altered the social structure of the colonies after independence. Some consider the revolution a conflict that simply replaced rule by the British and colonial Loyalist elites with rule by a rising American upper class that required independence to achieve political and social dominance. Others, such as Gordon S. Wood, assert that the revolutionary movement, with its rhetoric of equality and its mobilization of the populace across class, racial, and gender boundaries, transformed a hierarchical, patriarchal society into a more egalitarian society that continued to move toward equality and democracy in succeeding years.

Lessons Learned

When the revolution came to a close, the Americans were left with an abundance of valuable experience. They had overcome some of their fear of a professional army, and they recognized that such a force would be essential in any future conflict. The existence of a regular army was, in fact, more important than the possession of territorial objectives, as Washington's strategy of sacrificing cities rather than risking the loss of his army had demonstrated. A regular army, provided it remained under civilian control, had proven to be a reliable defender of liberty rather than a threat to it. Militia, while adequate protection in time of peace, was no longer considered sufficient to defend the country in wartime. Militia could, however, still be a valuable adjunct to regular troops, when used effectively by commanders such as Greene and Morgan. With the acceptance of the need for a professional army in times of war came the recognition that the system used during the revolution to manage and supply the army was inadequate. Congress had lacked the power to recruit, equip, and feed the Continental troops, frequently placing the success of the revolution in jeopardy. The need to defend the United States effectively was a major factor in convincing Americans to adopt a new system of government, the Constitution, that gave the president and Congress the powers of taxation and authority over the military necessary to provide security if the Americans' hard-won liberty were to be threatened in the future.

Jim Piecuch

See also African Americans; Army, U.S.; Civil-Military Relations; Colonial Wars (1607–1774); Congressional Relations, Military; France; Guerrilla Warfare; Huntington, Samuel; Native Americans; United Kingdom

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AMMUNITION

The term *ammunition* derives from the French term *la munition*, and was initially applied to all war materials. Eventually, the meaning narrowed to designate gunpowder and artillery shells only. At the current time, it connotes all objects utilized by one belligerent to apply destructive force to an opponent. It is often used synonymously with *ordnance*.

The term *ammunition* covers a wide range of materials designed for various uses, from bombs delivered by aircraft to rifle bullets. The various

types can be differentiated both by their delivery systems and by the use for which they were developed. Generally, the various types fall into several categories. These include antipersonnel, armor-piercing, and incendiary ammunitions.

This entry presents a brief overview of the development of main types of modern ammunition and their employment. It focuses on the different types of ammunition utilized by infantry, artillery, and aircraft. The likely trends of continuing evolution that follow in the development of various forms of ordnance, such as “smart” ammunition, will receive attention as well.

Development

The development of various types of ammunition corresponds with the types of conflicts at any given time in history. During the Second World War, for example, when nations committed their entire industrial base to the support of the war effort, munitions were developed that could wield the most destructive force against the enemy's industrial and human resources. As current wars follow a trend toward more low-intensity fighting, with civilian populations often utilized as cover by one belligerent or another, the creation of munitions that can be lethal in their impact yet discretionary in their targeting has received greater emphasis.

Small Arms Ammunition

The standard ammunition of the infantry soldier today, as from the beginning of the use of gunpowder weapons, is the bullet. This is generally conical in shape and varies in caliber and design based on the function it is designed to perform. It was developed in the 19th century and received its first major employment in the American Civil War. The First World War witnessed the first large-scale utilization of the cartridge, which is the system that includes the bullet, propellant, and metal shell casing. A rough survey of modern bullets includes the following varieties: armor piercing, blanks, blended metal, exploding, frangible, incendiary, lead, less lethal or less than lethal, jacketed lead, nontoxic, practice, solid, and tracer. Each of these was developed to perform a specific task in combat or in training. In recent years, greater use has been made of two new types of ammunition: nonlethal projectiles and what are often referred to as smart bullets. Nonlethal

projectiles include ammunition such as rubber bullets and, more recently, pepper bullets. Both of these forms of projectile are designed to stop targets but not with lethal force. The latter not only causes pain on impact but contains a heavy dose of pepper irritant as well. The term *smart bullet* encompasses a range of projectiles designed to alter their course in flight in order to intercept a target, or to explode at a certain designated point. For example, U.S. forces recently utilized a form of smart bullet in Afghanistan, a projectile designed to detonate at a precise distance from a designated target. While this attribute has existed for some time in artillery, it is a radical new development in small arms.

Artillery/Tank Ammunition

Artillery can trace its ancestry in the West back to the Middle Ages, when the first large cannons were developed for siege warfare in Europe. Insofar as modern artillery ammunition is concerned, there are three basic types: antipersonnel, armor piercing, and highly explosive. Incendiary rounds are often grouped with the third type. These are differentiated by the type of damage they are designed to inflict on an opponent. Likewise, artillery projectiles are differentiated by the manner in which they are assembled. There are four types: (1) fixed shells, in which the projectile comes as a complete round; (2) semifixed, in which the cartridge and propellant are separate but in the same container; (3) separate, which are used in larger guns in which there is a sealed cartridge and a separate propellant; and finally (4) separate loading, in which the projectile, propellant, and fuse all come separately. A recent development in the realm of artillery munitions is the introduction of the depleted uranium round. These are essentially armor-piercing shells manufactured with depleted uranium, which is a very heavy element and thus very useful for penetrating armor. These were utilized by the U.S. forces extensively in the 2003 Iraq War against Iraqi armor. Some groups have raised concerns over the use of this form of ammunition due to concerns about the long-term health effects it may have on both the users and recipients.

Aircraft Ammunition

The first use of aircraft in warfare took place in World War I. World War II witnessed a drastic

expansion of aerial bombardment. The great weakness of this form of attack was seen as lack of accuracy concerning the delivery of ammunition to a specific target. This led to the development of the first guided munitions during the Second World War. The most recent developments in guided munitions fall in the general category of smart bombs, weapons that are guided to their target using lasers, optical navigation system, global positioning satellite, or inertial navigation system. Likewise, some of these projectiles are designed to be able to alter their trajectory in flight to better accomplish the task of hitting their intended target. Traditional or dumb bombs simply fall from their plane, without the ability to control their descent to guarantee a direct hit on the intended target. Beginning in the 1960s, an additional type of bomb began to develop known as the dual-purpose improved conventional munitions or cluster bomb. Aircraft, likewise, can deliver nuclear weapons.

Conclusion

Smart bombs and nonlethal projectiles, like other guided ammunition, form part of a trend in current ordnance development directly linked to the types of conflict prevalent in the world at the present time. Much of the fighting occurring in present conflicts occurs in the midst of civilian populations. To minimize the injuries inflicted on civilian populations, a greater need for precise ammunition has arisen.

James R. Mc Intyre

See also Bombs, Cluster; Bombs, Nuclear; Bombs, Smart; Tactics, Air; Tactics, Covert; Tactics, Ground Forces; World War I; World War II; Wounds and Injuries

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AMPHIBIOUS VEHICLES

Amphibious operations have occurred for millennia when attacking forces landed on shores of oceans, lakes, or rivers held by enemy forces. Speed and overwhelming force were essential to tactical success, because the assault forces needed to get sufficient numbers of troops and equipment ashore before the defenders could drive them back into the sea. Transporting the assault forces to shore required specialized boats, but these vessels were limited in the places where they could land troops. Shores had to be accessible to the shallow draft boats and free of obstructions like reefs or sandbars above and below the waterline. Only true amphibious vehicles could traverse such obstacles. It was not until the 20th century that amphibians were developed and utilized in these operations. This entry discusses the evolution of amphibious vehicles and their equipment and specifications.

Premodern

From antiquity until the modern eras, sail- or oar-driven boats only moved assault troops a few miles per hour. Julius Caesar and his Roman legions conducted an assault from the sea when they invaded Britain in 55 BCE, and William the Conqueror and the Normans made an amphibious landing on England in 1066. Typically, assault troops landed directly on the beaches by running their boats aground, or they waded ashore after disembarking close to the shore. Once on the beach, the assault forces needed to be resupplied by sea at least until they gained control of food sources in subsequent operations. This required those sail- or oar-driven boats to be able to be extricated from the shoreline, which was not always possible given terrain, weather, currents, tides, and other factors.

The Second World War

With the advent of steam-driven and later combustion engines in the 19th and 20th centuries, motor-driven amphibious assault boats could run more effectively and thus decrease the restrictions caused by wind, currents, tides, or weather and reduce the time of the ship-to-shore stage of an assault. Making this transit as rapidly as possible grew more critical because of the advances in weaponry that made

artillery more accurate and deadly at longer ranges. This gave the defending forces a decided tactical advantage.

The photographs and films of the U.S. military's LCVP (landing craft, vehicle, personnel) landing on the Normandy beaches on D-Day in 1944 are an iconic image of amphibious operations. But even the LCVP was not a truly amphibious vehicle because it was a boat. Its ability to transport troops ended at the shoreline. A vehicle with amphibious capabilities needed mobility on water and on land. In fact, a more descriptive term should be *amphibian* vehicles.

The first significant amphibian assault vehicle appeared in the late 1930s in the LVT (landing vehicle, tracked). It was not originally designed with military applications in mind. On the contrary, the so-called Alligator boat was designed to be a rescue vessel used to save downed aviators or hurricane victims in the Florida Everglades. The Alligator possessed no propeller. Instead, it had dozens of metal paddle-wheel tracks like a tank's tracks. The treads provided propulsion in the water and gave the vehicle the ability to climb onto land, over sandbars, and across coral reefs. The first version, the LVT-1, was 20 feet long and 8 feet wide and weighed 8,000 pounds. Carrying 20 troops or 4,500 pounds of equipment, it could make 5 miles per hour at sea and 25 miles per hour on land. Later versions of LVTs achieved better speeds, but they offered minimal armor protection to their passengers and crew. One version—the LVT (A)—was mounted with a turreted 37-mm cannon to provide fire support for immediate amphibious assault forces on shore until heavier tanks could be debarked. LVTs could be seen by the hundreds during every American amphibious assault during World War II.

Similar in capability to the LVT was the DUKW. In this acronym, the *D* indicated that it was designed in 1942, the *U* stood for utility (amphibious), the *K* indicated that it had an all-wheel drive, and the *W* meant that it had twin rear axles. Literally an amphibian truck, the DUKW was a boat hull mounted on a standard General Motors Corporation 6 × 6 truck frame and fitted with a propeller. The wheels enabled the vehicle to move on land and the propeller on water. The DUKW proved its value in being able to carry 5,200 pounds of equipment, weapons, or troops well inland after its ship-to-shore transit. It weighed 20,000 pounds fully loaded

and could make 11 miles per hour on water and 50 miles per hour on land. DUKWs were 32 feet long and 8 feet wide. They offered good mobility, especially on land, but they were not very seaworthy in rough weather and offered little armor protection to passengers and crew. Some 21,000 DUKWs were built during World War II.

The Cold War

The LVT concept remained for many decades in the U.S. military. By 1972, the newest iteration—the LVT-7 or officially the AAV (amphibious assault vehicle)—came on line. U.S. Marines call them “amtracks.” The AAV was a significantly upgraded version of its predecessors of the 1940s and 1950s. Among the upgrades was propulsion in the water provided by twin waterjets. These jet systems have become the most common means of propulsion since the 1970s. Despite weighing 29 tons, the AAV offered good speeds of 9 miles per hour during the ship-to-shore transit and an impressive 45 miles per hour on land. Its thicker armor gave more protection to its three-man crew and 25 full-equipped men. The AAV also possessed greater armament, a .50-caliber machine gun and either an Mk 19 automatic grenade launcher or an M242 Bushmaster. Other nations have developed amphibian vehicles, including the Soviet Union’s PTS (Plavayushchij Transporter–Sryednyj), which is a tracked amphibious transport vehicle driven by propellers in the water, and China’s various amphibious assault tanks driven by jet propulsion systems.

Perhaps the most creative innovation in amphibian assault vehicle designs can be seen in the LCAC (landing craft, air cushion). Its antecedent dated back to a design in Finland in the early 1930s. The LCAC finally adopted by the U.S. Navy in 1987 was a departure from the wheels, tracks, propellers, or jet systems seen in other amphibians. Instead of these means of propulsion, the LCAC rides on a cushion of air forced downward against water or ground below it. Large skirts around the edges of the vehicle hang down vertically and keep the downward air flow from dissipating or escaping laterally. In the case of the LCAC, this provides a remarkably stable ride for a vehicle capable of traversing obstacles on land or water up to 6 feet high. The LCAC has a length of 87 feet and a beam of 47 feet. Its armament includes a combination of cannon,

machine guns, and grenade launchers. Two engines provide lift, and two more provide propulsion. When fully loaded, the LCAC is capable of running at 45 miles per hour and has a range of at least 200 miles. It boasts an impressive payload of 60 tons or the equivalent of one main battle tank. The LCAC’s long range and high speed give it the ability to fulfill an over-the-horizon strategy during an amphibious assault. In other words, the vehicle can be loaded 25 or more miles from the assault area and then make the ship-to-shore transit in decisively quick fashion. The LCAC can be employed in both military and humanitarian operations. The United States is not alone in developing air cushion amphibious capabilities. Chinese forces use the Jingsah II class LCAC, which is similar to the U.S. Navy’s LCAC. The Russian, Ukrainian, and Hellenic navies use the massive Zubr class LCAC, a vehicle capable of carrying 130 tons of equipment at speeds in excess of 40 miles per hour.

Post–Cold War

Since the end of the Cold War, nations with maritime strategic interests have continued to develop new amphibious vehicles capable of faster, more survivable ship-to-shore movement of troops and better capabilities ground operations. In the United States, however, budget cuts and a willingness to utilize existing technology in new ways has resulted in the cancellation of the most significant new development in amphibious vehicles. The EFV (expeditionary fighting vehicle) represented the next generation in amphibians for the U.S. Marine Corps. Initially scheduled to enter service in 2015 to replace the aging AAV in the American inventory, the EFV was to be able to achieve three times the AAV’s speed on water at 29 miles per hour. On land, the EFV was to be capable of running 45 miles per hour, with an operational range of 75 and 325 miles on water and land, respectively. Armed with the potent 30-mm MK 44 cannon and a 7.62-mm machine gun and equipped with ceramic and composite armor to protect its crew of 3 and 17 fully equipped U.S. Marines, the EFV represented the next logical evolution of U.S. amphibious capability. In January 2011, Secretary of Defense Robert Gates cancelled the EFV project, citing budget shortfalls and the ability to project power from the sea utilizing existing air and sea assets in most plausible scenarios. With this development, the deployment of



LCAC (landing craft, air cushion) in the U.S. Navy.

Source: U.S. Navy photo by Journalist Seaman Apprentice Charles A. Ordoqui (released).

new amphibious vehicles appears, at least in the near future, to be in doubt.

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See also Marine Corps, U.S.; Technology; Warfare, Amphibious

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ANTHRAX

Known to be lethal since ancient times, anthrax is an airborne and cutaneous infectious disease, caused by the spores of the *Bacillus anthracis*. This entry examines the development and epidemiology of the disease and discusses anthrax as a biological weapon.

Background on the Disease

The microbe has a long relationship with laboratory science. Discovered by the German microbiologist Robert Koch in 1876, anthrax was the first pathogen

observed by microbiologists and the first to be cultured. Transmitted through ingestion or open wound contact with the bacilli's spores, anthrax spreads rapidly throughout the body, exploiting the host body's lymphatic system. Mortality is caused by the microbe's production of two exotoxins—edema toxin and lethal toxin—which cause general fluid retention in the lungs and shock in hosts. Death results within days or weeks at the most. The disease has a 90% mortality rate. Anthrax spores are remarkably resilient; capable of surviving extreme temperatures, they may lie dormant in the soil for years until activated on being consumed by grazing animals. Natural occurrences of anthrax in the industrialized world are quite rare, as infected animals are generally isolated and destroyed. More frequent (yet still rare) are cases caused by contact with infected animal products imported from areas (e.g., Africa, Central Asia) where the disease is more common and control mechanisms are lacking.

Treatment of anthrax rests on massive doses of intravenous and oral antibiotics, though the antibiotics are useless after exotoxins appear. Antitoxins are currently in development but as of now are not available to the general public.

Anthrax as a Biological Weapon

History

The first efforts to employ anthrax as a weapon were made by the Germans during the First World War. Several covert programs were initiated to infect Allied livestock supplies in Romania, Mesopotamia, and Argentina. The prospect of biological warfare was sufficient to cause it to be included with chemical weapons in the 1925 Geneva Protocol banning gas and germ warfare. Nevertheless, weaponized anthrax was tested by the British army over the summer of 1942–1943 at Gruinard Island, Scotland. Results indicated that both aerial bombs and artillery shells would suffice to spread the disease throughout swaths of pastureland or small cities, though postconflict decontamination would be virtually impossible, thus rendering the sites uninhabitable for decades. In China during 1941 and 1944, the Imperial Japanese Army's Unit 731 also tested anthrax delivery systems, including the *Uji* bomb, a small aerial bomb using a porcelain case to hold its payload.

The combination of lethality and the durability of the microbial spores made anthrax a favored choice of biological weapons programs in the United States,

the Soviet Union, and other countries in the Cold War. Centered at Fort Detrick, Maryland, the U.S. Army's Biological Warfare Laboratory oversaw the testing and production of various agents and delivery systems, including anthrax. Various tests using live animals and human volunteers were conducted through the 1950s and 1960s, verifying the efficacy of anthrax as a multivector infectious agent, deliverable through aerosol or aerial bomb, contaminated food, and direct skin-to-skin contact. In 1969, President Richard M. Nixon declared a halt to all biological weapons programs in the United States and ordered Fort Detrick to complete its transition to peaceful biological research under the direction of the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID).

The Soviet Union's interest in anthrax is also relatively well documented, including a September 1979 accident at a Sverdlovsk production facility, which resulted in the death of more than 100 persons. Such incidents did not deter Soviet development, however. According to Ken Alibek, the former first deputy chief of the Biopreparat, the Soviet Union's biological weapons program, hundreds of tons of weaponized anthrax strains were stored at Vozrozhdeniya Island in Kazakhstan by the Soviets' security agency, the KGB, and the army until the Soviet Union's collapse in 1991. Abandoned in 1992, the stockpiles of anthrax and other weaponized disease agents were destroyed in a joint U.S.-Kazakhstan program in 2002.

American interest in anthrax continued after the 1969 Biological Weapons Ban. Following the destruction of all weaponized stocks, new strains were investigated and modified in small stocks for vaccine research purposes by USAMRIID in the 1980s. The most successful effort, the so-called Ames Strain, was developed in 1981. Noted for its uniformity and virulence, the Ames Strain was used in the September 2001 bioterror mailing incidents that claimed five persons and infected 17 others. Bruce Ivins, a biowarfare expert employed by USAMRIID, was suspected but not charged; he committed suicide in 2008 on learning that federal prosecutors were about to indict him for the crime.

The Post-Cold War Era

More recently, anthrax and other biological weapons agents were considered an immediate threat in the case of Saddam Hussein's Iraq. In the 1980s, Iraqi researchers developed weaponized

anthrax for use against external and internal threats. The prospect of facing biological weapons prompted the United States and its allies to inoculate its soldiers for anthrax before launching the 1991 liberation of Kuwait and invasion of Iraq in Operation Desert Storm. Following its defeat, the Iraqi regime dismantled its biological warfare program, destroying all existing stockpiles of biological agents.

The specter of future terror attacks was used to expand American research efforts in defensive biological weapons programs, with authorized public spending growing from \$1.6 billion in 2001 to more than \$36 billion in 2006. National Institutes of Health funding for biodefense outstripped spending on influenza research and prevention by a margin of more than 14:1—\$1.76 billion versus \$120 million. While ostensibly intended as a safeguard against future attacks on the homeland, even defensive biological warfare research violates the letter and spirit of the 1972 Biological Weapons Convention, which forbids the creation, production, and stockpiling of new and existing pathogens.

Prior to the start of Operation Desert Storm, an experimental anthrax vaccine was administered to U.S. and British forces serving in Kuwait and Saudi Arabia. In December 1997, mandatory anthrax vaccination was implemented by the order of Secretary of Defense William Cohen in response to publicized claims of weaponized anthrax being maintained by Iraqi forces. Within a short time, soldiers receiving the vaccine reported a series of symptoms including localized swelling, fever, malaise, and long bouts of lethargy.

The controversy over the vaccine continued to build as links were offered between the vaccine and “Gulf War Syndrome,” a neurological disorder associated with the destruction of chemical weapons stocks following Operation Desert Storm. Such reports prompted a series of investigations by the Department of Defense, USAMEDD (U.S. Army Medical Department), and the General Accounting Office. These surveys concluded that the existing vaccine was not sound, as the protective antigen factor in each shot varied, due to production problems. Ongoing reports of acute lingering side effects prompted a series of congressional investigations into the safety of existing vaccine stocks. Since 2003, court injunctions halting mandatory vaccination have stalled the Department of Defense’s mandatory vaccination program, despite Food and Drug Administration statements clearing the vaccine for use.

Terrorism

The problem of biological weapons employed by independent nonstate actors—terrorist groups or demented individuals—is quite real. The 2001 anthrax incident reveals that the greater threat is a terrorist cell’s release of a weaponized biological agent. Unlike nuclear and advanced chemical weapons, formulas for producing large quantities of biological agents are readily obtainable online. A diverse potential market exists, with threats ranging from al Qaeda to domestic antigovernment groups suspected of seeking the means of delivering a biological strike against the U.S. government.

Prevention and detection are both acknowledged as essential defenses against a biological agent release. Efficiency highly depends on training and technology, both of which remain insufficient. Effective detection remains out of reach, with current state devices considered too large and expensive for use outside the laboratory. Training is likewise confused; state and local communities demand protection while also rejecting intrusion into their jurisdiction. Meanwhile, the federal response effort is locked up in interagency rivalries, with various “acronymal” agencies—DOD, HSA, FBI, CDC—competing for funding and recognition.

Any serious biological terror or warfare attack in the United States would likely result in massive panic and high mortality. In the case of anthrax, mass civilian vaccination would be impossible, given the scant supply of existing stocks and the time required to produce new supplies. According to the Centers for Disease Control and Prevention, quick response to a bioterror anthrax release is the key. In a perfect response, with a vaccination program implemented on the first day of an outbreak, the projected mortality for a population of 100,000 is still 5,000 persons. This figure increases incrementally with each passing day, reaching 35/100 if vaccination is deferred for 6 days. Given the general ignorance of anthrax and its symptoms, the later response is considered the norm.

Conclusion

Anthrax remains a threat as much in the abstract as in the real. Prevention, protection, and defense planning against a deliberate release compel the United States and other nations to expend billions of dollars against the much feared outbreak that, hopefully,

may never come. Yet as the extent of threat from asymmetrical actors grows in the 21st century, so too does the prospect of individuals or organizations acquiring weapons of mass destruction capable of wreaking a horrible return on their investment. In the end analysis, societies have little choice but to prepare and plan for the worst-case scenario, even as the woeful realities of practical funding place the best plans out of reach.

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See also Warfare, Biological

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ANTHROPOLOGY AND WAR

Anthropologists have long been fascinated with the subjects of war and aggression. Over the years, there have been numerous theories regarding the origin of human aggression and warfare. Some anthropologists have posited an innate drive or even gene for human aggression, seeing, perhaps, a killer ape as a human ancestor. Others have looked at socialization and enculturation processes as the source of individual aggression and warfare. Out of these basic ideas have sprung many refinements, leading to particular theories of aggression and warfare. This entry discusses anthropological theories of war and violence and examines the involvement of anthropologists during wartime.

Anthropologists have looked at warfare as a political relationship between groups in which groups use or threaten to use force against each other. Violence, real or threatened, is the key element of anthropological studies of warfare. War, then, is not individual violence but violence between groups of people. Therefore, most anthropologists disdain biological or psychological explanations of warfare. There are notable exceptions. The type of questions that anthropologists ask cannot be answered by reduction to a killer instinct passed on by a killer ape ancestor. Rather, anthropologists are interested in the variations easily discerned in the frequency and intensity of warfare. There are societies in which warfare is rare or even nonexistent. There are others in which it is all too frequent.

There are three dominant ideas about war in anthropology: (1) a materialist theory, dealing with competition for scarce resources; (2) the social structuralist explanation, in which various structural arrangements either increase or lessen the frequency of warfare; and finally (3) a phenomenological perspective on warfare, which focuses on cultural values and beliefs as a means for understanding the frequency of warfare. Each of these perspectives has had a long history in anthropology and has offered a good deal to the understanding of war and its effects.

Sociobiology is but the latest phase of seeking cultural explanations, including warfare, in biological causes or a universal human nature. Edward O. Wilson, the founder of sociobiology, claims it to be the logical application of Darwinian evolutionary ideas to cultural behavior. All human activity is reduced to the issue of survival of one's genes. Every social organization and cultural system is directed toward that one purpose. In popular terms, the concept is expressed as "the selfish gene." Wilson borrows from earlier scholars, particularly Thomas Hobbes and Herbert Winfield Spencer, agreeing that there is a natural tendency toward violence. Moreover, he agrees with Robert Ardrey, Robin Fox, and Lionel Tiger in holding the descent of modern humans from killer apes. In this view, war is not only natural, that is, innate, but also functional in ensuring the survival of the fittest. In Wilson's view, it is not the individual that is the fittest but certain genes that help preserve the best traits.

For Wilson, even altruism can be subsumed under the rubric of evolutionary fitness. He writes, "Compassion is selective and often ultimately self-serving" (quoted in Jensen, 2011). Sociobiologists often forget or overlook the qualifying terms in Wilson's formulation. They focus on his general idea of there being a genetic basis for human group aggression and the selfishness of most if not all humans. Marvin Harris, among many other cultural anthropologists, attacked Wilson for asking the wrong questions in his research. These anthropologists point out that Wilson ignores the question of why human culture is so much more complex than that of any other animal. Moreover, Harris indicated that seeking a genetic basis for war is as foolish as finding one for brushing teeth. War, like tooth brushing, is a learned response and not a genetically programmed one. Echoing the majority of anthropologists, Harris noted that sociocultural explanations are more valid than sociobiological ones. They are so because they can account for all types of change, not simply glacially slow evolutionary ones, at best.

Sociobiology comes from a long line of similar theories based on Darwinian ideas, although not necessarily put forward by Darwin himself. A few of these theories illustrate the point. Raymond Dart, for example, put forward his theory of human inheritance of a violent human nature. He did so in his 1953 article "The Predatory Transition from Ape

to Man." In 1970, Robert Ardrey popularized the idea in *African Genesis*. This is the famous "killer ape theory," which, simply put, states that humans are different from other apes and are distinguished by their aggression, a trait inherited from their direct primate ancestors. Although it convinces many people in the general intellectual world, it has very little solid evidence to convince anthropologists. Moreover, it does not explain why one sociocultural group would be more violent than another.

A variation on the killer ape theory is one that Michael Harner puts forward. Harner advances the idea that humans are violent because of the nature of the human psyche. He advances an idea of the collective human memory in which insults, losses, injuries, and other psychic pain are stored and to relieve this pain, groups seek revenge. The theory explains violence in specific cases in the Amazon, long a focus of anthropological studies of violence. However, Harner's theory explains only some violence among the group he studies, the Jivaro. It does not explain external violence, such as warfare or raids. Thus, it explains personal feuds but cannot explain broader cases of group violence.

Definition and Origin of War

Keith Otterbein has become a major figure in the field of the anthropology of war. One of his major works, "A History of Research on Warfare in Anthropology" (1999), reviews the immense amount of material on warfare. Otterbein goes beyond a simple review to the use and abuse of anthropological material by anthropologists and other social scientists. Otterbein has long held to a typology that distinguishes among types of violence, including personal feuds, raids, and warfare.

The definitional problem has been a long-standing one within anthropology. Paul Roscoe has listed a number of sources in anthropology that have struggled with this definitional problem. What is clear in this confusion is the fact that for anthropologists there is a cultural basis for warfare and that most "simpler" societies may have violence but do not have organized violence on a level we can term warfare.

Otterbein has reviewed the numerous theories on warfare that anthropologists have put forward. He holds that by 1973, there were at least 16 of these theories, mainly the result of the Vietnam War.

Interestingly, he maintains that no new theories of warfare have emerged since that period and only half or so of these theories still have serious backing. Otterbein notes that all remaining theories are based on research focusing on nonindustrial socio-cultural groups and three premises. He lists these as ultimate causes of warfare, proximate causes, and consequences of warfare.

By ultimate cause, Otterbein means that which sways people to fight. These include the struggle for desired and scarce resources, warfare over women, or internal division between organizations of related men. By proximate causes of war, Otterbein refers to things such as militarism and leaders who have goals that will lead to warfare with others. Consequences of war refers to the results of war, which improve a group's ability to prevail against its enemies.

Otterbein acknowledges that some anthropologists, particularly Napoleon Chagnon, maintain that human beings have an inherent propensity toward violence.

One interesting thing about anthropological theory is that no theory ever entirely dies. While few people still discuss the killer ape theory today, except in popular science fiction movies, there are those who do see a struggle for survival leading to modern humans and who still campaign politically on that theory, arguing that it is the basis of civilization. Theories that blossomed during the Vietnam War are still very much alive today, as recent wars demonstrate clearly. In common with most anthropological theories, these theories are still with us in some form or other.

Sociobiological Theory

At this point, we are back to sociobiology as some anthropologists apply it. Napoleon Chagnon may be its best known proponent among cultural anthropologists. As Chagnon states his case, the high levels of violence in the Amazon are due to fighting over women but not because women are scarce. Rather, warfare over women ensures that the strongest males survive to donate their genes to the next generation. The stronger the male fighter, the more women, and therefore children, he has. He maintains that this idea is evolutionary and that sociobiology explains it. There have been battles within anthropology over Chagnon's theory. The least confrontational holds that Chagnon's theory does not even begin to explain

warfare in general and may be badly off base even regarding raids among the Yanomamo. The most confrontational objections have to do with charges of secret research trying to discover for the military ways to breed super warriors.

The Yanomamo (Also Known as Yanomami)

The Yanomamo, also known as the Yanomami or Yanomama, are a tribe of about 20,000 people distributed between Venezuela and Brazil in around 250 villages in the Amazon rainforest. The entire population of a village lives in a large compound named a *shabono*. The Yanomamo have become famous in anthropological literature because some anthropologists have stated they have an innate violent nature. Napoleon Chagnon has been foremost among these anthropologists. Leslie Sponsel, among others, has opposed these views.

Brian Ferguson has joined the battle over the meaning of the Yanomamo for broader anthropological theory. Ferguson notes that there have been three major perspectives on warfare in anthropology. These are materialist, cultural, and biological. Ferguson examines each of these three perspectives as it applies to the Yanomamo. Ferguson rejects the cultural and biological theories and puts forward a materialist explanation of Yanomamo warfare. He particularly rejects Napoleon Chagnon's view of inherent fierceness among the Yanomamo, noting that the Yanomamo did not suddenly appear on the world scene in the 1950s but had a long history with Europeans dating back to Spanish invaders.

Blood revenge is one of the most commonly cited causes of violence and warfare in tribal societies, yet it is largely ignored in recent anthropological theories of primitive warfare. A theory of tribal violence is presented showing how homicide, revenge, kinship obligations, and warfare are linked and why reproductive variables must be included in explanations of tribal violence and warfare. Studies of the Yanomamo Indians of Amazonas during the past 23 years show that 44% of males estimated to be 25 years or older have participated in the killing of someone, that approximately 30% of adult male deaths are due to violence, and that nearly 70% of all adults over an estimated 40 years of age have lost a close genetic relative due to violence. Demographic data indicate that men who have killed have more wives and offspring than men who have not killed.

Adaptive Behavior Theory

Marvin Harris was a major opponent of Napoleon Chagnon and sociobiology. He put forward a theory that war is primarily an adaptive strategy. One does not have to put forward a mythical killer ape of biological imperative to conquer. Warfare in the Amazon is simply a rational response to the difficult demographic and ecological conditions of the area. Harris emphasized the dangers that low blood sugar levels had on fostering violence in the Amazon. Harris's idea came to be termed the *scarce protein theory*.

Harris, one of the proponents of cultural materialism, argued that humans need to draw energy from their environment. If a sociocultural group cannot draw sufficient energy from its environment to meet the needs of its people, it will turn to violence to attain sufficient energy to meet its needs. Stresses from the environment lead to violence to return a group to equilibrium. Women are a scarce resource, one needed for reproduction. Violence over women is not related to a genetic imperative to reproduce the strongest warrior. Rather, it is the result of the general need to meet scarce resources, including women. To make matters worse, to conserve resources, many groups practice female infanticide, helping to keep women a scarce resource. Later in his career, Chagnon confided to Frank Salamone that he had come to accept Marvin Harris's ideas of the scarce-protein idea of Amazonian warfare.

There are a number of anthropological theories of violence and warfare that emphasize cultural transmission and learning. Rather than looking to genetic or other overly deterministic theories, learning theories or those leaning heavily on acculturationist views look to internal cultural processes and even to human rational and conscious agency to explain warfare.

Theories of Learned Violence

Internal Theory

The internal theory states that ideas of violence are transmitted from elders to younger men. The first theory is of violence learned within the community. Elders do so to enforce customs and traditions. Thus, young boys are taught to be rough with other males, relatives and friends alike. Elders provide

instruction in the use of weapons and teach the skills of warfare. Therefore, the processes of socialization and enculturation can account for warfare among groups as a boundary mechanism, separating "us from them."

External Theories

Brian Ferguson has long argued against any theory that singles out Amazonian Indians as inherently violent or even violent because of internal factors. He clearly places the blame for high levels of violence on the nature of European contact with indigenous Amazonian people. European actions have been to encourage warfare among the Amazonian peoples. European contact has also increased diseases among indigenous peoples and led to warfare. Moreover, the introduction of European goods led to fighting over trade connections. Ferguson does not present a romantic notion of the Amazonian Indian, a "noble savage" view. He knows that there was indigenous violence there. What he does argue is that European contact led to vastly increased levels of violence.

Fraternal Interest Group Theory

Fraternal interest group theory has the merit of being compatible with any of the other anthropological theories mentioned above. This theory is put forward by Theoden van Valzen, W. van Wetering, and both Keith and Charlotte Otterbein. The theory turns to social structural explanations, stating that in societies with high internal dissension, there are male residential kinship groups to protect the interest of the group. We find such groups where patrilocal residence (residing with or near the husband's family) is rife, whereas in matrilocal groups (residing with or near the wife's family), males are not able to give such support to one another. Add the factor of decentralization to the mix, and then the existence of male residence kinship groups and violence is common.

The Zulu Example

A frequent example anthropologists use in discussing warfare is that of the Zulu. Many anthropologists believe that true warfare is a prerogative of the state. The Zulu demonstrate a case of state formation. The Zulu Kingdom became a state in the 19th century. Its formation illustrates both circumscription theory and institutionalized leadership

theory. Robert Carneiro's circumscription theory sees warfare as the key element in state formation. For Carneiro, warfare occurs in areas where agricultural land is limited. Scarcity of land leads to the acquisition of weaker villages by the stronger, better organized ones.

Anthropological Involvement in Vietnam

The Vietnam War was a serious trial not only for the country in general but also for the anthropological profession. At times, it almost tore the profession apart and did set people against one another as well as tearing departments apart. Gerald Hickey presents a firsthand account of one anthropologist's involvement in the war, from his original field work in 1956 to his leaving 18 years later after working for the RAND Corporation on a government contract to study the highland tribes. Hickey hoped to help the tribes, but his account is a cautionary tale of what happens to groups whom the military seeks to make allies in the midst of a war. Hickey provides an account of the disintegration of the Montagnards (indigenous people from the mountains of Vietnam) and the loss of their culture over a long period of time.

Anthropological Involvement in the Military

There has long been controversy concerning anthropological involvement with the American government's war efforts. Opposition goes back at least to Franz Boas's public opposition to anthropological involvement in World War I. After the end of the war, Boas wrote a blistering attack on several archaeologists who spied for the American government in Mexico while posing as scientists. World War II provided an exception to the general anthropological opposition of working with the government for war aims. Some helped develop the forerunner of the Central Intelligence Agency, the Office of Strategic Services. Others worked for the Office of War Information. However, there have been criticisms of some anthropologists who worked in Japanese internment camps on the west coast of the United States, with allowances made for those who worked to alleviate conditions and obtain compensation for those interned.

There have been many attempts to discover anthropological intrigue in the Cold War period. Certainly, Project Camelot was one such effort. Generally speaking, however, most anthropologists

appear to have spoken out against Cold War actions and opposed the Vietnam War. On the other hand, there were many anthropologists who unfairly lost their teaching positions at the instigation of government agents and the hysteria fanned by McCarthyism as David Price has so aptly demonstrated. There was some complicity between anthropologists and the military during the Vietnam War, and there is evidence of the American Anthropological Association's recruitment of anthropologists for various governmental military projects during the Cold War. Meetings of the American Anthropological Association in the 1960s led to strong antiwar resolutions and ethical statements. It is debatable whether the current association is as strongly against the militaristic adventures of the United States as it once was.

It is a simplification to state that American anthropologists have become more radical without adding a number of qualifications. Certainly, there has been more use of postwar ideas like modern feminism, the works of Michel Foucault and Edward Said, the various posts—postmodernism, postcolonialism, poststructuralism—and various types of Marxism. However, there are still strong strains of more moderate positions, ranging from conservatism through more traditional liberalism. Many members have not been happy with what they consider the watering down of the 1960s ethic statements and the use of anthropologists in war zones to combat counterinsurgency. Similarly, there is a general ban on the sharing of secret information with any government, including one's own.

The recent wars in Afghanistan and Iraq have elicited almost unanimous opposition to the use of anthropologists, since 2007, as embedded cultural advisers to combat army and marine troops. The American Anthropological Association has strongly condemned the practice since its beginning. Most of the so-called anthropologists in the project are either students or nonanthropologists. Moreover, the practice is a violation of anthropological ethics that prohibits anthropologists from endangering the people among whom they work in any way. The prohibition goes back at least to Franz Boas's condemnation of the anthropologists who became spies in World War I. Cultural knowledge is dangerous, to understate the case, when used in military situations. Moreover, a number of anthropologists have been killed over the years, especially during the Cold

War, after wrongly being accused as spies. The overwhelming feeling among anthropologists is to keep a distance from any work that may be classified as secret or used by the military to harm people.

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See also Sociology

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ANTISUBMARINE WARFARE

Antisubmarine warfare (ASW) is the area of naval operations that, narrowly defined, has as its mission the denial to an enemy of the effective use of the enemy's submarine force at sea either by their destruction or their neutralization. More broadly, antisubmarine warfare may include action to destroy, disable, or disrupt the associated command, control, and support infrastructure in addition to carrying out direct attacks on enemy submarines. This entry discusses the emergence of the submarine threat and then examines the weapons and systems deployed to defeat the submarine's attack.

Defeating a modern submarine threat requires the coordinated efforts of a complex force composed of

multiple sensor systems, ships, submarines, aircraft, and weapons. National sensor systems cue specialized attack submarines and direct them to intercept enemy ballistic missile submarines. Ship-aircraft teams protect lines of communications to maintain freedom of the sea for civilian commerce and to permit accomplishment of other friendly force missions such as the establishment of protected havens for power projection and amphibious operations. The modern ASW force has been developing for more than 100 years.

Early Attempts

The first attempts to build submarines provoked little reaction from naval strategists and often proved more of a danger to the inventor than the intended target. Concern with underwater threats began to grow after the invention of the first successful self-propelled torpedoes by Robert Whitehead in the 1860s. The marriage of the improved descendants of Whitehead's weapons with the first viable submarines in the early years of the 20th century created a threat that changed the face of naval warfare.

Considerable work was done at the end of the 19th century to create defenses against torpedo attacks. Special torpedo boat destroyers were built, antitorpedo nets were hung around warships, and searchlights were installed to mark attackers for destruction by quick-firing guns, but little of this work would aid against the torpedo-armed submarine.

The most significant problem was detection of the submarine before it attacked so that it might be killed or neutralized. Then antisubmarine forces needed weapons capable of destroying a submerged submarine. Battered by U-boat attacks during World War I, the British worked to solve both of these problems.

World War I

Though some early efforts were amateurish, by early 1916 an effective purpose-built weapon designed for shipboard use—the depth charge—was available. The detection problem was much more difficult. Except for the top few meters, the ocean is not transparent, and searching its depths required the creation of whole new technologies.

In a pattern repeated later, the British Admiralty relied on scientific experts to help solve the problem. The Admiralty established the Board of Invention

and Research in mid-1915 with a combined scientific and naval staff to evaluate antisubmarine warfare proposals, and at the end of 1916, the Admiralty added the Anti-Submarine Division to deal with other issues, including sensor development. The division established protected shipping lanes near land and adopted new tactical approaches, including the extension of aircraft patrols over merchant shipping near Britain. Though not effective in attacking and sinking U-boats, early air patrols forced submarines to submerge and reduced their movement, and thus their ability to freely locate targets.

The Anti-Submarine Division's effort to develop a sensor that could penetrate the water sheltering German U-boats was incomplete at the end of the war. It would eventually yield an effective search sensor called *sonar* (sound navigation and ranging), which used acoustic echo-ranging to locate a submarine. Experiments were also conducted with magnetic detection of submarines, but during World War I, the most effective method for defending shipping from submarine attack was use of the protected convoy.

World War II

The most important advance of the interwar period was the installation of effective active sonar systems in escort ships. This was followed during World War II by the installation of radar and new antisubmarine weapons such as acoustic-homing torpedoes. Mass production of escorts and new ship types, especially small aircraft carriers, allowed effective protection of convoys and pursuit of offensive ASW operations using hunter-killer groups.

The Battle of the Atlantic was one of two significant ASW theaters in World War II. In the Pacific, the Japanese navy had much less success against Allied submarines as they devastated Japan's sea lifelines. One reason for the disparity was that in both the theaters the Allies read much of their opponents encoded message traffic; the Japanese naval culture, which assigned the antisubmarine warfare mission a lower priority than what were perceived to be more worthy pursuits for true sea warriors, also contributed to the Japanese inability to protect their merchant fleet.

The Cold War

The postwar submarine threat was largely defined for the North Atlantic Treaty Organization navies by the

buildup of a large Soviet submarine force based on captured German technology. Allied wartime tactics formed the foundation of postwar ASW; however, nuclear power soon revolutionized submarine warfare by creating a true air-independent submersible. This threat demanded improved sensors and weapons.

Dedicated maritime ASW aircraft were built to carry improved sonobuoys (sonar buoys; small, independent acoustic sensors), magnetic anomaly detection devices, radar, and ASW torpedoes. New long-range acoustic sensor networks (Sound Surveillance System) were installed on the ocean floor and connected to command and coordination centers. These centers analyzed the data collected from the sensor networks and used the information to direct the aircraft to their targets.

Surface ships were paired with helicopters that were able to carry sonobuoys, magnetic anomaly detection devices, radars, and ASW torpedoes. Surface ships provided data collection, display, and analysis capabilities; communications suites; additional sensors including electronic warfare receivers; and a long-range weapon, the antisubmarine rocket. The integrated ship-helicopter team, providing extended multisensor area coverage, became a basic component in ASW and other mission areas.

Addition of nuclear propulsion made submarines a more formidable threat at sea, but the introduction of ballistic missile submarines able to launch nuclear weapons from unknown locations with no warning, thereby threatening national decapitation, raised the consequences for ASW's failure to prevent national destruction. The creation of the ballistic missile submarine expanded the role of the torpedo-firing submarine. Arguing that the best hunter of one submarine is another submarine, nuclear attack submarine crews concentrated on finding and killing ballistic missile submarines.

Early Soviet propulsion systems were noisy, and most tracking operations used passive sonar systems. Improved quieting through the addition of sound absorbing material to the hull and machinery isolation required development of new search technologies that continued into the post-Cold War period.

Post-Cold War Era

The basic structure of antisubmarine warfare—now a part of undersea warfare in Western navies—mirrors

the late Cold War structure. Maritime patrol aircraft, attack submarines, and the ship-helicopter team, now aided by satellite, Surveillance Towed Array Sensor System, and high-power, low-frequency active and other sensors, still form the ASW foundation. Most improvements in antisubmarine warfare capabilities will result from incremental improvements in those areas.

Still, new research continues. Blue-green lasers, submarine-generated pressure waves, and infrared signatures on the ocean surface have been examined as tools and clues for submarine location, but acoustic methods are still important. After long reliance on passive sonar systems, quieter submarines have led to a renewal of interest in active sonar, especially low-frequency active sonars that also provide better search capability in shallow-water regions.

The nuclear submarine threat has receded somewhat after the Cold War. The most significant current threat is posed by improved diesel-electric submarines and nonnuclear air-independent propulsion submarines operating in shallow near-land areas where acoustic conditions are particularly difficult. Low-frequency active sonar is designed to help find submarines in these areas, and other new systems, like unmanned underwater vehicles, integrated sensor networks, scalable and deployable surveillance systems, advanced signal processing, and new warships and weapons, are under development.

Larry A. Grant

See also Aircraft, Antisubmarine; Destroyers; Frigates; Submarines

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ANTIWAR MOVEMENT

See Peace Movements

ANZUS SECURITY TREATY

ANZUS refers to the security treaty signed in 1951 by Australia, New Zealand, and the United States. It is a military alliance that currently binds Australia and the United States and Australia and New Zealand together on defense planning issues in the Pacific. New Zealand and the United States are no longer mutually under the governance of ANZUS owing to a 1984–1985 dispute between the two nations over visiting rights for nuclear-armed or -powered American naval vessels at New Zealand ports. Regular meetings between the U.S. secretary of state and the Australian minister for foreign affairs take place annually. These bilateral meetings replaced the original ANZUS Council of Foreign Ministers meetings. ANZUS, unlike the North Atlantic Treaty Organization alliance system, does not have an integrated defensive command structure or forces. However, both nations' militaries take part in combined training exercises as well as maintaining cooperative defense facilities, primarily housed in Australia. This entry covers the origins, signing, effect, and current state of the ANZUS Treaty.

Background of and Reaction to ANZUS

The roots of ANZUS lie in the post–World War II era and were intimately tied to the crafting of a formal peace treaty with Japan and the onset of the Cold War in the Pacific. Both Australia and New Zealand exhibited deep concerns over a lenient peace with Japan due to fears about the possible resurgence of a rearmed Japanese nation as well as over possible economic competition from a revived Japan. These fears led both nations to hold out against American calls for a quick peace treaty. The United States wanted a peace treaty with Japan signed to integrate that nation into a defensive shield against the growing threat of communism in East Asia. These fears were heightened by the 1949 victory of communist forces in China, but the critical issue was the North Korean invasion of South Korea in June 1950. This produced great worry in Washington, D.C., that Japan would be targeted by communist forces, domestically as well as externally. The collapse of China placed Japan at the center of American post-war security policy in Asia, and thus the outbreak

of the Korean War was seen as a potential threat to those plans.

Both Australia and New Zealand viewed the American desire to conclude a rapid peace treaty with Japan as an opportunity to gain a formalized defensive commitment from the United States. Consequently, many historians have viewed ANZUS as a diplomatic quid pro quo. To garner support for the Japanese peace treaty, President Harry S. Truman sent Republican, and future secretary of state, John Foster Dulles on a tour of Pacific nations in February 1951. During meetings with the Australian and New Zealand officials in Canberra, Dulles acceded to a tripartite security agreement beyond the original scope of what the United States had hoped to agree to. Another point that led to the U.S. acquiescence to ANZUS was the agreement by the Australian government to supply possible reinforcements for the defense of the Middle East in the event of a war with the Soviet Union. For the Americans, ANZUS was initially more about global defense than regional defense. The ANZUS agreement was formally signed on September 1, 1951, in San Francisco as part of the formal signing of the peace treaty with Japan. Almost immediately, the treaty came under criticism from Great Britain and other Pacific nations, chief among them the Philippines.

The British protested their exclusion from any formal defensive or treaty arrangement in the Pacific. They argued that their involvement in fighting the communist insurgency in Malaya as well as their position as a senior member of the British Commonwealth secured their right to be represented in ANZUS. The Philippines and other Asian states viewed ANZUS as a distinctly Western or “White man’s pact” that sought to extend European influence in Southeast Asia and the Pacific. For its part, the United States did not resist the Filipino argument and actually sought the inclusion of the Philippines as well as Japan to transform ANZUS into a more general agreement among Pacific nations rather than the formalized defensive treaty for which Australia and New Zealand had pushed. The Australians, in particular, fought against both the British and Filipino efforts to be included in ANZUS because Canberra believed that any dilution of the treaty relationship with the United States would threaten the Australians’ close relationship with Washington that had been engineered over the course of World

War II and the early Cold War. The discussions among the ANZUS member states about the inclusion of the British and the Filipinos would serve as the basis for discussions for the creation of another, more inclusive, regional defensive system that would become the Southeast Asia Treaty Organization (SEATO).

ANZUS After 1951

Between 1951 and the early 1970s, ANZUS was not widely viewed as a significant regional diplomatic force. This was partly due to Australia and New Zealand remaining closely identified with Commonwealth diplomatic and defense efforts. The most controversial use of ANZUS forces in this period was the commitment of Australian troops and New Zealand support forces to South Vietnam in 1964. This was triggered by the inability of SEATO to meet the Laotian crisis of 1961–1962 and pushed ANZUS into an active phase of diplomatic and defense cooperation. The United States came to a greater appreciation of the support of its ANZUS partners because of their regional political power and also because, unlike other nations sending forces to Vietnam, Australia and New Zealand did so without monetary inducement. The reduced role of New Zealand in ANZUS stemming from the 1984–1985 disagreement with the United States in effect made ANZUS a Washington-Canberra bilateral agreement as New Zealand's importance dissipated from the American perspective. ANZUS provided the rationale for Australian support of American initiatives in the Persian Gulf War as well as in the 2001 invasion of Afghanistan and the 2003 invasion of Iraq. ANZUS today has become an institutionalized part of both U.S. and Australian foreign policies and remains central to the continued relationship between both the nations.

Travis J. Hardy

See also Alliances; Australia

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APPROPRIATIONS, MILITARY

The military appropriations process in the United States is a multistep process that involves key elements of the executive and legislative branches, resulting in congressional appropriation bills signed into law by the president. The budget process was first established by the Budget and Accounting Act of 1921, which requires the president to submit a federal government budget to Congress every year. Originally, the act created the Bureau of the Budget for this purpose; the name of the bureau was later changed to Office of Management and Budget (OMB). The Congressional Budget and Impoundment Control Act of 1974 (1974 Budget Act) specifies the role Congress plays in the budget process.

The budget funds all branches of the U.S. military: army, navy, air force, and Marine Corps. Salaries, benefits, training, arms, equipment, research, and operations related to the U.S. military are specified in the military budget. This entry explains the budgeting process, describes the roles of the Armed Services Committees, and defines terms related to appropriations legislation.

Budgeting Process

The starting point of the military appropriations process is the development of a military budget by the executive branch, under the control of the OMB. The president's budget is designed to accomplish three primary fiscal objectives:

1. Project the next fiscal year's government deficit (or surplus) by proposing aggregate spending levels and tax revenues.
2. Prioritize individual federal programs and groups of programs (called "budget accounts").
3. Communicate to Congress any changes to spending and tax policies recommended by the president. Such changes would include new tax laws and revisions to mandatory spending programs.

The major cabinet departments participating in the preparation of the military budget are the

Departments of Defense, Energy, and Treasury. Other major contributors of budgetary data include the Government Accountability Office (GAO) and the Congressional Budget Office. Since 1988, Defense Department and related budgets have been prepared on a *biennial* basis, that is, the budget represents program budget estimates for a 2-year period, in which fiscal year requirements remain separate and distinct.

The military budget authority specifies the proposed level of spending requested for various military programs and agencies and is part of the full government budget usually released in February for the following fiscal year beginning October 1. In 2008, the proportion of budgetary spending devoted to the military and homeland security was 23%. However, through fiscal 2009, much of the costs for the wars in Iraq and Afghanistan had not been funded through regular appropriations bills but through emergency supplemental appropriations. This changed in 2010, when most of the costs for the two wars were included in the president's budget.

The president's budget proposal is a critical input to congressional deliberation. The House and Senate Budget Committees are mandated by the 1974 Budget Act to draft budget resolutions by April 15, though this deadline is not enforced because the accompanying 1974 Budget Enforcement Act was allowed to lapse by Congress.

A distinction must be made between an *authorization* bill and an *appropriations* bill. Authorization bills arise from the budgetary process but only provide actual funding for *mandatory* programs—such programs (including military retirement benefits and veterans' disability benefits) do not require additional funding legislation. Budgeted *discretionary* spending, such as most military spending, is included in the authorization bill but requires subsequent congressional appropriations legislation before money can be spent on a nonmandatory budget item.

A budget resolution is a concurrent congressional resolution, and though binding on Congress, is not a law, cannot be filibustered in the Senate, and is not signed by the president. The total budget resolution is first sent to each body's Appropriations Committee. The budget resolution report includes the "302(a) allocation table," which divides the overall budgeted amounts into functional accounts. The military portion of the budget is designated as Function 50; Function 970 designates spending on

the international war on terror. The Appropriations Committee then assigns each function, via a procedure referred to as a "302(b) sub-allocation," to the appropriate congressional committee. The budget for the military functional account is reported via 302(b) sub-allocation to the House and Senate Armed Services Committees.

Draft resolutions are meant to create an overall cap on spending, including military spending. Each committee holds hearings, debates the president's budget, and often makes substantial modifications to it. The bills reported out by each committee must be approved by a full vote of the respective bodies. A House-Senate conference committee then reconciles the two bills, and the resulting conference report must be passed by another full vote of each congressional body to become binding on Congress.

Defense Department budgetary spending stood at more than \$685 billion for fiscal year 2010. This figure represents 19% of the federal budget and 28% of estimated tax revenues. If one includes non-Defense Department military spending, these percentages rise from 25% to 29% and 38% to 44%, respectively. The U.S. defense budget (not including spending for the wars in Iraq and Afghanistan, Homeland Security, and Veterans Affairs) is approximately 4% of the gross domestic product. Adding these other costs puts defense and homeland security spending at 5% to 6% of gross domestic product.

There are many elements of military spending that are not included in the Defense Department budget, including nuclear weapons, veterans' affairs and pensions, and counterterrorism. Total Defense Department budget requests for 2012 total \$676 billion.

The components of 2012 Defense Department budget, in descending order, are as follows:

- Operations and maintenance: 37%
- Military personnel: 25.8%
- Procurement: 20.4%
- Research, development, testing, and evaluation: 13.6%
- Military construction: 2.4%
- Family housing: <1%
- Revolving and management funds: <1%

Part of the U.S. Defense Department's budget is classified and is referred to as a *black budget*. Military projects not available for public scrutiny, known as

black projects or *covert operations*, are funded by black budgets. The estimate for the 2012 Defense Department black budget is \$59.3 billion (7.7%).

In 2012, the budget percentages allocated to each of the armed forces services is 25.9% for the army, 29.1% for the navy and Marines, and 27.1% for the air force. The remaining 17.9% of the military budget was allocated to defense-wide spending. For the 2011 fiscal year, the top five budgeted amounts for defense-related programs were (1) F-35 Striker aircraft, (2) ballistic missile defenses, (3) *Virginia*-class submarines, (4) brigade combat team modernization, and (5) Aegis-operating destroyers.

Defense Appropriations

The power of appropriation derives from the U.S. Constitution, which in Article I, Section 9, provides that “no money shall be drawn from the Treasury but in consequence of appropriations made by law.” The House and Senate Armed Services Committees are charged with establishing, continuing, and/or modifying the funding ceilings on each defense program and providing the budgetary authority to appropriate funds for use by federal agencies. In addition, Congress often leverages its authority to help mold defense-related policies. The sweep of the Armed Services Committees’ prerogatives allows them to effect changes to any number of Pentagon priorities and procedures, such as procurement for materiel and services, personnel policy within the Defense Department, and timely reporting to Congress from executive branch departments and agencies charged with carrying out defense and homeland security policies. For instance, Congress can kill a weapons system, close down military bases, or mandate armed forces troop-staffing levels.

Political considerations certainly can play a role in deciding the fate of specific defense programs and systems. For instance, a weapons system that has geographically dispersed the components built by a network of subcontractors may be easier to preserve than one that is localized in just one area. Nonetheless, obsolete or overpriced weapons programs can be terminated any year by Congress: In 2009, the F-22 stealth fighter was not included in the 2010 Authorization Act signed into law, effectively killing this weapons system.

A standard appropriation bill is related to a single fiscal year—the funds have to be obligated

during the fiscal year for which they are provided; they lapse if not obligated by the end of that year. However, no-year (available until spent) and multi-year appropriations are permitted.

The Armed Services Committees have historically reserved the May–June time period prior to the start of the next fiscal year to deliberate and mark up defense-related appropriation bills. By precedent, appropriations originate in the House of Representatives. The House Armed Services Committee holds hearings, debates, and marks up its appropriation bill. On passage by the full House, the Senate Armed Services Committee takes up the House bill and produces its own version.

Rules in the Senate allow any member to raise a budget *point-of-order* on any bill in which budget allocations are exceeded or tax revenues are cut below budget minimums. Thereafter, three fifths of the Senate must vote in favor to adopt the rule that is the subject of the point-of-order. (The House only requires a majority vote to override a budget point-of-order.) This is an important self-enforcement mechanism to keep appropriations within budgetary constraints.

Another budget constraint mechanism, PAYGO, was reestablished by legislation in 2007. Simply stated, PAYGO disallows any change to spending or taxing that increases the federal deficit. Any increase to the deficit must be revenue-neutral or offset by savings in other programs. In 2009, the rule was modified to provide for emergency expenditures. PAYGO does not apply to mandatory spending; discretionary spending, such as spending on defense, is subject to PAYGO rules. A point-of-order can be raised for any bill that violates PAYGO rules.

The ultimate budget constraint is a presidential veto of an appropriations bill. The president may return an unsigned bill to Congress within 10 days of receipt to effectuate a veto. Congress can override the veto with two-thirds majorities in both houses.

After Senate passage, the House and Senate Defense Appropriation Bills are reconciled into a single report by a House-Senate joint conference and then voted by each body. The bill is then sent to the president for the president’s signature, which when affixed provides the required authority for the executive branch to spend funds on the approved programs.

Appropriations for nuclear weapons programs are drafted by the House and Senate Energy and Water Appropriations Subcommittees and are

included in the final Appropriation Act signed by the president.

Supplemental Appropriations and Continuing Resolutions

The House and Senate Defense Appropriations Subcommittees throughout the year can prepare *supplemental* appropriation bills to provide funding requested outside the usual authorization and appropriations procedure. Supplemental appropriation acts provide additional spending authority during the current fiscal year when regular appropriations are insufficient to finance activities not provided for in the regular appropriation process.

Emergency supplemental appropriations are nominally utilized for unexpected expenses and as such are not part of the normal budgetary process. However, the wars in Iraq and Afghanistan were completely funded via emergency supplemental appropriations during the years 2003–2009. These incremental costs are estimated at no less than 1 trillion dollars over the course of both wars and were in addition to normal military spending. Beginning in 2010, the wars in Iraq and Afghanistan were categorized as “Overseas Contingency Operations” and included in the budget. There was, however, additional military funding sought by supplemental appropriations. For the fiscal year 2010, supplemental war funding amounted to \$37.1 billion but included money for the Afghanistan conflict as well. The total costs of war-related supplemental appropriations represented 4% of federal spending for the years 2001–2008, according to the Congressional Budget Office.

A *continuing resolution* (CR) is a type of appropriations legislation that acts as a stopgap when spending legislation has not been approved before the start of a new fiscal year. Continuing resolutions allow money to be spent at the same rate as previously authorized, until a new appropriations bill is enacted. Both houses of Congress must pass, and the president must sign, a continuing resolution before it takes effect. The extra time provided by a continuing resolution gives Congress the opportunity to resolve conflicting political views on levels and types of spending without jeopardizing important federally financed programs, including military programs. In recent history, five CRs on average have been passed each fiscal year.

Fiscal Cliff and Other Uncertainties

At the time of this writing, the outcome of the so-called U.S. fiscal cliff budget deficit reduction remained unresolved. The Budget Control Act of 2011 mandates substantial cuts to many discretionary portions of the U.S. budget as part of a deficit reduction scheme. The magnitude of proposed spending cuts is \$1.2 trillion over a 10-year period, with the first substantial cuts occurring on January 1, 2013. Half of all cuts, about \$55 billion per year, will come from military spending in a process called *sequestration*. This will lower project defense discretionary spending to 1.5% annually for the 2013–2021 periods. By way of comparison, this spending grew at an average annual rate of 8.2% from 2000 to 2011, which included spending on the wars in Iraq and Afghanistan.

Whatever the outcome of the sequestration debate, large deficits and fiscal uncertainties will no doubt exert a drag on the growth of military spending over the next decade.

Eric Bank

See also Armed Services Committee, House; Armed Services Committee, Senate; Congress, U.S.; Congressional Relations, Military; Defense, Department of

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ARAB AMERICANS

The term *Arab American* refers to the more than 4 million people living in the United States who trace their ancestry to any of the 22 nations in the Middle East and North Africa that are members of the Arab

League. Communities of immigrants from Arabic-speaking countries began forming in the late 1800s, mostly in the industrial cities of New York and Boston, but immigrants from what was then known as Greater Syria (now Lebanon, Palestine, Jordan, and Syria) quickly established enclaves in many major cities, such as Houston, Pittsburgh, Detroit, San Francisco, Birmingham, and Minneapolis, and smaller towns in Iowa, North Dakota, Oklahoma, and other states. Arabs continue to immigrate to the United States because of economic opportunities, chain migration, or because they are refugees of war and political violence. Religion is an important marker of identity for Arab Americans. The majority of Arab Americans are Eastern Orthodox or Catholic Christian, and a large percentage are Shi'a or Sunni Muslim, with smaller numbers of Druze and other sects. Because of this diversity and the fact that the U.S. Census does not recognize Arab or Middle Eastern as a distinct racial category (all people of Middle Eastern descent are officially classified as White), exact numbers are difficult to determine, both for the general population of Arab Americans and for those who serve or have served in the U.S. military. This entry discusses the role of Arab Americans in the U.S. armed forces.

Early Military Service

Although there has never been a lengthy historical investigation of Arab Americans in the military, historians and Arab American organizations recognize the long history of Arab American service in the armed forces. The Arab American National Museum in Dearborn, Michigan, lists that 13,965 Arab Americans served in World War I, most of whom were Christians from Greater Syria, a number that comes from a 1924 study by a Princeton professor named Philip Hitti. This figure is often cited as evidence that large numbers of Arabs, both Christian and Muslim, have been living in and fighting for the United States for at least 100 years. In fact, Hitti claimed that the Syrians contributed more soldiers to World War I than any other ethnic community in the United States at that time. Regardless of the accuracy of this claim, Arab American leaders and writers often refer to this World War I figure to reinforce the notion that Arabs can be and are loyal, patriotic Americans.

Some historians and organizations trace the roots of Arab military service in the United States even further, claiming that hundreds or even thousands of Arabs and Muslims, mostly former slaves from North Africa, fought in the U.S. Civil War. In fact, there is evidence that a former slave from Morocco served as a guide for General Thomas Sumter during the Revolutionary War. Again, although it is difficult to ascertain the accuracy of figures from these early U.S. wars, many Arab Americans are proud of their community's military record. As Arabs living in the United States have often been the victims of discrimination and suspicion as a result of U.S. foreign policy interests in the Middle East, military service is one visible method of demonstrating loyalty to the United States.

While it is true that people of Arab ancestry have been living in the United States for centuries, to claim that there is a continual and singular Arab American presence in the United States and its military since the U.S. colonial period is to elide the historical differences between slaves from North Africa who fought in the Civil War; Syrian immigrants who fought in World War I; second- and third-generation Lebanese Americans who fought in World War II, the Korean War, and the Vietnam War; and Arab Americans from a dozen different nationalities who are veterans of the U.S.-led Gulf Wars. In addition to these generational and national differences, there is a vast diversity in religious traditions, economic and citizenship status, political viewpoints, and self-identification (as some Arabic-speaking people do not readily identify as Arab). All of these factors, combined with the fact that the military did not record religious or ethnic/racial demographics, make it nearly impossible to determine exact figures of Arab American veterans. Most of the figures on Arab American military service, including the oft-cited 13,965 number from World War I, were determined by amateur and professional historians who scoured local and national military records, relying mostly on last names as a determining factor in a person's Arab heritage. This is problematic for numerous reasons, including the fact that many non-Arab Muslims (the majority of Muslims worldwide and in the United States are not Arab) have Arabic or Arabic-sounding last names and that many Arabic-speaking Christians

changed or Americanized their names as early as the 1880s.

General Military Experience

Even though Arab Americans are too diverse to speak of monolithically, it is possible to generalize about some aspects of their history with the U.S. military. In many ways, the experience of the Arab American community with military service is similar to other ethnic groups: Arab American newspapers, churches, and community organizations celebrated their “Syrian doughboys” during World War I, extolled the virtues of purchasing Liberty Bonds throughout both World Wars, and memorialized their veterans and created Veterans of Foreign Wars’ posts in the decades after World War II. Institutions like the Arab American National Museum and organizations like the Association of Patriotic Arab Americans in Military, founded by the U.S. Marine Jamal Baadani, continue to highlight the military service of Arab Americans as an important part of their overall history.

Stories of World Wars I and II veterans abound in the many regional and national directories that Arab American organizations published and in the histories that individuals, communities, churches, and mosques have recorded since the early 1900s. A good example is the 1943 Syrian-Lebanon Directory of Michigan, which was dedicated to the “American Boys of Syrian-Lebanon Origin, fighting for the Noble cause of Democracy” and included numerous pictures of men in military outfits and dozens of advertisements imploring the reader to purchase war bonds. In addition to print materials, many Eastern Orthodox and Catholic churches have plaques, memorials, or even associations that honor their veterans, such as the “Four Star American Legion Post” of St. John Maron Church in Williamsville, New York, named for the four Lebanese American soldiers from the parish who died in World War II.

The diversity of Arab American religious identity is also evident in the history of religious recognition in the military. It was Arab Americans who first pushed for recognition of Eastern Orthodox (Sam Matook of Rhode Island during World War II) and Muslim (Abdullah Igram of Iowa in the early 1950s) on dog tags instead of the previously used

“X,” which denoted no religion. As late as 1998, there were only three Muslim chaplains across all branches of the armed forces. Muslim chaplains did not even exist until after the Persian Gulf War, even though Arab Muslims have been serving since World War I or before. The first Muslim chaplain was an African American Muslim, but Arab American Abdullah Hulwe, who began his career in the U.S. Army as a mechanic, completed his education and became the only Muslim chaplain in Iraq in 2005.

Arab American Military Service, 1991 to the Present

According to the Association of Patriotic Arab Americans in Military, there are more than 3,500 Arab American men and women in the military as of 2011. Because of the broad range of ways that Americans with Arab ancestry self-identify, the exact number is difficult to ascertain.

James Zogby, director of the Arab American Institute, is quoted in a 1991 *Economist* article as saying,

Two words have collided and both of them are ours. . . . Suddenly in the spotlight, Arab-Americans are torn between the urge to stress their loyalty and the alarm they feel about the latest turn in Middle East events. They are represented both in the armed forces and in the peace marches.

Although this quote refers to the Persian Gulf War, it aptly applies to the position of Arab Americans within the Global War on Terrorism.

Especially after the Persian Gulf War, Arab American military personnel have been the focus of media attention for a perceived inherent conflict in serving in the military. Newspaper and magazine articles tend to single out a soldier of Arab ancestry and highlight the tensions that could exist while fighting for the United States in the Middle East. While there have been some thoughtful approaches to these issues, namely, Alia Malek’s profile of Lance Corporal Abraham Al-Thaibani in her 2009 book, *A Country Called Amreeka*, media coverage can sensationalize the position of Arab Americans in the military, which draws on the long history of Arab American positionality in the United States. One veteran of the Persian Gulf War, interviewed during

research for the Arab American National Museum's exhibit "Patriots & Peacemakers: Arab Americans in Service to Our Country," expressed concerns about what prolonged war does to the perception of Arabs among U.S. troops and also reiterated his "unwavering patriotism" that drove his decision to serve in the military in the first place.

While it is important to note that some soldiers might be conflicted, it is dangerous to generalize that all soldiers of Arab ancestry (who may or may not identify as Arab American) would be reluctant to fight in a Middle Eastern country. Furthermore, just as the Arab American community is linguistically and religiously diverse, the attitudes toward war and military service are equally diverse. In the early 1900s, the racial classification and citizenship status of Arabs were a matter of debate in several court cases. Later in the century, U.S. political and economic interests in the Middle East worked to turn popular culture and popular opinion in the United States against Arabs. This perilous position continues today with the various incarnations of the USA PATRIOT Act and military engagements in the Middle East, and the consequential heightened suspicion of Arabs, particularly Arab Muslims.

Arab Americans have held military rank from privates to four-star generals, John Abizaid and George Joulwan. While it is true that serious discrimination of Arab American service personnel has occurred, it is not necessarily the experience of every soldier of Arab, or even Muslim, descent. Many more service personnel of these backgrounds describe their service as any of their colleagues would, with anecdotes ranging from horrific to humorous, from having to deal with minor annoyances like missing their families to significant problems with injuries or posttraumatic stress disorder.

The Arabic language has become increasingly important to the U.S. military, and Arab Americans have contributed to crucial roles in translation and language instruction. According to Aladdin Elaasar, Arabic became the biggest language program at the Defense Language Institute, where he had formerly worked as an instructor, following the attacks of 9/11. Many Arab American service members became interested in military careers because of their language skills, and the U.S. military and other government entities (notably the Central Intelligence Agency) have been strategically appealing to Arab

Americans for their language skills and cultural competency. For example, in 2005, a number of Arab American veterans received letters from the Marine Corps asking them to utilize their language skills by enlisting or reenlisting in the marines. In some instances, the persons receiving these letters were 60 and 70 years old.

Conclusion

While some view the service of Arab Americans as controversial in the context of current U.S. wars abroad, their presence has led to better cultural understanding among their fellow soldiers and continued dialogue about military actions. Like Arab Americans at large, the stories of military personnel are numerous and diverse. There are veterans whose stories have been told in history books, such as Kasaam Ramadan, an Arab American Muslim who was granted citizenship in 1919 after his service in World War I, or have been enshrined in the Arab American National Museum, such as Jamal Baadani. But countless others have not yet shared their stories, or their stories may be complex and not celebratory of the U.S. military, but each new story shows how difficult it is to generalize about the Arab American military experience.

Matthew Jaber Stiffler and
Elizabeth Barrett Sullivan

See also Diversity; Global War on Terrorism; 9/11 (2001); USA PATRIOT Act

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ARCHIVES, MILITARY

Military historians have a variety of choices when researching military archives. Military archives range in size from the largest, the National Archives and Records Administration, to the smallest state and local historical societies. The various armed forces history offices and archives as well as universities, military academies, and war colleges provide ample records for the student of military history. This entry describes many of the resources available for researching military records and other information, including online resources.

National Archives and Records Administration

The largest collection of federal military records is located in the National Archives and Records Administration (NARA) at Archives I and II. Established in 1934 by President Franklin D. Roosevelt, NARA holds records dating back to 1775. Archives I is located in Washington, D.C., and holds records of the U.S. Army, Navy, Coast Guard, and Marine Corps. Most military personnel and pension records prior to 1917, including records of Confederate veterans, are located at Archives I. In addition, one can find navy deck logs, army unit records, quartermaster records, and campaign medal records to name a few.

Archives II is located in College Park, Maryland, and holds modern military records from World War I through Vietnam. A list of record groups (RG) can be found on the National Archives website, www.nara.gov. A few of the more interesting RGs follow. RG 120 covers the American Expeditionary Forces (World War I) and includes unit records. RG 92 (Office of the Quartermaster General) has detailed burial files of World War I soldiers. Records of the U.S. Marine Corps are in RG 127 and include command chronologies. RG 38 (Office of the Chief of Naval Operations) includes very detailed action

reports and ship war diaries from World War II. RG 18 (records of the Army Air Forces) contains mission reports of bomb groups and other air units. In recent years, RG 226 (Office of Strategic Service) records were declassified; most recently, NARA released Office of Strategic Services' personnel records filed by name. RG 407 (Adjutant General's Office) contains army unit records, including after-action reports, combat journals, and maps. Finally, Archives II has a complete collection of foreign military studies compiled by high-ranking German officers after World War II as well as microfilm collections of captured German and Japanese documents that were returned to their respective countries after the war.

In addition to textual records, Archives II has the Still Pictures Branch, the Cartographic and Architectural Branch, and the Motion Picture, Sound, and Video Branch. The Still Pictures Branch has the Matthew Brady photographic collection as well as the complete Signal Corps photo collection and official navy photographs and some Department of Defense photographs. The Cartographic and Architectural Branch holds military maps, including Army Map, Service maps, and the corresponding aerial reconnaissance photographs on rolls of oversize negatives. Finally, the Motion Picture, Sound, and Video Branch holds thousands of combat and military films from World War I through the Vietnam War. Much of the National Archives collection can be searched online on the NARA website.

National Personnel Records Center

The National Personnel Records Center (NPRC) in St. Louis, Missouri, is the primary source for 20th-century military personnel records. The NPRC holds millions of records of discharged military personnel from all services as well as their medical records. A fire in 1973 destroyed 80% of army records for soldiers discharged from November 1912 to January 1960 and 75% of air force records of personnel discharged from September 1947 to December 1964. There are some alternative methods of finding certain information, which are outlined on the NPRC website, www.archives.gov/st-louis. Only the veteran or next of kin can request complete files, when available, but researchers can obtain information not protected by the privacy act.

Presidential Libraries

Presidential libraries are another valuable source of records relating to American military history. Today, there are 13 presidential libraries covering the administrations of Herbert Hoover through George W. Bush. The libraries contain records relating to the military service of the presidents who served and records of some of their military advisors. For example, the Roosevelt and Truman Libraries contain valuable information on World War II and the Korean War. The Eisenhower Library contains volumes of records relating to his military career, including the Supreme Headquarters Expeditionary Force records on D-Day, oral histories with his military advisors, and his presidential records on the Korean War. Records relating to the Vietnam War can be found in the libraries of Eisenhower through Nixon.

Naval History and Heritage Command

The Naval History and Heritage Command in Washington, D.C., History and Archives Division, is the main repository of records relating to the operational history of the U.S. Navy. The bulk of the collection relates to the post–World War II navy and includes command reports, immediate office of the Chief of Naval Operations records, and some disestablished command records. The Operational Archives also has personal papers of naval personnel dating back to the 19th century, oral histories, official biographies of navy officers, and manuscripts. The aviation and ship records include command chronologies and deck logs (post–Vietnam War). In recent years, many collections have been transferred to the National Archives.

Air Force Historical Research Agency

The Air Force Historical Research Agency at Maxwell Air Force Base, Alabama, maintains a collection begun in World War II of more than 70 million pages relating to U.S. Air Force history. The repository maintains unit histories, unit lineage and honors, an oral history collection, end-of-tour reports, and personal papers of influential air force personnel. It also has records relating to the British Air Ministry and the German air force. Copies of the agencies' records are available on 16-mm microfilm at the National Archives.

Army Heritage and Education Center

The Army Heritage and Education Center (AHEC) at Carlisle, Pennsylvania, maintains an extensive

collection of unit histories, manuscripts, maps, photographs, oral histories, and personal papers. The center compiled valuable surveys from veterans of the Spanish-American War, World War I, World War II, the Korean War, the Vietnam War, the Cold War, and the post–Cold War era. A voluminous collection of photographs, including the collection of the Massachusetts Commandery of the Military Order of the Loyal Legion, a Civil War veterans' organization, is also available to researchers. Personal papers include those of Generals Matthew B. Ridgway, Benjamin O. Davis Sr., William C. Westmoreland, Eric K. Shinseki, and others. AHEC is also a source for the papers of veterans' organization such as the Battle of the Bulge Historical Association. Finally, the center maintains the largest collection of army unit histories.

Center of Military History, Historical Resources Branch

The U.S. Army Center of Military History (CMH), Historical Resources Branch, in Washington, D.C., maintains a library and an archive. The branch holdings consist of more than 57,000 items that support the publishing mission of the CMH. Collections of note are the *Annual Reports* of the Secretary of War/Secretary of the Army, complete War Department and Department of the Army general orders, station lists, and army registers for biographical information on officers. The CMH also maintains general officer biographical files. One of the most important RGs is the Historical Manuscript Collection, which consists of mostly unpublished narrative histories compiled by the CMH or field historians in support of the Official History of the U.S. Army. Another important collection is the Annual Historical Reports, compiled by all major commands. Finally, the CMH conducts and collects oral histories compiled by combat historians beginning in 1965. In recent years, the CMH has been digitizing its holdings and placing them online, so it is advisable to consult its website, www.history.army.mil/, before visiting it.

Marine Corps History Division Historical Reference Branch

The Marine Corps History Division Historical Reference Branch at Quantico, Virginia, contains more than 15,000 biographical files of prominent U.S. Marines. The branch also has subject files on

topics from the founding of the Marine Corps to the present. Unit files and geographical files contain working files on Marine Corps units, lineage and honors, and commanders, as well as information on installations and locations where marines served in war and in peace. Microfilmed muster rolls, unit diaries, and rosters prior to 1966 are also available.

Coast Guard Historian's Office

The Coast Guard Historian's Office in Washington, D.C., maintains more than 500,000 images and some documents. The Cutter Files contain photographs, news clippings, brief histories of each cutter, and some operational files. The historian also maintains biographical files and photographs of senior officers and famous personnel. The manuscript collection contains personal papers, photographs, and scrapbooks of famous personnel, including former commandants. In addition to documents, the office has several thousand books, manuals, and directives. Deck logs of Coast Guard ships are located at Archives I in Washington, D.C.

Military Academies

The Military Academies and their alumni associations are another good source of information on military personnel since many graduates donate their papers to the academy libraries. In addition to personal papers of general officers and civilians who were instrumental in air power development, the Air Force Academy Special Collections' Branch holds the archives of the Stallag Luft III veterans and the Colonel Richard Gimbel Aeronautical Library, which contains more than 5,000 books, manuscripts, and papers dating back to the 15th century. The Naval Academy has a collection of personal papers, while most of the Coast Guard Academy collection, except for a small collection of manuscripts, photographs, and annual reports, is located in the Coast Guard Historian's Office. The United States Military Academy Archives collects and maintains records relating to the official business of West Point, and the Special Collections holds more than 1,500 linear feet of manuscripts as well as maps, photographs, rare books, and the Sylvanus Thayer collection.

Naval War College Library Naval Historical Collection

The Naval War College Library Naval Historical Collection, located in Newport, Rhode Island, was

established in 1969. The library contains 304 manuscript collections, 460 oral histories, and the personal papers of Alfred Thayer Mahan and other notables. The Air War College and Army War College collections are at the Air Force Historical Research Agency and AHEC, respectively. The Special Collections, Archives and History Branch of the National Defense University Library in Washington, D.C., has a collection of personal papers of flag rank officers, photographs, rare books, maps, and artifacts. The personal paper and archive collection are currently being digitized and indexed.

Library of Congress Manuscript Division and the Veterans History Project

The Library of Congress Manuscript Division and the Veterans History Project (VHP) are two areas of interest to military historians. The Manuscript Division holds the papers of military personalities such as Ira Eaker, Carl Spaatz, Adolphus Greely, Samuel Eliot Morison, and the U.S. Army 92nd Infantry Division Collection. One of the most important collections is the Naval Historical Foundation Collection established in 1926 and deposited into the Library of Congress in 1949 as part of a partnership agreement. Today, there are more than 300 separate groups of papers covering naval history, and the Naval Historical Foundation continues to locate and add manuscripts to the collection.

The VHP collects oral history interviews with veterans and civilians who helped support war efforts and preserves them in the American Folklife Center. The project has interviews with veterans of World War I, World War II, the Cold War, the Korean War, the Vietnam War, the Persian Gulf War, and the Global War on Terrorism. Interviews with civilians include factory workers, United Service Organizations (USO) members, and defense contractors. Some of the interviews are available online, and they have an extensive finding aid. In addition to oral histories, the VHP also collects diaries, letters, and photographs.

University Libraries

University libraries are another valuable source for obtaining military records. The Vietnam Center and Archive at Texas Tech is the largest source of records on the Vietnam War outside the federal government. They actively collect, process, and make available donations from veterans and veterans' organizations such as Air America and have an ongoing oral

history project. The Hoover Institution at Stanford University holds the papers of many military personalities such as Generals Edward Lansdale, Joseph Stilwell, and Albert C. Wedemeyer. Other universities such as Rutgers, the University of Tennessee in Knoxville, and the University of North Texas maintain veterans' oral histories. Florida State University has the Institute on World War II and the Human Experience, and Williams College holds the papers of Major Charles Whittlesey of the "Lost Battalion." It is always worth checking university libraries because it only takes one collection to fill a gap in research.

Other Countries

Most nations have archives that can be good sources of military records. The United Kingdom's National Archives at Kew holds military records, including records from American warships captured during the American Revolution and the War of 1812, and British prize court records hold papers captured in American ships. The military records of France are maintained by the Ministry of Defense at two locations, in Vincennes and Châtellerault. French Navy records, for example, contain dossiers on John Paul Jones, Pierre Landais, and Joshua Barney. The German Federal Archives (Das Bundesarchiv) in Freiburg holds German military records from 1867, the Berlin-Lichterfelde branch holds military records up to 1866, the Berlin-Wilmersdorf branch holds military films and film-related documents, and the Koblenz branch holds the photographic collection.

Searching for Records

Overall, researchers should be resourceful when searching for military records. The larger federal archives are generally the first place one should consult, but do not discount state and local libraries, archives, and museums. In many cases, veterans donated their personal papers to their hometown libraries, historical societies, or their veterans' associations. Finally, always call in advance before you make a trip to an archive or library.

Tim Frank

See also Oral History

Further Readings

Many finding aids are online, but following is a select list of books and finding aids:

- Emery, G. W. (1994). *Historical manuscripts in the Navy Department Library*. Washington, DC: Naval Historical Center.
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ARLINGTON NATIONAL CEMETERY

Across the Potomac River from the Lincoln Memorial and grand buildings representing American democracy is one of the most symbolic parcels of land in the United States. Arlington National Cemetery covers 624 acres and is the final resting place of American presidents, Supreme Court justices, famous historical figures, deceased veterans, and legions of American soldiers from all U.S. wars. More than 4 million people visit Arlington National Cemetery each year for a variety of reasons. Some go to walk the beautiful parklike terrain and read the names that chronicle a nation's history, some to pay respect to military heroes, others to visit a deceased family member, and many to see a fallen family member or a friend laid to rest after dying in service of the country. The new graves remind visitors of the true purpose of Arlington National Cemetery—a kept faith between all who serve and the U.S. government—that their contributions will

never be forgotten. This entry discusses the history of Arlington, some of Arlington's popular sites such as the Tomb of the Unknowns, and recent controversies.

The land that is now Arlington National Cemetery was originally purchased in 1802 by George Washington Custis and served as a functioning plantation, with the grand Arlington House as its nerve center. The plantation eventually passed to Custis's daughter Mary Custis Lee, wife of West Point graduate Robert E. Lee. The Civil War divided the nation in 1861, and Lee resigned his commission in the U.S. Army and offered his services to the Confederate States of America, with which the Commonwealth of Virginia had sided. This decision forced the Lee-Custis family to abandon their beloved home. The property's location within artillery range of the capital made it strategically important. The federal army occupied the property immediately after the Lees's evacuation.

By 1864, the Union war dead overflowed cemeteries and hospitals around Washington, D.C. Quartermaster General Montgomery Meigs decided to appropriate 200 acres of the Lee's Arlington estate for a cemetery. Within the same property was a self-sustaining settlement of more than 1,000 freed slaves established by the government known as Freedman's Village. The plantation of the Confederacy's favorite family became both a burial ground for their enemies and a national symbol of the Union's cause.

The sinking of the USS *Maine* and U.S. entrance into the Spanish-American War in 1898 facilitated a national reconciliation between the North and the South. Following the war, President William McKinley took steps to make Arlington a national symbol, not just a Northern one. In 1900, he authorized a Confederate plot to be created within the cemetery. The plot was arranged differently than all others in the cemetery and contains the remains of soldiers who fought against the Union. A large memorial stands in the center of their graves. It is one of the more controversial sites in the cemetery; it symbolizes a complex period in the nation's history that is still debated. On Memorial Day in 2009, despite appeals, President Barack Obama continued a tradition established by Woodrow Wilson by placing a wreath at the Confederate Monument. President Obama did, however, also place a wreath on a monument honoring the service of African Americans in the Civil War.

In addition to the historically preserved Arlington House, there are other sites for visitors to experience. Among the most moving of these is the Tomb of the Unknowns (a monument dedicated to unidentified American soldiers). This tomb housed the remains of one unidentified soldier from the World Wars, the Korean War, and the Vietnam War (in 1998, this soldier was identified and moved to a family plot). Since 1948, the 3rd U.S. Infantry Regiment, "The Old Guard," has stood constant guard over the remains. Before then, the Washington Provisional Guard performed the sacred duty. For all interments within the large marble tomb, U.S. presidents have presided over the ceremonies. Each Memorial Day, a representative from the current administration



A soldier in the 3rd U.S. Infantry Regiment (The Old Guard) measures 1 foot with his boot and places a flag in front of a grave marker at Arlington National Cemetery during the annual tradition "Flags In," May 21.

Source: U.S. Army.

lays a wreath in honor of the unknowns. Every day, hundreds of visitors solemnly gather to watch the changing of the guards at each half hour. The large outdoor Memorial Amphitheater is connected to the Tomb of the Unknowns; it holds state funerals and holiday ceremonies.

The grave of assassinated president John F. Kennedy is highly frequented within Arlington. President Kennedy is joined by his wife, two of their infant children, and his brothers, Senators Robert and Edward Kennedy. An eternal flame burns over JFK's grave to symbolize the enduring legacy of one of the nation's most beloved presidents. The panoramic view of the capital city from his grave site has been called one of the most beautiful in the city.

Like many other sites that represent a national identity, Arlington National Cemetery has not been without controversy. There have been debates ranging from interment qualifications to the variety of headstones offered for placement. The ever-decreasing space and the expected influx of passing World War II veterans created more rigid ground burial qualifications in 1967, although inurnment in the Columbarium is more accessible. Increased burial qualifications have at times placed burial decisions in the political realm, causing presidents to step in and provide waivers for special considerations.

The terrorist attacks of 9/11 took the lives of both uniformed military personnel in the Pentagon and civilian Department of Defense employees, who were not eligible for burial in Arlington. Many of the civilian employees were buried in Arlington, nonetheless. This sparked a very public debate. In 2008–2009, a movement was begun to end funeral policies that excluded low-ranking soldiers from the full funeral ceremonies afforded to high-ranking officers. With the unconventional warfare taking place in the Middle East during the period, it seemed unfair to follow segregating funeral policies. Beginning in 2009, all soldiers being interred in Arlington received the same honors.

In 2010, national media frenzy surrounded Arlington when it was discovered that hundreds of graves were mislabeled or missing. This shook the unwavering faith that many Americans placed in Arlington and caused administrative changes. The U.S. Army began an extensive mission to map the entire cemetery and assess exactly what the extent of the mishandling was. Regardless of the many recent controversies, Arlington remains one of the most powerful symbols of service and sacrifice to the United States of America. Careful planning and land acquisitions have ensured that the cemetery will remain active until approximately 2060; there are



Grave of John F. Kennedy and Jacqueline Lee Bouvier Kennedy Onassis in Arlington National Cemetery.

approximately 25 new burials each day in Arlington over a 5-day week.

Richard A. Hulver

See also Cemeteries, Military; Civil War, American; Family, Military; War Dead, Disposition of

Further Readings

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ARMED FORCES RADIO AND TELEVISION SERVICE

The Armed Forces Radio and Television Service (AFRTS) offers 24-hour access to news, information, and entertainment. AFRTS, headquartered in Fort George Meade, Maryland, operates as part of the Department of Defense (DOD). The service communicates DOD policies, priorities, programs, goals, and initiatives. AFRTS provides stateside radio and television programming through various services to U.S. service members and DOD civilians and their families serving outside the continental United States. The AFRTS operation is enabled by three branches, of which the American Forces Network (AFN) is the operational arm: The Radio and Television Production Office, the Pentagon Channel News-Center, and the Defense Media Center (DMC). This entry examines the history and services of the AFRTS and the recent impact of the Internet and social media. The entry concludes with a discussion of AFRTS's satellite networks and the scale of its operation.

Historical Roots

The birth of the AFRTS can be traced to early military radio stations appearing in the Panama Canal Zone, Philippines, and Alaska just prior to World War II. The success of these early radio stations paved the way for the Armed Forces Radio Service (AFRS). The War Department officially established

AFRS in 1942 with a mission of providing programming, shortwave service, and broadcast equipment for U.S. military locations overseas. The AFRS grew significantly from there, with the addition of Armed Forces Television at Limestone Air Force Base, Maine, in 1953 as an experimental station. In 1954, the television mission was officially recognized, and AFRS became AFRTS. The AFRTS grew from then on, providing radio and television service to U.S. combat forces overseas, quickly expanding during the Korean and Vietnam Wars. During Operation Desert Shield/Desert Storm, AFRTS provided service to U.S. combat forces. In a few short months, AFRTS built an extensive radio network and established a limited television service in the desert, providing familiar news, sports, and entertainment programs to the thousands of troops deployed to the region. More recently, AFRTS has deployed to Somalia, Haiti, Croatia, Bosnia, Hungary, Macedonia, Albania, Kosovo, East Timor, Central America, and the Operation Enduring Freedom and Operation Iraqi Freedom areas of operations.

The Services

The AFRTS is composed of several elements serving in different roles but working toward a unified programming.

The Radio and Television Production Office

The Radio and Television Production Office produces, acquires, and approves radio and television spot announcements for AFRTS and the Pentagon Channel. As AFRTS and the Pentagon Channel have a selective audience, their commercials are tailor-made for the audience at hand. The Radio and Television Production Office is the only activity within the AFRTS system authorized to release spots for worldwide broadcast.

The Pentagon Channel (Television and Online)

The Pentagon Channel, launched in the United States on May 14, 2004, is the newest arm of AFRTS. The DOD-operated internal communications channel is also distributed by satellite overseas as a channel of the AFRTS and domestically to military bases, reserve centers, and National Guard armories. A growing number of U.S. satellite and cable carriers are also making the channel available to their viewers. The Pentagon Channel's goal is to

provide military viewers timely access to news and information about the DOD.

The Defense Media Center

The DMC is run and operated by military broadcasting personnel, as well as civilian employees, ensuring 24-hours-a-day programming. A variety of news, information, and sports programs from all the major networks is transmitted live from the DMC to the various arms of the AFRTS.

The American Forces Network

In addition, the AFN provides a mix of American television programs seen stateside on major broadcast networks as well as major cable channels. Different AFN services are carefully designed to serve different audiences, or to give the audience more choice, rather than compete for regional audience pools.

AFRTS programs are distributed without censorship, propagandizing, or manipulation, in accordance with DOD Directive 5120.20 and DOD Regulation 5120-20R. Program content is unchanged and commercial-free; therefore, all

commercials are replaced with AFN program promotional announcements, DOD internal information, and other public service spot announcements of interest to DOD personnel and their family members.

AFRTS at Present

Although the AFRTS was the largest radio and television service in the world by 1985, the advent of new media has raised issues concerning the role and place of AFRTS within the contemporary experience of DOD personnel abroad. Social and mass media have changed the way DOD personnel communicate and receive information and programming while serving. The news, television shows, and official message services can now be accessed online; however, access is contingent on satellite proximity, bandwidth access, and regional censorship restrictions. Although its goal is not to compete for an audience with main broadcast and entertainment providers, the AFRTS's creation of the Pentagon Channel in 2004 and the launch of the online version in a similar format to that of a popular social media site suggest an effort to remain relevant.



U.S. Air Force Senior Airman Natalie Anderson, of American Forces Network, broadcasts AFN Radio station 94.1 throughout Bagram, Afghanistan, December 21, 2006.

Source: Photo by Staff Sergeant Marcus J. Quartermann.

Despite the nature of mass media and social media, unrestricted access to the aforementioned services cannot be guaranteed to all DOD personnel located in the 177 countries or regions where the United States has deployed. As such, the advent of new forms of communication has not yet precluded the need for the AFRTS and its services abroad. The continued relevance and evolution of the AFRTS will depend on the demand and availability of the services offered in an increasingly individual-based communications era.

Scale of Operation

The AFRTS provides 24-hour access to news, information, and entertainment. To do so, the AFRTS employs personnel from across all branches of military service as well as civilians to meet the technical and content requirements for each aspect of the operation.

Allowing the AFRTS to bring “a slice of home” to service members and their families, two distribution networks enable the operation. A satellite network of six satellites positioned around the globe, in conjunction with the Direct-to-Sailor system of three satellites, provide television feeds. Intelsat Galaxy satellites provide service to the Atlantic and Pacific satellites. Linked Intelsat satellites over the Atlantic provide signals to serving personnel in Africa, the Middle East, as well as Iceland and Portugal. In the Pacific, two satellites carry the AFRTS signal to DOD personnel in Japan and Korea.

Due to the density and proximity of service personnel in Europe, a superstation concept is used to deliver radio and television services across the continent. Eutelsat HotBird satellites are used to disseminate and receive the feed throughout Europe, North Africa, the Middle East, and many parts of Southwest Asia.

All AFRTS satellite transmissions use the Scientific-Atlanta PowerVu® digital compression system, allowing the transmission of multiple channels (television and radio) through a single satellite transponder. This system employs digital conditional access encryption, protecting the feed from being received by unauthorized audiences or “shadow” audiences.

Although exact audience numbers are unclear, the Direct-to-Sailor alone reaches 300 military ships. The intended audience can be assumed as the

number of personnel currently serving in the U.S. armed forces; however, there exists a substantial unintended audience in areas where access is available to non-DOD employees. No official figures exist for the size of the “shadow” audience worldwide, but a study of the audience in Japan found that one fifth of the local population accessed AFRTS radio at least once a week. Similar figures can be assumed in other regions of the world.

Ariel Garneau

See also Communication; *Stars and Stripes* (Newspaper); Television

Further Readings

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Website

The Pentagon Channel: <http://www.pentagonchannel.mil/>

ARMED SERVICES COMMITTEE, HOUSE

The House Armed Services Committee is a standing (permanent) committee that serves as the main body dedicated to legislative policy research and Defense as well as Energy agency oversight within the House of Representatives. It is a key component in the larger national defense establishment, including the Department of Defense, national security staff, elements of the Department of Energy, portions of the Department of Homeland Security, as well as military-industrial interest groups. This entry provides an overview of the basic public policy jurisdiction, historical development, and legislative, representative, and oversight activities, as well as organization, key personnel, and related liaison endeavors of the House Armed Services Committee. It is primarily through this committee that the House

influences the setting of American foreign and domestic policies relative to the American military. It does this in conjunction with its sister committee in the Senate, the congressional intelligence committees, and civilian as well as military intelligence agencies, the White House, Pentagon, and relevant components of the larger political parties as well as interest group communities.

Public Policy Jurisdiction

The House Armed Services Committee has jurisdiction over most public policies as reflected in the legislative, representative, and oversight roles of the larger House of Representatives as they pertain to the American national defense establishment. More specifically, this committee looks at issues, develops policies, and investigates the activities common to the defense realm. These activities can include weapons procurements, base resource allocations, governing of the Selective Service System, research and development project promotions/evaluations relative to warfighting, deterrence, as well as military peacekeeping/enforcing missions. Other such activities also under the purview of the House Armed Services Committee include military force deployments, combat and logistical training scenarios, mission assessments, funding authorizations, and disseminations to the various branches of the American military, as well as personnel education, evaluation, housing, rationing, and associate dependent civilian care. At times, policy jurisdiction is shared with various other committees in the House due to the multiple referral phenomena as well as the post-9/11 creation of the Homeland Security Committee. Also, the increased employment of committee/subcommittee task forces and commissions has further decentralized the policy process affecting intercommittee and full House relations.

Historical Development

The House Armed Services Committee was created when two previous committees, the House Military Affairs and House Naval Affairs Committees, were combined in the wake of the Legislative Reorganization Act of 1946 and the creation of the Defense Department in 1949. During the era of militia independence in the 19th century, a separate committee devoted to militia affairs, begun in 1835, was utilized for policy making and oversight in that arena. However, that committee was co-opted by

the Military Affairs Committee as part of a broader attempt to centralize military organization and administration in 1911.

The House Armed Services Committee has often been seen as a “junior partner” in security issues, often overshadowed by its equivalent in the Senate due to that institution’s larger constitutionally specified role in foreign relations. However, it has historically played and still plays a major role in military budgeting. This is particularly true in the coordination of national security goals with local constituent needs as seen in structural policy construction. The major impetus for this high-profile role in budgeting, even relative to the Senate Armed Services Committee, derives from the constitutional grant of origination for revenue bills being vested in the House rather than the Senate.

After the Republican Party gained control of the Congress in the 1994 elections, Speaker Newt Gingrich led a reorganization effort that included changing the name of the House Armed Services Committee to the National Security Committee in an attempt to refocus the committee’s efforts toward more strategic over structural policy formation. When the Democrats regained control over the House after the 2006 midterm elections, they returned the committee’s historic name. Despite a reversal of party control in the wake of the 2010 congressional elections, the Republicans have retained the traditional name of the committee. However, regardless of name, the committee has continued to expand its efforts in strategic policy influence while maintaining its dominance in structural type policy making, especially since the 9/11 terrorist attacks.

Legislative, Representative, and Oversight Roles

The House Armed Services Committee reviews all bills that pertain to its area of jurisdiction in military and naval affairs, and it conducts hearings and engages in markup sessions that write and rewrite legislation, usually after referring it to one or more of its component subcommittees. Then, the full committee votes to report the bill out for consideration by the rest of the chamber, with a committee report that recommends the legislation for passage by discussing its attributes and summarizing its main contours. Most of the members of the House Armed Services Committee come from districts that have strong military or military support constituencies;

thus, part of the representative role of these members is to provide information relevant to them and bring their concerns to the legislative construction process on the committee. Finally, most House oversight involving defense actors occurs in this committee with the prosecution of hearings, commissioning of reports, and conduction of investigations of military and related activities.

Organization/Key Personnel and Liaison Activities

The House Armed Services Committee is organized by the majority and minority parties of the House of Representatives led by a chair and a ranking member, respectively. In 2013 the chair was Howard “Buck” McKeon (R-CA), and the ranking member was Adam Smith (D-WA). The number of members in the committee is set by House Rules and always reflects an overrepresentation of the majority party. The number and jurisdictions of the subcommittees are also set by House Rules and committee desires.

There are seven subcommittees: (1) Readiness, (2) Seapower and Projection Forces, (3) Tactical Air and Land Forces, (4) Oversight and Investigations, (5) Emerging Threats and Capabilities, (6) Strategic Forces, and (7) Military Personnel. The subcommittee chairs are always selected by the majority party, but seniority is the primary determinant of rank within the various subcommittees and the committee as a whole within each party block. The committee and its attendant subcommittees have ongoing relationships with various elements of the national defense establishment, including the military branches, defense contractors, and relevant labor as well as policy interests. In the past, these relationships were seen to be largely elitist in orientation, constituting subgovernments or iron triangles (policy-making relationships between congressional committees, executive agencies, and interest groups); today, they are seen as more pluralistic issue networks composed of shifting coalitions regarding the construction of military and naval policies.

In conclusion, this entry has examined the major policy, historical, political, and structural characteristics of the House Armed Services Committee.

Matthew Mark Caverly

See also Armed Services Committee, Senate

Further Readings

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ARMED SERVICES COMMITTEE, SENATE

The Senate Armed Services Committee is the main legislative body responsible for policy construction and oversight relative to the American armed forces. This entry provides a brief overview of the committee’s purpose, organization, historical development, and place within the larger national security community.

Legislative and Oversight Purpose of the Senate Armed Services Committee

The committee’s sphere of public policy includes all legislative and oversight activities that the Senate engages in relative to the American military and its corresponding policies. The committee has primary legislative review of bills and resolutions that deal with military activities and prerogatives such as basing, funding, weapons procurement, strategic and structural policies, personnel recruitment/retention, training, and real-world force deployments, as well as the evaluation, revision, and articulation of military mission parameters, objectives, and overall national security strategies.

The committee plays a prominent role in national security policy construction, with entrenched relations between it and the president, the National Security Council, its sister committee in the House, the Senate and House Foreign Relations/Affairs Committees, the Pentagon, foreign and domestic intelligence agencies, and relevant aspects of the domestic and foreign interest group communities. The committee has primary oversight of the Pentagon and conducts the majority of hearings,

investigations, and associated legislative markup activities on bills/resolutions as well as issues that the Senate deals with relative to the American military establishment. As a corollary to the above activities, the majority of the members of the Senate Armed Services Committee represent state constituencies that have large military/veteran populations, military bases, and military-industrial corporations/businesses as well as associated civilian work forces.

Organization

The Senate Armed Services Committee is led by a chair, Senator Carl Levin (D-MI) in 2013, and a ranking member, Senator James M. Inhofe (R-OK). The committee's membership and subcommittee composition are controlled by both committee rules and larger senatorial rules. As of now, the committee has six subcommittees devoted to several specific areas of defense policy activities: (1) Airland, (2) Emerging Threats and Capabilities, (3) Personnel, (4) Readiness and Management Support, (5) Seapower, and (6) Strategic Forces. The composition of the committee and component subcommittees is always weighted in favor of the majority party; however, this committee has a long history of bipartisanship, though this norm is declining.

Historical Development

The Senate Armed Services Committee was created out of the merging of the Senate Military and Naval Committees due to the Legislative Reorganization Act of 1946. This was part of a larger centralization of military capabilities that established the National Military Establishment, the Central Intelligence Agency, the National Security Council, a separate Department of the Air Force, and the Department of Defense by 1947. Prior to this, the Senate Militia Committee, a by-product of federalism, was merged with the Senate Military Affairs Committee in the wake of the First World War to improve oversight and legislative markup capacities within the Senate.

Due to the Senate's prominent constitutional role in foreign affairs, this committee has always been seen as a power committee within the Senate, unlike its counterpart in the House. Also, the general prominence of all senators relative to representatives as well as the prominence of America's strategic situation in the world order has given this committee a strong voice in the promotion, evaluation, and revision of American military policy since its inception.

For a brief period, the Armed Services Committee declined in prominence with the end of the Cold War; however, the Persian Gulf War and the post-9/11 Afghanistan and Iraq Wars have all contributed to the reemergence of this committee as a power player in senatorial and broader national politics.

Place in the Broader National Security Community

The Senate Armed Services Committee has been seen by theorists to be governed by two competing notions of policy influence and construction. Earlier work claimed that the committee was largely an elitist cabal that created policy in subgovernments with the relevant portions of the defense and military-industrial sectors. However, in the wake of the Vietnam War, these iron triangles (policy-making relationships between congressional committees, executive agencies, and interest groups) were displaced by larger issue networks of shifting coalitions that redefined defense policy making in a more pluralistic manner. The 9/11 attacks have made the committee a decisive place of political action regarding debates over support or opposition to the executive branch's national security agenda. Furthermore, this activity has taken on an increasingly partisan character, fundamentally altering the legislative-executive dynamic in this area of public policy.

Finally, the committee plays a prominent role in the appointment process for commissioning officers in the armed services. This power derives from the constitutional fiat to "give advice and consent" relative to presidential appointments. All officers of the armed forces are tacitly appointees by the president and hence subject to review and confirmation (by a simple majority vote) in the Senate. This is a largely unused authority, defined more by acquiescence to the routines of the commissioning and promotions process. However, it has been employed by the Senate (and the Armed Services Committee in particular) as a way to check presidential power or, at the very least, bring attention to issues of concern. The 1991 Tailhook scandal was one such example of the committee exerting political pressure on the executive branch by holding up promotion confirmation reports to call for a deeper investigation into the sexual assault allegations.

In conclusion, this entry has examined the role that the Senate Armed Services Committee plays in the larger political milieu of American military

affairs. In particular, the entry looked at the committee regarding its authority and composition, historical development, relationship to the rest of the Senate, the political-military-industrial complex, and the executive branch including the presidency.

Matthew Mark Caverly

See also Armed Services Committee, House

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ARMOR, BODY

The concept of body armor has existed from the dawn of humanity as people developed weapons and sought to defend themselves against their aggressors. As weapons have grown in sophistication, so has body armor. Body armor is a piece of protective equipment worn on or around the torso to prevent damage to a person's vital organs. There are many different types ranging from ancient hoplite (Greek) leather vests and medieval plate armor to modern-day flak jackets and ballistic vests. Armor can be of two varieties, soft or hard. Soft armor consists of multiple layers of protective fabric. Soft armor is generally used by police officers, civilians, and bodyguards. Hard armor consists of a vest with pockets in which the wearer places metal or ceramic plates to increase the level of protection. Hard armor is utilized by military combat personnel and police tactical units. Body armor is an ever-evolving piece of equipment that will continue to change as the nature of weapons is altered. This entry discusses the

development of body armor and describes the types of body armor used by U.S. and other armed forces, with a focus on the U.S. military.

Background

Pre-1941

Though ancient and medieval armies made wide use of body armor, its usage generally ceased with the advent of gunpowder weapons; however, researchers took up its development again in the 1860s. One of the first successful attempts at bullet-resistant armor was developed in Korea following its 6-week engagement with the French during 1866 in response to the increasing firepower of Western armies. The model consisted of a vest made with 13 layers of cotton, the minimum amount determined necessary to stop a bullet.

One of the earliest documented usages of modern body armor occurred during a police shootout in 1880 with the Australian bushranger Ned Kelly. The armor consisted of plough mouldboards that covered his torso, upper arms, and upper legs. Though the armor withstood the projectiles, it could not protect his legs from the wounds that slowed him down and led to his capture. Using his design to develop various models, which were all too heavy to be practical, including the Brewster Body Shield, weighing 40 pounds, developers sought to create more durable armor with better protection while simultaneously making it lighter following World War I.

Post-1941

During World War II, armor development shifted focus from the ground to the air. Great Britain developed the early-model flak jacket for use by the Royal Air Force (RAF). The flak jacket, which weighed 25 pounds, consisted of a vest of ballistic nylon with manganese plates sewn into it and was designed to protect aircraft crew from low-velocity shrapnel fragments caused by the destruction of other planes or the explosion of artillery shells. It was too bulky for RAF pilots in their bombers, so the RAF offered the equipment to the U.S. Army Air Forces, for whom it became a defense standard, and U.S. Navy aircraft carrier personnel.

In 1969, after the failures of the M-1951 and the T65-2 armor models due to their inability to stop bullets, the Barrier Vest was created by American Body Armor. The Barrier Vest mixed the concepts of soft

armor and hard armor by combining quilted nylon with steel plates. In the 1970s, DuPont created a more effective and popular bullet-resistant vest made with a new material named Kevlar. Kevlar armor functions by redirecting the energy of the bullet as it strikes the vest, resulting in the dissipation of force at the point of impact and causing a mushrooming of the projectile. Kevlar armor was flawed in that if high-velocity bullets struck the vest, the energy that was dissipated from the impact point could result in lethal blunt force trauma. As such, further protection has been developed for current use.

Current Armor

The nylon flak jacket was gradually phased out after the invention of the Personnel Armor System for Ground Troops Vest (PASGT-V), which was also designed to reduce shrapnel damage. The new vest, part of an overall protection package called the Personnel Armor System for Ground Troops, that included a new style of helmet as well, was created in the early 1980s and continued to be used up until its phase-out in 2004. The PASGT-V used Kevlar for the first time in a U.S. military vest as opposed to the ballistic nylon. This armor was created with a better fit and weighed anywhere from 7.5 to 11 pounds, depending on the size of the vest. Because of its manner of construction, the PASGT-V offered greater movement, flexibility, and compatibility with other clothing than any previous model.

The PASGT-V can also be upgraded with the Interim Small Arms Protective Overvest, which offers an increase in protection from small arms fire in the front and back of the vest by adding more plate layers to both sides. The Interim Small Arms Protective Overvest can also be used to augment the Ranger Armor Vest and the Combat Integrated Releasable Armor System (CIRAS) vest to improve the wearer's protection from small arms to the back.

Ranger Armor Vests and CIRAS vests were used exclusively by U.S. Special Operations Command troops. CIRAS vests are unique in that they come equipped with a release cable. One pull of this cord releases the vest from the body and makes treatment by medical personnel vastly easier.

From 2004 until today, the PASGT-V has been gradually replaced by the Interceptor model of armor. The Interceptor protects from both shrapnel and ballistic damage more efficiently than the previous

models by making better use of protective plates in conjunction with woven Kevlar and weighing less than previous models. The newest models of armor have two variants, the original Outer Tactical Vest (OTV), used with the small arms protective insert plates, and the Improved Outer Tactical Vest (IOTV), used with the enhanced small arms protective insert plates. The OTV was used from 2004 to 2007, when it was replaced with the IOTV for the U.S. Army. The U.S. Marines adopted the OTV but soon scrapped it and developed a system of armor of their own called the Modular Tactical Vest. Some U.S. Navy ground troops utilize the MTV, while others use the IOTV. All models of the Interceptor include pockets that hold the protective plates that are made of steel, ceramic, or lightweight carbon boride. All modern armor also has the ability to attach groin and neck protection.

Classifications

All armor used in the United States is rated by the National Institute of Justice of the U.S. Department of Justice. The National Institute of Justice has six formal classifications for rating armor: Types I, II-A, II, III-A, III, and IV; higher number types protect from more damaging ammunition and higher velocities. Military-grade armor must have a protection rating of at least III-A, though most have a rating of III.

Future Developments

Currently, researchers are working to continue making the armor as light and effective as possible. One major improvement coming soon is a change to the Interceptor model. Currently, the model uses 20-plus layers of Kevlar, but there are plans to replace the Kevlar with a new M-5 fiber that has a weight about one third of Kevlar.

Looking into the next 5 years, a new fabric is being developed by Dow Corning named Deflexion. The theory behind this silicon-based fabric is that it will be the best of both the soft and the hard armor concepts. The Deflexion armor will be flexible and soft when the wearer is in motion, but on impact, it will harden to a near-solid state providing maximum protection. The secret of this fabric lies in its molecular structure. The molecules move around freely under normal conditions, but on impact, they become compressed and spread the impact across the surface of the armor.

Another innovation that could potentially be coming to body armor stems from the inspiration given by a deep-sea mollusk. The mollusk has a shell consisting of three layers. The first layer is made of iron sulphide particles. The second layer is spongy. The third layer is a general layer of protection. Translated into armor, this would result in a three-layer model, where the first layer would form tiny cracks on impact so as to prevent more extensive damage to the rest of the suit, the second layer would absorb the majority of the impact, and the third layer would provide the remainder of the needed protection.

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See also Helmets; Infantry; Uniforms

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ARMORED VEHICLES

In broad terms, armored vehicles provide protection for their occupants and vital systems while transporting them on the battlefield. While many aircraft and watercraft incorporate armor, in the modern military lexicon, *armored vehicles* generally refers to ground combat and support vehicles. Armor is not an end in itself but provides protection to increase a vehicle's survivability for it to fulfill a purpose. Armies since World War I have employed armored vehicles in a variety of roles including, but not limited to, transporting infantry, security operations, command and control, air defense, chemical warfare, artillery support, reconnaissance, medical evacuation, and recovery operations. Many law enforcement and paramilitary organizations also use armored vehicles. Armored vehicles range in size and weight from the main battle tank to armored trucks. However, the term *tank* generally refers to a specific category of vehicles and often leads to

assessments of a military's strength in terms of tanks *and* armored vehicles. Therefore, this entry focuses on vehicles other than tanks.

Historical Background

Designs of armored vehicles correspond with their purpose in a given threat environment. Armor and propulsion are not ends in themselves but a means of protecting mechanical, electronic, and human systems and facilitating their effects on the battlefield. Additionally, armored vehicle design and capabilities should correspond to an army's tactical doctrine. One of the most important functions armored vehicles perform is the movement and protection of dismounted infantry. As warfare became increasingly mechanized in the second half of the 20th century, the need to support rapidly moving armored units spurred the development of armored infantry carriers, a departure from the armored cars introduced in the pre-World War I era. During World War II, Allied and Axis armies employed infantry carriers combining wheels and continuous track systems, called half-tracks. These vehicles featured open transport bays that offered poor protection for the infantry. The postwar period saw the emergence of the armored personnel carrier (APC), such as the American M113 series, designed to move the infantry into the battle area protected against the effects of small arms and artillery. The M113 and similar armored vehicles were "battle taxis," meant to bring the infantry close to the battle, where they dismounted and fought on foot.

The Soviet Union changed the nature of infantry transport in 1970 when it began producing the Boyevaya Mashina Pekhoty (BMP), the world's first infantry fighting vehicle (IFV). Unlike armored personnel carriers, the IFV incorporates specific design features that allow the infantry to remain in and fight from the vehicle or dismount and fight on foot. The United States produced the M2/M3 Bradley fighting vehicle in response to the Soviet's BMP program. Both IFVs had ports through which the infantry could fire and offered increased protection against nuclear, biological, and chemical weapons. Most IFVs mount powerful weapon systems with an offensive capability, in contrast to the medium- and heavy-machine guns commonly found on armored personnel carriers. The development of antitank missiles in the 1960s provided a lightweight,

tank-killing weapon that U.S. and Soviet designers quickly married to their respective IFV platforms. These vehicles comported to Soviet and American doctrine that called for close coordination between tanks and supporting infantry.

A single armored platform often supports vehicle variants meant to fulfill a number of battlefield roles. For example, the M113 family of armored vehicles provided a number of variants, including command and control, antitank missile, medical evacuation, engineer, and fire support vehicles. Variants of the Bradley IFV have included a Stinger missile air defense variant, a combat engineer variant, reconnaissance variant, and fire support variant. The purpose of these vehicles is to protect these systems in a combat environment.

Armored vehicles operate most effectively in environments that facilitate their mobility and allow their weapon systems space for long-range targeting. In environments where vehicles must remain on established roads, they become vulnerable to ambush, mines, and improvised explosive devices (IEDs). In the 1980s, the Afghan mujahideen effectively targeted the Soviet Union's armored vehicles in regions of Afghanistan where that country's severely mountainous terrain restricted vehicle movement to narrow, poorly constructed roads. Similarly, during the Vietnam War, the Viet Cong mined the roads of Vietnam and ambushed U.S. armored vehicles that could not venture into the swamps and jungle. Urban environments offer perhaps the most dangerous environment for armored vehicles. Multistory buildings give enemy antitank teams vantage points from which to employ close-range antitank weapons against vehicles' thinly armored top decks and turrets. Snipers and hidden machine guns force vehicle crews to button up, limiting their visibility and ability to engage dismounted threats. Cities with underground sewer systems permit the placement of explosives underneath armored vehicles, the least protected area for those platforms lacking mine-resistant, v-shaped hulls and high ground clearances. The Russian army's experience fighting in Grozny in the late 1990s demonstrated the vulnerability of armor, unsupported by dismounted infantry, in an urban battlefield.

Characteristics and Roles

The purpose that the vehicle serves dictates its characteristics, which one can describe in terms of mobility,

firepower, and survivability. *Mobility* refers to the ability to traverse various types of terrain, often without the benefit of well-established road networks. Heavy woodlands, marshes, jungles, and mountains all present significant mobility challenges to all forms of armored vehicles. The key to cross-country mobility is the distribution of weight across the greatest possible surface area. Vehicle propulsion systems consisting of continuous tracks or "caterpillar" tracks have proven very effective at providing cross-country mobility, allowing for heavy-armor and -weapon systems. Because tracked armored vehicles require significant logistical infrastructure for support and maintenance, they are less cost-effective for paramilitary organizations and militaries with limited budgets. Tracks also tend to destroy vegetation and tear up roads. These tendencies, combined with their intimidating size, often make tracked armored vehicles less than ideal for security and assistance operations requiring close relationships with the local population.

When mission requirements dictate that forces primarily travel on established roads or when forces wish to maintain a less imposing presence, wheeled armored vehicles offer an alternative. Wheeled vehicles distribute the vehicle's weight across four to eight tires, which make them less effective at cross-country travel but also less destructive of road networks. Less weight means not only less armored protection and firepower but also fewer logistical requirements. For example, to idle for 8 hours, the American M1A2 Abrams main battle tank requires 300 gallons of diesel, while an M1126 Stryker Infantry Carrier Vehicles will not exhaust its 55 gallon fuel tanks. Wheeled vehicles also offer a less imposing image to local populations, making them better suited for use in operations other than high-intensity maneuver war.

In addition to tactical mobility, different types of armored vehicles possess differing levels of operational and strategic mobility. Operational mobility is the ability to move within a theater of conflict. Moving tracked armored vehicles several hundred miles within a theater without causing significant wear on their tracks and engines requires heavy equipment trailers. Conversely, wheeled armored vehicles can move rapidly within a combat theater under their own propulsion without any significant maintenance requirements. Strategically, wheeled armored vehicles can travel into a combat zone as cargo on heavy lift aircraft more efficiently than

heavy tracked vehicles. As a matter of practice, however, deploying large numbers of wheeled or tracked armored vehicles requires sealift capabilities and extensive port infrastructure.

Armored vehicles possess various levels of firepower depending on their purpose. *Firepower* describes the weapon systems a vehicle possesses, although one could also include, where appropriate, the firepower of the infantry soldiers a vehicle carries into battle. Vehicles designed to carry infantry and to engage in direct-fire combat such as the Russian BMP series and the American M2/M3 Bradley fighting vehicle have weapon systems capable of defeating other armored vehicles and even tanks. In contrast, armored vehicles such as the mine-resistant ambush-protected vehicles' series, which the United States purchased for counterinsurgency operations in Iraq and Afghanistan, mount medium- or heavy-machine guns primarily for close protection of the vehicle. While mine-resistant ambush-protected vehicles often engage in direct-fire combat, they are not designed to encounter other armored vehicles and, therefore, require less firepower. Armored, self-propelled artillery possesses extremely powerful weapons, but to provide indirect fire support, not to engage other armored vehicles. Recovery, fire support, and command and control vehicles also possess limited firepower.

The thickness and design of a vehicle's armor determine the level of protection the vehicle offers to its crew and internal systems. The term *survivability* refers to the combination of all systems that protect the vehicle and crew from enemy weapons. Fire suppression systems, compartmentalization, reactive armor, and the location of ammunition and fuel tanks all affect vehicle survivability. Battlefield threats include direct-fire weapon systems, artillery, air attack, mines and other buried explosive devices, and vehicle obstacles. Here again, the vehicle's purpose dictates the level of protection, generally characterized by the vehicle's capability to withstand damage from battlefield threats. Armored vehicles characterized as "heavy" armored vehicles can withstand significant damage from all but the most powerful antitank systems. That protection comes at the cost of increased weight from armor and tracked propulsion systems. "Medium" armored vehicle carry enough armor to prevent artillery shrapnel and heavy-machine gun rounds from penetrating the vehicle, but antitank systems are often too powerful

for these vehicles. For this reason, the United States upgraded its Stryker vehicles with "slat" armor to defeat rocket-propelled grenades before deploying those systems to Iraq. Most small-caliber weapons cannot penetrate "light" armored vehicles, but most heavy weapons can defeat their armor. There is no such thing as impenetrable armor; for example, armor-piercing ammunition may allow heavy machine guns and large-caliber sniper rifles to penetrate medium- and even heavy-armored vehicles.

Armies and paramilitary organizations faced with few threats from antitank weapons or armored vehicles, but with many threats from mines and improvised explosives, require vehicles with unique armor profiles. This was especially true when circumstances dictated that the U.S. military execute counterinsurgency operations in Afghanistan and Iraq, where insurgents quickly adopted the improvised explosive device as their weapon of choice. The U.S. armor vehicle fleet was, up to 2003, optimized for maneuver warfare against similarly armed enemies, so a heavy emphasis went to maintaining large fleets of tanks and heavy armored vehicles. Counterinsurgency operations required large numbers of vehicles to patrol the streets of Baghdad and roads of Afghanistan. After initial attempts to increase the survivability of unarmored vehicles proved ineffective, the American military deployed vehicles designed specifically to defeat the improvised explosive device threat. These vehicles had long been present in the inventories of nations dealing with low-intensity security threats. South Africa's security forces developed similar vehicles during the last decades of the 20th century to defeat similar threats.

Conclusion

For almost a century, armored vehicles have operated on almost all the world's battlefields, as a means to increase the mobility, survivability, and lethality of soldiers and systems. Specially designed versions have demonstrated their worth in peacekeeping, peace enforcement, internal security, and counterinsurgency operations. Vehicles operating in environments for which their developers intended them have, in general, been very effective. When armies mismatched vehicles to the environment and mission, the results have often been devastating. However, armored vehicles, despite their cost and

logistical demands, will likely remain present in the inventories of the world's armies for the foreseeable future.

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See also Afghanistan; Iraq Insurgency (2003–2011); Mines, Land; Tanks

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ARMS, SMALL

Small arms comprise weapons designed to be carried by individual personnel into combat—most notably service rifles, sidearms, and specialized weapons. These weapons utilize the concept of direct fire, that is, an uninterrupted line of sight through which to engage a target. Their main role is to neutralize enemy infantry units in medium- to close-range combat. Each type of weapon has specific attributes that make it best for a distinct situation. This entry describes the types and features of small arms used by the U.S. military.

Service Rifles

Modern service rifles are known as assault rifles, meaning they combine the power of a traditional single-shot rifle with a faster rate of fire and high-capacity ammunition magazines. This makes them

multipurpose weapons capable of performing a variety of soldierly tasks. The primary service rifle of the U.S. military is the M16 assault rifle—a lightweight, 5.56-milimeter, gas-operated, air-cooled, magazine-fed assault rifle with a rotating bolt actuated by direct impingement gas operation and capable of semiautomatic and full automatic fire. Developed in the 1960s, it was first used in combat in Vietnam. Since adoption by the U.S. military, it has undergone four model changes, each designed to make specific improvements to the weapon. The most recent version, the M16A4, has many improvements that make it superior to the original model. It boasts improved iron sights, a larger capacity magazine, and an especially ingenious forward assist button. The forward assist button was added to prevent the possibility that the weapon would jam and be unable to fire.

Another unique feature of the M16 is the possibility for customization of the weapon. Although it is ready to use as is, the M16 has two key features that allow it to be modified to suit the operator. First, the carrying handle can be removed so that the iron sights can be replaced by more modern optics. The realities of modern-day combat require that virtually every infantry soldier upgrade either to a rifle scope or close combat optic, often abbreviated to CCO. These advanced optics allow the user to acquire a target faster than when using the traditional iron sights. Second, the stock of the M16 is detachable, allowing the attachment of two different stock options: adjustable and fixed. An adjustable stock allows the total weapon length to be decreased, particularly important in urban environments. Along with its accuracy and affordability, the ability to modify the M16 has made it the longest continuous service rifle in U.S. military history.

To complement the M16, the U.S. military has also approved a more compact version of its standard service rifle, the M4 carbine. The M4 is fundamentally a smaller copy of the M16 and has similar capabilities. It fires the same size bullet (5.56 NATO), uses the same magazine, and contains a number of the same replaceable parts. Because of its size, it is favored in military operations in urban terrain, also known as MOUT.

Another addition to the M16's capabilities is the M203 40-mm grenade launcher. Designed to be attached beneath the barrel of an M16/M4, the M203 was implemented to add firepower to a

service rifle platform, allowing soldiers to engage fortified defensive positions and lightly armored vehicles. The grenade launcher can fire an assortment of ammunition types, including high explosives, smoke, flares, and buckshot pellets.

Sidearms

The term *sidearm* normally refers to a pistol that a soldier carries in the event of a service rifle failure or when all available rifle ammunition has been depleted. Not every soldier is expected to carry or is even issued a sidearm. Sidearms are primarily supplied to noncommissioned officers, commissioned officers, or those not usually issued a service rifle—pilots or military police officers in a noncombat deployment. The longest serving sidearm in U.S. military history was the Model 1911A1 .45, mainly due to its reliability and incredible power. Serving since the First World War, it was replaced in 1990 by the M9 9-mm, the current sidearm of the majority of the U.S. military. The M9, although it fires a smaller size round, has a 15-round magazine (compared with between 7 and 9 rounds for the 1911A1) and is considerably more accurate than its predecessor.

Specialized Weapons

Specialized weapons are carried by soldiers whose roles differ from those of an ordinary infantry soldier. There are two main types of small arms that are considered specialized weapons: sniper rifles and shotguns. Sniper rifles, as the name implies, are issued to snipers, who are expert military sharpshooters. With the capability to engage targets at extremely long ranges, the sniper rifle allows the soldier to eliminate enemy soldiers with precise accuracy and surprise. Each military branch employs a number of different rifle types depending on the combat situation expected.

Despite the diverse number of sniper rifles, most have similar operating systems and features. The main sniper rifles used by the U.S. military, such as the M24 or M40, are bolt-action rifles. This means that after each shot the bolt must be manually pulled back, the spent shell ejected, and a new shell pushed into the barrel. This process makes the weapon more accurate and more consistent but produces a very slow rate of fire. Sniper rifles are also fitted with a long-range rifle scope. The scope gives the operator the ability to see and engage targets at distances far

greater than the human eye can see. This gives the operator a great advantage over conventional enemy infantry.

Shotguns are designed to be used in extremely close combat. Shotguns have an advantage in urban combat because of their power and ability to spread shot projectiles instead of firing a single bullet. Their main disadvantage is that they are not effective beyond close ranges. Like sniper rifles, there is no single model type used by every branch of service. However, the most popular type is the 12-gauge pump shotgun; pump meaning it is manually reloaded after each round.

These varieties of small arms make up the modern arsenal for the U.S. military. Modern technology dictates that new weapons may soon replace existing weapons with more futuristic models. Contemporary designs are seeking to improve on small arms by adding high-tech equipment such as infrared cameras, night vision, and advanced weaponry into one, all-purpose service rifle. Until then, the small arms of today will bear the standard for the modern U.S. military.

R. Alex Brownlee

See also Ambush; Direct Fire; Guns, Machine; Infantry

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ARMY, DEPARTMENT OF

Founded in 1789 as the Department of War, the Department of the Army (DA) was reorganized as a service department under the National Security Act of 1947 and charged with the administrative affairs of the U.S. Army. Composed of the Office of the Secretary of the Army, the Office of the Army Chief of Staff, the Army Staff (ARSTAFF), and support agencies, DA is responsible for recruiting; organizing; supplying; equipping; training; servicing; mobilizing; demobilizing; administering; constructing and

repairing military equipment, buildings, structures, and utilities; and acquisition of real property necessary to support the army. This entry describes the mission, function, and organization of the DA.

Mission and Function

The army's statutory obligations are summarized in Article 1, Section 8 of the Constitution of the United States as executing the laws of the Union, suppressing insurrections, and repelling invasions. Expanding those roles, Chapter 307 of Title 10 of the United States Code (10 USC) establishes that the army will be organized, trained, and equipped primarily for land combat operations to preserve peace and security; provide for the defense of the United States, the Commonwealths and possessions, and any areas occupied by the United States; support national policies; implement national objectives; and overcome nations responsible for aggressive acts that imperil the peace and security of the United States. Chapter 303 of 10 USC establishes that through authorities residing with the secretary of defense, and subsequently the secretary of the army, DA will administer the army to execute its constitutional obligations.

Department of Defense Directive 5100.1, *Functions of the Department of Defense and Its Major Components*, codifies the roles, responsibilities, and authorities of DA according to existing law as prescribed in 10 USC. Department of Defense Directive 5100.1 stipulates both common departmental and service-specific functions that DA carries out. Common functions include the following: recruiting; organizing; supplying; equipping (including research and development); training; servicing; mobilizing; demobilizing; administering (including the morale and welfare of personnel); maintenance, construction, outfitting, and repairs of military equipment; construction, maintenance, and repair of buildings, structures, and utilities; and the acquisition, management and disposal, and management of real property and natural resources in support of each service.

Through the authority of the secretary of defense, the secretaries of the military departments are also responsible for the operation and efficiency of their departments; formulation of policies and programs that are fully consistent with national security objectives and policies established by the president and the secretary of defense; effective and timely

implementation of policy, program, and budget decisions and instructions of the president or secretary of defense relating to the functions of each military department; carrying out the functions of the military departments so as to fulfill the current and future operational requirements of the Combatant Commands; effective cooperation and coordination between the military departments and agencies of the Department of Defense (DOD) to provide for more effective, efficient, and economical administration and to eliminate duplication; presentation and justification of the positions of their respective departments on the plans, programs, and policies of the DOD; the effective supervision and control of military department intelligence activities; and other activities prescribed by law or by the president or secretary of defense.

As a military service, the army has functions that are common to the navy, air force, and Marine Corps. The secretary of the army is responsible for the following service-related functions: determine force requirements to support the national security strategy and requirements of the Combatant Commands; recommend the assignment and deployment of forces to the Combatant Commands and to the Joint Chiefs of Staff; administer service forces; provide logistics support to service forces; develop doctrine; conduct testing and evaluation; provide joint training and exercises; operate organic vehicles; and participate in the development of doctrines, training, and equipment for joint operations.

As the distinct land component of the DOD, DA is responsible for the preparation of land forces necessary for the effective prosecution of war and other military operations. The primary function of the army is the organization, training, and equipping of land forces to defeat enemy land forces and seize, occupy, and defend land areas. Furthermore, the army is responsible for organization, training, equipping, and providing joint forces for air and missile defense, space operations, amphibious operations, airborne operations, special operations, psychological operations, and, more recently, cyberspace operations.

Organization

DA is composed of the Office of the Secretary of the Army (the secretariat), the Office of the Army Chief of Staff, the ARSTAFF, and various support

agencies. Within the Office of the Secretary of the Army are the offices of the secretary, the under secretary, the assistant secretaries, the general counsel, the administrative assistant, the chief information officer, the inspector general, the auditor general, the chief of legislative liaison, the chief of public affairs, the director of small business programs, and the deputy under secretaries. The secretariat is responsible for army-wide policy development, promulgation, and oversight of their assigned functional areas. As such, the secretariat advises the secretary of defense on army capabilities and requirements to perform its statutory missions; presenting and justifying army policies, plans, programs, and budgets; communicating army policies, plans, programs, capabilities, and accomplishments to the public; and managing the external affairs and the compliance functions of the army with the advice and assistance of the chief of staff of the army (CSA).

The CSA serves as the senior military advisor to the secretary of the army in all matters and has responsibility for the effective and efficient functioning of army organizations and commands in performing their statutory missions. Among the responsibilities of the CSA are serving as the senior military leader of the army; assisting the secretary of the army in the external affairs, including presenting and justifying army policies, plans, programs, and budgets; presiding over the ARSTAFF to ensure the effective and efficient function of the headquarters; serving as a member of the Joint Chiefs of Staff in providing independent military advice to the secretary of defense, president, and Congress; and representing army capabilities, requirements, policy, plans, and programs in Joint forums.

The integration and coordination of DA policy, position, and procedures across functional areas of responsibility are conducted by the ARSTAFF. The ARSTAFF comprises five deputy chiefs of staff (G-1, Personnel; G-2, Intelligence; G-3/5/7, Operations, Plans, and Training; G-4, Logistics; G-8, Resource Management); the chief of engineers; the surgeon general; the chief, National Guard Bureau; the chief, Army Reserve; the judge advocate general; the chief of chaplains; and the sergeant major of the army.

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See also Army, U.S.; Defense, Department of; Military Organization, Army

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ARMY, U.S.

In 2012, the U.S. Army had just concluded one major conflict the previous year (Iraq), remained engaged in another conflict (Afghanistan), and still maintained a significant presence on the Korean peninsula. The Army's active-duty strength was approximately 550,000, which was organized into three field armies (Third, Seventh, and Eighth), four corps (I, III, V, and XVIII Airborne), and 10 divisions (1st Armored, 1st Cavalry, 1st–4th and 25th Infantry, 10th Mountain, and 82nd and 101st Airborne). Numerous separate brigades, groups, regiments, and even separate battalions also existed in the combat, support, and service branches. A small number of U.S. Army forces were also permanently attached to the U.S. Special Operations Command, a joint organization that controlled the most important elite units within all of the services, including the U.S. Army Special Forces (Green Berets), U.S. Army Rangers, Air Force Special Operations Command, and U.S. Navy SEALs.

In the early 21st century, the U.S. Army was undergoing a major reorganization that was itself begun in the late 1990s as Force XXI. Force XXI was an effort to restructure army divisions to take advantage of new technology and allow smaller formations to control a larger battle space. Ultimately, Force XXI had a major role in the organization of modular brigades and the brigade combat team concept found in the army during Operations Enduring Freedom and Iraqi Freedom. Organizational change has been a common theme in the history of the army. From the American Revolution to the Global War

on Terrorism, the army has adapted to whatever environment it found itself in, all but one of those times successfully. This entry discusses the history of the U.S. Army, including its organization, the use of conscription, downsizing and other challenges, and the army's role today.

Early History

Organized around the militias of the 13 original British colonies, the Continental Army (as the U.S. Army was originally called) of the American Revolution only became a professional force over time. The militia that first reported for duty under the command of Major General George Washington in 1775 had little or no formal military training. A few more senior officers, like Washington, had combat experience in the French and Indian War (1754–1763), but the majority of the militia had no experience other than some minor skirmishes with Native Americans. Over time, the experience of combat and the training offered by some European volunteers (most particularly Major General Friedrich von Steuben) turned the militia into professionals.

Unfortunately, after the American Revolution, the U.S. Army was all but eliminated by Congress. At its low point, the entire army consisted of a single artillery battery located at West Point, New York. The defeat of a militia force in the Northwest Territory (modern-day Ohio, Illinois, Indiana, and Michigan) by Native Americans in 1791 led to the formation of the Legion of the United States, the first postrevolution reincarnation of the professional army. The legion, which contained a mix of infantry, cavalry, and artillery, continued only until 1796, when a more traditional regimental structure was created. The War of 1812 caused a large increase in the size of the army and provided another opportunity to demonstrate the benefit of professionally trained soldiers over ill-trained militia soldiers. The majority of soldiers during the War of 1812 were members of U.S. Volunteers, who formed regiments designated only for wartime service. This system of using predominantly volunteer formations during wartime continued until the National Defense Act of 1916, which reorganized the army between the Regular Army, National Guard, and National Army. The National Army included the Regular Army and National Guard, as well as volunteers and draftees designated for service during wartime only.

In the period from the War of 1812 to the Mexican-American War, the U.S. Army remained small and underfunded. The outbreak of the Mexican-American War in 1846 led to yet another temporary expansion in the size of the army. Greatly outnumbered and having to rely on substantial numbers of militia, European observers did not expect the U.S. Army to defeat the European-organized and -trained Mexican Army. Nevertheless, the United States succeeded with an army led by officers who were long-serving professionals and frequently graduates of the United States Military Academy (founded in 1802). The extensive combat experience gained by these officers proved important when the United States was torn by civil war less than two decades later.

The Civil War to 1917

The secession of South Carolina and the subsequent attack on Fort Sumter in Charleston Harbor in April 1861 marked the beginning of the American Civil War. Since this conflict was internecine, the combat experiences gained during the Mexican-American War did not benefit only the U.S. Army. For instance, both Confederate President Jefferson Davis and Confederate general-in-chief Robert E. Lee were graduates of the United States Military Academy and combat veterans of the Mexican-American War. The Civil War saw the first widespread use of African Americans in the armed forces, and approximately 190,000 African Americans served by the end of the conflict. By the end of the Civil War in 1865, the U.S. Army was ranked among the most powerful military forces in the world. However, the U.S. Congress again reduced the size of the army to nothing more than a constabulary strong enough to patrol the Western frontier and battle Native Americans.

During the post-Civil War period, the U.S. Army resumed a constabulary role, which had occupied the majority of its time during the 19th century. While the U.S. Colored Troops, formed during the Civil War with African American volunteers, were demobilized following the war, four Regular Army regiments (9th and 10th Cavalry and 24th and 25th Infantry Regiments) were organized largely from Civil War veterans. From 1865 to 1877, the army was the enforcing arm of Reconstruction in the former Confederate states. While admirably performing

its role in Reconstruction, the overall policy failed largely due to congressional parsimony and a lack of political will on the part of Northerners. During the 1870s and 1890s, the army was torn between frontier policing against Native Americans, on the one hand, and involvement in labor disputes during the uglier phases of the American Industrial Revolution, on the other.

Not until the Spanish-American War in 1898 did the U.S. Army again increase in size. The short duration of the war—less than 4 months—meant that very little actual combat experience was gained by the soldiers. However, the end of the war found the United States with new territorial possessions throughout the globe that now needed to be administered and, in some cases, pacified, which required an increase in the size of the regular army. As a colonial power, the United States was not only involved in Puerto Rico, Guam, and the Philippines but also participated in the Western Expedition to relieve the besieged Peking legations during the Boxer Rebellion in China in 1900.

While the rest of the world was engulfed in World War I, the U.S. Army found itself involved in Mexico. On March 9, 1916, the Mexican revolutionary Francisco “Pancho” Villa raided Columbus, New Mexico, and killed 17 American soldiers from the 13th Cavalry Regiment. In response, U.S. president Woodrow Wilson ordered Brigadier General John J. Pershing into Mexico to find and capture Villa and his men. The Punitive Expedition was significant both for being the last horse-mounted campaign in American history and for being the first U.S. Army campaign to use mechanical vehicles. The Punitive Expedition dragged on for almost a year of hard campaigning with numerous chases and small skirmishes, but since Villa was never captured, it was deemed a failure.

The Punitive Expedition ended in February 1917, and the United States entered World War I just 2 months later, in April. By the time the United States declared war on the Central Powers, the war was almost 3 years old, and the conflict had taken on a rather distinct character. Trench warfare, poison gas, and massive artillery bombardments created a horrific situation for the soldiers, and the end of the war resulted in a worldwide antiwar movement that manifested itself in the United States as an isolationist attitude toward the rest of the world. For the first time in American history, the United States used conscription

from the beginning of its participation in World War I. While conscription had been used during the Civil War, it showed some level of desperation on the part of both the Union and the Confederate governments, since, historically, enough men had always volunteered for military service in times of war. The need to force military service through conscription became a standard facet of 20th-century American warfare and had negative side effects during the Vietnam War.

The Interwar Years and World War II

On June 2, 1920, less than 2 years after the end of World War I, the U.S. Congress passed the National Defense Act, which defined the organization of the U.S. military during the interwar period. Rather than creating a new and more powerful peacetime U.S. Army, the act returned the army to the status quo ante, chronically underfunded and only large enough to serve as a skeleton for future wartime buildups. The act officially established three new branches of the U.S. Army (Air Corps, Chemical Warfare Corps, and Finance Corps), while at the same time abolishing one wartime branch (Tank Corps). Unfortunately, the act did not reflect a change in national military policy, but rather it was a continuation of the *de facto* standing policy since the American Revolution. Historically, Americans were hostile to any large standing army regardless of changed geopolitical circumstances or the consequences on the state of military preparedness or national defense.

The National Defense Act of 1920 created a two-decade-long bleak period for the U.S. Army. During the 1920s and 1930s, the army had little money for training—let alone technological development. The U.S. Congress justified the drastic reduction in size of the army by pointing out that frontier constabulary duty in the American West and colonial possessions had ended. Without money for a large or high-tech force, the army turned inward and came to value education and training. While the army never adopted a true German-style general staff system, institutions such as the Command and General Staff School at Fort Leavenworth, Kansas, represented an effort to institutionalize professionalism in the officer corps. The Army War College, then located in Washington, D.C., took things a step further and involved students in military planning for the War Department.

The invasion of Poland by Nazi Germany on September 1, 1939, found the U.S. Army as the 18th largest army in the world, behind nations such as Greece, Poland, Portugal, and Turkey. After the German conquest of France in 1940, the U.S. Congress finally procured the funds necessary to modernize the army. Nevertheless, the December 7, 1941, attack on Pearl Harbor still found American soldiers equipped with World War I-era weapons and equipment. The final surrender of American and Filipino forces in the Philippines in May 1942 has often been attributed to the benign neglect of the army during the interwar period.

During World War II, the U.S. Army found itself fighting both on the islands of the Pacific and the continents of Africa and Europe. In the Pacific, the infantry performed almost all of the ground operations conducted by the army. In Europe, traditional infantry units were joined by the newly formed Armored Force, which encompassed not only tanks but also mechanized infantry and mechanized field artillery. At its high point in World War II, the army encompassed three army groups (6th, 12th, and 15th), 11 field armies (1st–10th and 15th), 24 corps (1st–16th, 18th–24th, and 36th), and 95 divisions (1st–14th, 16th, and 20th Armored; 1st and 2nd Cavalry; 1st–13th, 17th, 24th–38th, 40th–45th, 63rd, 65th, 66th, 69th–104th, 106th Infantry, Americal, and Philippine). By the end of the war, the army was a profoundly changed institution. The size of the army set the standard by which the organization has measured itself ever since. In addition, the gasoline engine had, once and for all time, changed the definition of horsepower. During World War II, women were finally accepted into the military and within the army both as nurses and as members of the Women's Army Corps, freeing men for the front by performing state-side administration and maintenance tasks. While the Women's Army Corps was intended only as a war-time temporary measure, it became a permanent part of the army via congressional legislation.

The Cold War

After another drastic downsizing, the U.S. Army was confronted with a dismemberment when the U.S. Air Force became a separate military service in 1947. The decision to create an independent air force had two major consequences for the army. First, the air force was the largest single recipient

of funds in the Department of Defense from 1947 to 1960, which meant that the budgets of the other three services were frozen or reduced. Second, the army now found itself without dedicated close air support, which led to the development of rotary-wing army aviation (helicopters), which played an important role in the Vietnam War.

Following a short interlude of occupation duty in Germany and Japan, the outbreak of the Korean War in 1950 caused a temporary increase in the size of the U.S. Army. The Korean War was fought almost exclusively with World War II weapons, equipment, and tactics and frequently with the previous war's veterans. The remainder of the 1950s saw the army marginalized on the nuclear battlefield and attempting to reorganize. To remain relevant, the army created the Reorganization of the Current Infantry Division, most commonly referred to as the Pentomic division. This new division structure was organized around five infantry battalion-plus sized battle groups rather than the more traditional three infantry regiments.

The early 1960s found the U.S. Army again reorganizing for conventional warfare with the Reorganization of Army Divisions structure. This new division organization returned to the triangular organization of World War II, but with three combat brigades rather than with three combat regiments. This divisional organization was used by the army during the Vietnam War. This war proved to be the most divisive conflict in American history other than the Civil War. While the army was able to boast that it never lost a battle in Vietnam, the American people and their representatives decided to end the war—leaving South Vietnam vulnerable to conquest from North Vietnam, which occurred in 1975. While the army exhibited genuine innovation, principally in the form of air mobility doctrine, the unconventional nature of the conflict proved too difficult to conclusively defeat before the American people ran out of patience. Conscription, which had been used successfully during the World Wars and the Korean War, became a major factor in the decision to withdraw American troops.

In the aftermath of the Vietnam War, the U.S. Army was torn by racial strife and a serious drug abuse problem. One of the first changes was the abolition of conscription and the return to the volunteer military, which was the norm in American history prior to World War I. In addition, it took the efforts of a dedicated group of officers in the period

from 1973 to 1990 to transform the army back into the world's leading military force. Not only individuals and new doctrine but also new weapons systems helped bring about this transformation. The arrival of the M1 Abrams tank and the M2/M3 Bradley fighting vehicle provided the army with the best tanks and mechanized infantry vehicles in the world.

The Post-Cold War Era

Ultimately, the final proving ground for this reformed U.S. Army was not the combat with the Soviet Union in the Fulda Gap between East and West Germany. Instead, the army tested itself in the deserts of Kuwait and Iraq. Following the invasion of Kuwait by Iraqi dictator Saddam Hussein in 1990, the United States committed military force to liberate Kuwait in Operation Desert Storm, or the Persian Gulf War as it is more commonly known. The liberation of Kuwait began in January 1991 with an air campaign that lasted for 1 month before the ground campaign began on February 24. While the United States did not represent the only combat force of the 34-nation coalition, it did provide almost 75% of the strength.

The ground combat phase of Operation Desert Storm lasted a mere 100 hours and was a case of overwhelming technological superiority on the part of the U.S. Army and its allies against the Iraqi Army. The war played to the strengths of the U.S. Army and involved large, armor-heavy forces on both sides. Also, the M1 Abrams and M2/M3 Bradley were even more effective than anyone had anticipated. Only 149 Americans were killed in action, while approximately 25,000 Iraqis were killed. Ironically, though the location was different, the type of warfare was exactly what the army had been training for since the end of World War II.

From Operation Desert Storm through the opening phase of Operation Iraqi Freedom, the U.S. Army's armored and mechanized forces dominated the conventional battlefield. Operation Desert Storm was such a resounding and quick victory that most Americans, even many in the Department of Defense, believed that the army was virtually unbeatable. This attitude led to complacency during the 1990s, which allowed for a drastic downsizing in the army. For instance, the active-duty army was reduced from 18 divisions (1st–3rd Armored; 1st Cavalry; 1st–9th, 24th, and 25th Infantry; 10th

Mountain; and 82nd and 101st Airborne) in 1989 to 10 divisions by 1995. In addition, it led to the cancellation of several weapons systems that were seen as unnecessary but that the armed forces believed were indeed necessary if America was to maintain a technological advantage over the rest of the world.

Despite the cuts to the U.S. Army and the rest of the armed forces during the 1990s, the post-Cold War world presented many challenges for the United States. Even in the 1990s, the U.S. military's conventional dominance was challenged long before combat in Afghanistan and Iraq. The most important and perhaps prophetic of these challenges to American conventional military power was the Battle of Mogadishu in 1993 (commonly known as Black Hawk Down from the book and movie of the same name) in Somalia. The conflict in Somalia represented an effort by the United States to impose order on a failed state. Though only 18 Americans lost their lives versus as many as 2,000 Somalis, it was the United States that left Somalia without completing its goals. This confrontation between a Western power with technological superiority and Muslim unconventional warriors who fought against Western culture/influences became a theme of the early 21st century.

Global War on Terrorism

The Global War on Terrorism (later simply the War on Terrorism), which began after the September 11, 2001, attacks on New York and Washington, D.C., included further combat situations in which firepower was matched by the terrorists' use of unconventional warfare and a willingness to incur heavy losses—most particularly through suicide bombing. During the conflict, the U.S. Army was forced to continue to be technologically and tactically innovative in order to confront the new threat. However, American defense policy also had to undergo many profound changes to meet the unconventional nature of the war.

The Taliban's involvement in the September 11 attacks led to the initial campaign to topple the Taliban as the de facto rulers of Afghanistan. This campaign found U.S. Army Special Forces, along with U.S. air power, allied with anti-Taliban elements in Afghanistan, most particularly the Northern Alliance. While the Taliban was quickly removed from power, their influence in Afghanistan and its society remained. Even after 10 years of combat and

the formation of a democratically elected government, Afghanistan still more closely resembled a failed state than a stabilized nation. The question for much of the world remained whether it would ever be possible for Afghanistan to be truly stable.

While the opening phase of the war in Iraq involved the use of conventional power against the Iraqi army, the U.S. Army quickly found itself in an unconventional fight against both former Saddam Hussein loyalists and the international terrorist organization al Qaeda. For several years, the U.S. Army appeared unable to deal with the unconventional nature of the fight. This apparent inability to stabilize Iraq was coupled with illegal or dubiously legal incidents that embarrassed the United States internationally. Beginning with the 2007 appointment of General David Petraeus as the commander of the Multi-National Force, the situation in Iraq began to stabilize. Following the withdrawal of all American combat forces in December 2011, Iraq remained relatively stable, though concerns remained regarding the future.

The Global War on Terrorism could not have been fought without the U.S. Army Reserve and National Guard, both of which had been only lightly used since the Korean War. While much tension existed between the active and reserve forces early on, the number of deployments and amount of combat seen by the reserves gained them the grudging respect of their active-duty counterparts. More tension exists between the U.S. Army and U.S. Marine Corps, on the one hand, and the U.S. Navy and U.S. Air Force, on the other. The army and the marines, both as organizations and as individual members, had the perception that the navy and air force did almost nothing to contribute to the fight. While that is certainly an overstatement, there is no doubting that the army and the marines have done the majority of the fighting and dying, while the navy and the air force have been primarily focused on transportation and logistics.

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See also Army, Department of; Defense, Department of; Military Organization, Army

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ARMY CORPS OF ENGINEERS

The U.S. Army Corps of Engineers is one of the oldest continuously operating branches of the U.S. military establishment and has contributed in a number of ways to the military and civilian progress of the nation. This entry briefly outlines the beginnings of

the corps, its current organization, and its continuing role both in domestic and international actions.

Early History

The U.S. Army Corps of Engineers was founded on June 16, 1775, by order of General George Washington. The recognized founder of the engineers was Louis Le Bègue de Presle du Portail, a French engineer and Continental Army colonel, who headed the branch from 1777 until 1782. It became a separate and independent branch of the U.S. Army on March 16, 1802. The first duty of the corps encompassed the construction and maintenance of the United States Military Academy at West Point.

Since its inception, the corps has played a significant role in the military history of the United States. In the 20th century, it has branched out to make important contributions to the country's civilian development as well. During the early period of the corps, it focused primarily on supporting logistics during periods of conflict, such as the Mexican and Civil Wars. Preparedness occupied much of the corps's attention as well; thus, they built coastal fortifications. During times of peace, it mainly supported internal improvements to the nation. This work included surveying roads and canals and mapping the western frontier to the Pacific Ocean, a monumental accomplishment in its own right. The Corps of Engineers also worked on the construction of national monuments as well as government buildings.

The mission of the Corps of Engineers began to expand radically in the 20th century as it became a federal flood control agency as well under the Flood Control Act of 1936 and Flood Control Act of 1944. The task of flood control pushed the Army Engineers to gain greater knowledge of environmental science and the possible environmental consequences of their projects. In addition, during the Great Depression, the corps was utilized in many of the public works' projects that featured prominently as a part of the New Deal.

World War II and the Cold War

Another major turning point for the Corps of Engineers came in 1941, when the War Department tasked it with the construction of facilities for the U.S. Army and its air wing, which later became the

U.S. Air Force, both at home and abroad. This mission led to the construction of numerous military bases in the United States, as well as the building of temporary military establishments both for U.S. troops and for allies all over the globe.

Through the end of World War II and the onset of the Cold War, the corps became more involved with new projects that supported U.S. global strategy. Internationally, this translated into the construction of numerous infrastructure improvements for various U.S. allies. On the domestic front, the corps played a significant role in the construction of the Kennedy Space Center.

Beginning in the late 1960s, the environmental mission of the corps expanded as well to include natural resource management and protection of the nation's wetlands. In addition, the corps assists the various military services in environmental management at both current and former installations. Under the Water Resources Development Act passed by Congress in 1990, promoting the environment was designated a central mission of the corps.

Present Organization and Mission

Although the Corps of Engineers is a branch of the U.S. Army, most of the 34,000 members are civilians. The permanent divisions include the North Atlantic Division, South Atlantic Division, Mississippi Valley Division, Great Lakes and Ohio River Division, Southwestern Division, Northwestern Division, South Pacific Division, Pacific Ocean Division, and Transatlantic Division, which includes districts in Europe, the Middle East, and Afghanistan. Other commands that form part of the corps include the Engineer Research and Development Center, the Huntsville Engineering and Support Center, the Transatlantic Programs Center, and the 249th Engineer Battalion. The mission of the corps remains to provide vital engineering services in peace and war to strengthen our nation's security, energize the economy, and reduce risks from disasters. This mission has played out in a variety of ways in recent years.

The corps aided in the cleanup efforts after the attacks of September 11, 2001, and continues to play a significant role in the continuing Global War on Terrorism. This includes numerous reconstruction and infrastructure improvement activities, as well as overseeing the construction of American

military bases and other infrastructure. In Iraq, the efforts included not only reconstruction after the 2003 invasion but also the modernization of parts of the Iraqi oil production facilities at Basra. The corps, along with the wider American efforts in Iraq, has been criticized within the press and within Congress for lax oversight of contractors and the scores of projects that were overbudget or uncompleted.

At the same time that it has taken a significant part in the Global War on Terrorism, it has maintained its domestic responsibilities in the United States. Some of the handling of these internal challenges has led to criticism. In 2005, the corps came under heavy scrutiny for the failure of some 53 levees in and around the city of New Orleans during Hurricane Katrina. The failure of the levees along with the failure of pumping facilities led to Katrina being one of the most destructive hurricanes in the nation's history. Environmentalists were especially critical of the corps for favoring dams and levees over more less environmentally evasive ways to minimize flooding.

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See also Army, Department of; Civil War, American; Engineers, Combat; Iraq War (2003); War in Afghanistan; World War II

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ARMY NURSE CORPS

Founded on February 2, 1901, the U.S. Army Nurse Corps (ANC) has provided medical care for soldiers and their families during wartime and peace for more than a century. Before the founding of the corps, the U.S. military relied on nurses to

provide medical care for soldiers but hired them to serve only as contract nurses. Thousands of nurses worked in army hospitals in the Revolutionary and Civil Wars, but as contract nurses they held no permanent status in the army. Following the Spanish-American War, however, the army deemed a permanent nurse corps necessary and created the ANC within the Medical Department. Since its founding, the corps has evolved in size and makeup, and nurses have attained greater professional status and respect. Today's ANC serves both in the United States and around the world, with approximately 9,200 nurses serving on active duty and in reserve status. This entry discusses the history and makeup of the ANC.

History: World War I to the Present

When the United States entered World War I, only 403 army nurses were on active duty, but the corps quickly grew to more than 21,000, with approximately 10,000 nurses deployed to Europe. These nurses served in a variety of hospital settings, from dressing stations that provided initial first aid to hospital trains and transport ships, as well as field hospitals, evacuation hospitals, and base hospitals located farther behind the front lines that provided increasing levels of care. In addition to war wounds—including new types of wounds and conditions particular to industrialized war—nurses worked to fight the worldwide influenza epidemic of 1918. Approximately 100 died during the war, most from influenza.

During World War II, the corps grew from fewer than 7,000 nurses on active duty before the bombing of Pearl Harbor to approximately 57,000, with 32,500 serving overseas in the European, Asian, and African theaters. Many of these nurses joined through the Cadet Nurse Corps program, which coordinated and paid for nurses' education in exchange for national service for the war's duration. As in the previous world war, nurses worked in a variety of types of hospitals and treated all manner of wartime wounds and illnesses. About 500 nurses trained to become the army's first flight nurses, and 17 among them died during the war. Overall, 201 army nurses died in the war, while another 83 were captured and held as prisoners of war, most of them in the Philippines.



Operating Room of the Malinta Tunnel Hospital in Corregidor, Philippines, 1937.

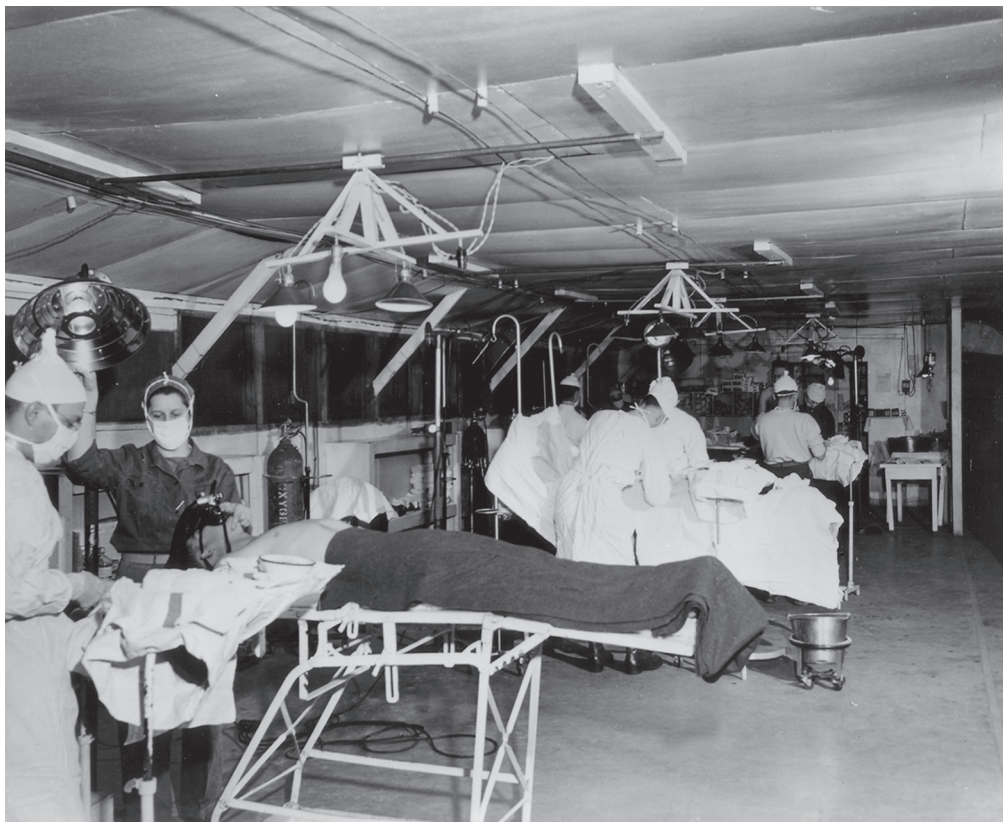
Source: Army Nurse Corps Archives, Office of Medical History, Office of the Surgeon General.

Although the number of nurses on duty declined dramatically following the war's end, the Cold War brought additional conflicts in which army nurses served. Approximately 540 nurses deployed to Korea, many working in the newly developed Mobile Army Surgical Hospitals. Five thousand nurses served in the Vietnam War between 1956 and 1973, with thousands more serving on active duty around the world. Nine army nurses died in that war (seven women and two men), one as a result of active enemy fire. In the late 20th and early 21st centuries, army nurses have deployed to conflict zones and sites of natural disasters around the world: from Grenada and Panama to the Middle East and Eastern Europe. During the Persian Gulf War of 1990–1991, approximately 2,200 nurses served in theater, most from Army National Guard units or

the Army Reserve. In 2010, nurses were stationed in both Iraq and Afghanistan.

Working in the ANC

While nurses' work has always been crucial to the army, nurses did not always find themselves treated as equal members. During World War I, nurses held no rank. After the war, Congress granted nurses relative rank, a status that provided them some authority in hospitals but less pay than other officers of the same rank. Nurses continued to hold only relative rank during World War II until June 1944, when Congress granted nurses temporary commissions with equal pay for the war's duration plus an additional 6 months' pay. The Army-Navy Nurses' Act of 1947 granted nurses permanent commissions



44th U.S. Army Mobile Surgical Hospital, Korea, 1954.

Source: Army Nurse Corps Archives, Office of Medical History, Office of the Surgeon General.

with equal pay, dependency allowances, and retirement benefits. Still, even as officers, nurses faced limitations on their careers because of restrictions on the rank women could attain. Although Congress increasingly opened more slots in ranks for women, only in 1967 did it remove restrictions that limited women to the rank of colonel, and in June 1970, ANC Chief Anna Mae Hays became the army's first female brigadier general. Beginning in 2004, the ANC chief held the rank of major general.

The gendered and racial makeup of the corps has also changed dramatically since its inception. At its founding, the "Nurse Corps (female)" admitted only single White women. Although the formal name of the corps changed in 1918, the corps steadfastly refused to admit men until 1955, when it began admitting men to the Reserves. In 1966, men secured full admission to the Regular ANC. Since then, men have become an even greater proportion of the corps, and in 2000, William T. Bester became the first male chief of the corps. In 2010, approximately one third of the corps was male. Additionally,

the corps remained a segregated institution until the 1948 integration of the military. During World War I, 18 African American women joined the corps, while the demands of World War II pushed the corps to admit even more African American women. Even then, however, the ANC segregated the 500 Black nurses who joined the corps and limited them to care of African American troops or prisoners of war. Only after the racial integration of the military did the corps end its policy of racially based assignments. Hazel W. Johnson became the first African American ANC chief in 1979.

As the corps became more diverse, it also gradually changed restrictions that limited female nurses' ability to combine their army career with marriage and family. During both World Wars I and II, the army temporarily lifted restrictions that prohibited married women from serving on active duty. In 1964, the army lifted restrictions on married women serving in the corps, and throughout the decade, it also granted some waivers to women with children who wished to remain in the service. In 1975, the



First Lieutenant James Mitchell of the 10th Mountain Division treating a civilian child, Afghanistan, 2003.

Source: Army Nurse Corps Archives, Office of Medical History, Office of the Surgeon General.

Department of Defense finally ordered that the military would no longer discharge women who became parents.

Kara Dixon Vuic

See also Medicine, Military; Navy Nurse Corps; Surgeon General, Air Force; Surgeon General, Army; Surgeon General, Navy; TRICARE (Military Health Plan); Women

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ARMY WAR COLLEGE

Located at historic Carlisle Barracks in south-central Pennsylvania, the Army War College is the premier institution within the U.S. Army for educating just over 500 military officers and selected civilians about the use of landpower within the U.S. national security strategy in a 10-month accredited master's degree program. This entry describes the

founding, curriculum, and supporting institutions of the Army War College.

Founding

Elihu Root recognized the need for significant reform to the primarily domestically focused army when he assumed the position of Secretary of War (1899–1904) under the presidencies of William McKinley (1899–1901) and Theodore Roosevelt (1901–1909) at the beginning of the 20th century. The military had performed adequately against an exceptionally weak Spanish foe in the War of 1898, but Root realized that the resulting colonies that the United States won would require changes to the army. In 1901, he oversaw the establishment of the Army Senior Service College at Roosevelt Hall in southwestern Washington, D.C., with the initial students arriving in 1904. The college educated senior-level officers to examine the use of land power by the United States.

With the advent of World Wars I and II, the nation began incrementally realizing that new institutions with an ever broader grasp of strategy were required. Many of these became interservice, then “joint” institutions, such as the Army Industrial College becoming the Industrial College of the Armed Forces after World War II. The Army War College, with its emphasis on the various branches of the U.S. Army and use of landpower in instances of strategy, had closed at the beginning of World War II and lost its building at the newly renamed Fort Lesley J. McNair when the National War College opened in 1946. The college reopened at its present location in 1951.

Curriculum

The Army War College offers a senior service school education for lieutenant colonels and colonels in the army, along with civilians and some officers from other services, for a 10-month master’s degree accredited by the Middle States Association for Higher Education. The Service War Colleges—the Army War College; the Marine War College at Quantico, Virginia; the Navy War College in Newport, Rhode Island; and the Air War College at Maxwell, Alabama—each has a greater portion of its students from its home service with a smaller number of civilians and officers from the other services than do the two entirely “joint” schools, the Industrial College of the Armed Forces and the

National War College. The Army War College also has a number of international officers from around the world, invited at the behest of the chairman of the Joint Chiefs of Staff, to learn about the United States, the Army, and the U.S. national security community while sharing their nations’ views.

The curriculum at Carlisle has three primary drivers: (1) strategic leadership, (2) strategy theory, and (3) strategic practice. The college organization conforms to these concerns, but the students take courses more broadly linked to the mission, such as national security policy and strategy, instruments of power, theater strategy, change in complexity, and strategic leadership. The seminar method is the primary educational tool to foster debate and critical thinking. The Army War College also has a significant number of students enrolled in a distance learning option rather than attending courses in Carlisle.

The faculty is a mix of active-duty officers, agency personnel seconded to the college for a fixed period of time, and Title X civilian academics hired under fixed contracts. This faculty teaches, engages in outreach, and provides research for the broader community and the army itself. The research of some of the faculty has provided some of the most compelling material for debate on the army’s doctrine, operational decisions, strategic concepts, and overall national security strategy, making it a highly desirable location for teaching eager, challenging, fully engaged students in an environment fostering highly respected discussion. At Carlisle, a national group of academics within and outside the professional military education community has been engaging in cutting-edge assessments of whether the appropriate approach to teaching strategy is being implemented and considered around the nation.

Students study and live on post at Carlisle Barracks, with their families. The curriculum involves seminars, lectures, reading, and physical activities. The intention is to broaden students’ ability to analyze beyond their superb operational skills to the higher level decision making required to “master the strategic art.”

Supporting Components

The Army War College has a superb array of supporting institutions for its overall mission. The Center for Strategic Leadership, known as the Collins Center, supports the army and Joint Staffs

through research, war-gaming, and conference activities that allow unfettered discussion along with serious analysis, through writing and simulations, of pending and potential leadership challenges for the army and the nation.

The Peacekeeping and Stability Operations Institute, created in the 1990s, is pivotal to the development of the army's doctrine on peace operations and stability concerns. It also serves as a magnet for discussions on government policy in this area, with representatives from nongovernmental organizations, foreign armies, and other interested parties.

The Strategic Studies Institute is probably the most prolific research organization for any of the senior service schools in the U.S. military. The Strategic Studies Institute does research directly for the army and Joint Staffs while also hosting conferences at Carlisle. The Strategic Studies Institute also hosts a dazzling array of meetings in conjunction with academic institutions around the nation. In most cases, both hard copy and electronic summaries of the conference proceedings offer a continuous mechanism for debate in the national security field.

The Army War College has two other less academic but important bodies under its control in Carlisle. The Army Heritage and Education Center allows a better understanding of the army's history through a large collection of manuscripts, books, maps, artifacts, and photographs, open to the public. Similarly, the Army Physical Fitness Research Institute assists with keeping the force in the most effective condition. These centers operate as part of the Army War College community.

Cynthia A. Watson

Author's Note: The views expressed here are personal and do not represent those of the U.S. government, Department of Defense, or any governmental agency.

See also Command and General Staff College

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ARMY-NAVY GAME

The Army-Navy game represents one of the most important rivalries in college football and dates back to 1890. The football contest pits the military's two oldest commissioning institutions against one another, and the yearly game has come to embody the spirit of interservice rivalry. This entry discusses the history of the Army-Navy game and some of the game's traditions.

History

The cadets of the United States Military Academy and the midshipmen of the United States Naval Academy first met on the gridiron in 1890 when a newly formed Army football team challenged a Navy team that had been in existence since 1879 to a game at West Point. The experienced Navy team shut out the cadets and began one of the most storied college football rivalries. The teams have played every fall since then, except for a 10-year span in the late 1890s and early 1900s, and the midshipmen hold a slight advantage in the series.

Both academies have football programs steeped in tradition and glory, fielding Heisman Trophy winners such as Army's Glenn Davis and Navy's Roger Staubach. In the first half of the 20th century, the

Army-Navy was the most important football game in the nation, often having national championship implications. Beginning in the 1960s, with the coming of the Vietnam War and the increasingly unpopular attitudes toward the military, the luster of the game began to fade. Nonetheless, its significance to the military academies remained. Each year, cadets and midshipmen in both academies, serving members of their respective military branches, and alumni look forward to the one fall day in which their branch of military can prove its superiority and gain bragging rights. The game highlights a competitive interservice rivalry and symbolizes the competitive achievement of the U.S. military.

The Game

American football is often compared with war. Coaches are generals and their staff the officer corps. The players are the soldiers, each position's job being well defined and hierarchically ranked. Two teams meet on a field of battle and violently clash with one another for an hour, attempting to obtain victory from a prepared strategy. The cadet and midshipmen football players understand the fantasy of this metaphor. Unlike nearly all other college football players, for the Army and Navy players, football is the easiest part of their strictly regimented life. The players on each team are among the best and brightest their country can offer. They are at their respective academies to become commissioned officers serving their country. When their 4 years of schooling are over, they are committed to years of military service. The seniors (first classmen) playing for victory in the Army-Navy game often find themselves serving side by side for their country the following year. In times of war, this becomes one of the most poignant aspects of the Army-Navy rivalry.

In the early years of the Army-Navy game, when both teams represented the most elite football programs in the nation, several important factors helped ensure the importance of the contest. College football was not the training ground for the National Football League (NFL) it is today, officer pay was generally much better than a professional football player's, military drafts meant that many of the nation's best athletes had to serve their country, and the undefeated record of the United States in war enticed many young men to serve. All of these things created an atmosphere in which the military

academies were juggernauts in the football world and explain why an Army football team won three consecutive national championships from 1944 to 1946.

Once the Cold War began, some of the prestige surrounding the armed forces began to wane. The wars fought in Asia did not possess clear-cut objectives, and achieving victory became much more problematic. Young men were more reluctant to commit to a military academy, especially after the draft ended. At the same time, the National Football League emerged as a more profitable league. Football players needed success in college to prove themselves worthy of lucrative professional pay. The rigid height and weight requirements at the military academies, along with the mandatory military commitment immediately following college, were detrimental to recruiting. Eventually, they just could not field teams that could play teams like Notre Dame or Penn State competitively each season.

Faltering national competitiveness lessened the media frenzy around the Army-Navy game but in no way affected its well-entrenched tradition. The game continues to be nationally televised and attracts a respectable number of viewers. Attendance at the game, usually played in Philadelphia (a neutral site roughly halfway between Annapolis and West Point), is also exceptionally good. The Army-Navy game is the last game of the season for both academies and also the last regular season college football game, giving it sole possession of the national spotlight. The outcome sometimes decides where the yearlong home of the Commander in Chief's Trophy will be, although since the Air Force Academy entered the mix in 1982, the point has often been moot.

Spectators witness a type of football rarely seen during a Division I season. Both academies generally field players considered undersized and undertalented by today's National Football League standards. The amount of passion seen in the players, however, is second to none. The game is usually characterized by hard-hitting defenses and offenses that rely on a grinding running game. No matter what the talent difference between the teams, the game is often low scoring and close. When the final whistle blows, both schools stand side by side and sing each other's alma maters in front of their student bodies (the winning team's is sung last). Players' emotions during this tradition often come to the surface because winning

the game is of great significance to both schools. This symbolic act demonstrates that although each academy wants nothing more than to beat the other, the U.S. Armed Forces are a unified body. The singing of the alma maters is the most moving aspect of the game to many Americans. This 120-year rivalry stands as one of the great athletic traditions in the United States and provides American civilians a rare look at the composure and resilience of the future leaders of their armed forces.

Richard A. Hulver

See also Physical Fitness; Sports; U.S. Military Academy; U.S. Naval Academy

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ART, COMBAT

Traditionally, artists have recorded scenes of fighting as illustrators or in a fine arts tradition with battles based on secondhand observation or created in the artist's imagination. Gradually the concept of the combat artist emerged as an artist who had witnessed military action on the spot, a soldier first, an artist second. These artists were given freedom of expression and subject matter. They made sketches and photographs in the midst of battle and then finished their work in a studio setting. Combat art recorded the human experience of war: a brutal reality interspersed with quiet moments of waiting. The combat artist added an important third dimension to the battle experience, one that photographs and videos cannot capture.

The combat art program began in World War I, when the U.S. Army commissioned eight artists into the Corps of Engineers to record the activities of the American Expeditionary Forces in France. In 1943, a World War II War Art Unit and War Art Advisory Committee was formed, which eventually selected 23 active military artists and 19 civilians to

record and interpret military operations. On August 31, 1943, Congress withdrew funding, but private corporations stepped in to finance the military art programs. By June 1944, Congress reinstated the soldier-artists, who eventually portrayed campaigns worldwide. No official artists worked during the Korean War, but combat art programs were reinstated during the Vietnam War for both military and professional artists. The combat art program has continued to exist to the present. However, due to budget cuts, the number of working combat artists has diminished, down to one in each service. Although separate branches of the military maintain their own collections, all services work together to document military history, to inform the public about what the services do, and to record the war-time experience of fellow soldiers through art. This entry describes combat art and records activities of the different services.

Combat Art Programs

The U.S. Army's War Art Unit in World War II combined both military and private ventures. The Army's War Art Advisory Committee worked with Abbott Laboratories (which funded artists to record medical activities) and with *Life* magazine, with consultants from Associated American Artists, and with *Yank* magazine and the *Stars and Stripes*. Between 1960 and 1975, the Army's Vietnam Combat Artist Program selected both civilian and military volunteer artists, sending 57 artist-soldiers for 60 days into the war zone in two- to five-man teams on a continually rotating basis. Since 1966, the program has covered operations worldwide under the Army Artist Program. In 1992, the Staff Artist program began, where one official soldier-artist served at a time. This body of work evolved into the U.S. Army Art Collection cared for by the U.S. Army Center of Military History, which now comprises 15,000 works of art and objects. Currently, there is an Artist in Residence at the U.S. Army Center, MSG Martin Cervantez. The Army also holds artifacts (uniforms, weaponry, and tanks), has a portrait collection, and maintains 60-plus smaller museums.

The Navy Combat Art Program was founded in 1941 by a soldier-muralist, Griffith Baily Coale, who convinced navy commanders to send eight active-duty artists into the field. Navy artists completed regular duties first; art work was off-hours.

Also, Abbott Laboratories supplied civilian artists to record naval operations in World War II: naval aviation, medicine, submarine warfare, and the U.S. Marines. Abbott gave 300 works by 18 artists to the Navy Art Collection after the war. Two navy military artists served during the Korean War. The revived Navy Combat Art Program in Vietnam operated with the help of the Salmagundi Club of New York, which supplied civilian artists paid by the military to cover naval combat areas. The Navy Combat Art Program merged with the Naval Historical Center, sending artists to noncombat venues as well.

Since 2003, navy artists have covered specialized support operations for Iraq and Afghanistan in the Mediterranean Sea, as well as medical rehabilitation at Walter Reed Medical Center. The artist Morgan Wilbur, staff member of the Naval Historical Center, lived and worked on an aircraft carrier and recorded Navy Medicine's programs in Iraq as well as coalition activities in Baghdad. The Naval Art Collection at the Washington Navy Yard includes navy painters, historical naval prints, and important American artwork by Gilbert Stuart and Thomas Hart Benton.

The Marine Corps Combat Art Program began after Pearl Harbor and diminished after Vietnam. During the Cold War, the program developed a mission-based program with short-term assignments to flare-up situations. The Global War on Terrorism changed this format. Since then, mobilization of reservists-artists can be for extended terms. Since 2006, Sergeant Kristopher J. Battles, combat artist in residence, has been on a yearly tenure, painting in Iraq, Afghanistan, and Haiti. A new studio at Quantico allows the artist time to grow and time to experiment. The marine program prides itself on its high artistic standards and on its human vision of war. The program continues to cover current U.S. Marines' combat, support activities, and humanitarian roles. There are now 8,000 works in the current collection. Many are housed at the National Museum of the Marine Corps, which has received 2 million visitors since 2006.

The Coast Guard Art Program and the U.S. Air Force Art Program cannot technically be considered combat art because artists do not work in war situations. Coast Guard artists are volunteer professional artists chosen in a partnership with the Salmagundi Club in New York City. There are 1,800 works in

the collection. The Air Force Art Program recruits artists through professional groups such as the Society of Illustrators in New York. There are 9,000 works in its collection.

Critics label combat art programs as impractical, out of step with high-tech war, losers to Hollywood glitch, and subject to military cutbacks. Soldier-artists must now lobby commanders to be deployed, and control of art has increasingly moved to museums. Yet the artist-soldier tradition remains with committed supporters and shall probably continue in the future.

Mary Warner Blanchard

See also Museums, Military; Photography, Combat; War Films

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ARTILLERY

Artillery is the science of using mechanical advantages, most frequently using combustible propellant, to deliver a projectile with formidable violence against a target at considerable distance. Artillery is classified as cannon, mortar, and howitzer. Cannon are capable of firing only at a flat trajectory, at targets directly within view of the gun. Today, cannons are typically employed only on tanks or infantry fighting vehicles such as the Bradley. Mortars are capable of firing only at a high angle and are, thus, able to attack targets in a defile, hidden behind buildings, structures, vegetation, or terrain. Howitzers are a hybrid weapon, capable of firing at both low angle for direct engagements and high angle for indirect engagements. Nearly all artillery pieces employed today are howitzers, with mortars being relegated as infantry weapons. This entry describes the

development of artillery, types of artillery, technology, and current use.

History

Ancient armies including the Greeks and Romans used various devices such as catapults, ballistae, and trebuchets to pummel their opponents. By the early 13th century, primitive cannons were employed in Europe against castles, using black gunpowder to propel solid projectiles that could batter their way through stone or earthen walls. This prototypical artillery was heavy, slow-loading, and lacked maneuverability. The earliest projectiles were nothing more than massive, roughly round stones that lacked accuracy or range. However, by the middle of the 18th century, artillery was a well-established field with bronze cannons that were relatively lightweight and mobile, accurate at extended ranges, and capable of firing various types of projectiles.

The 19th century was marked by remarkable technological improvements, which created the field artillery as it is known today. By the time of the American Civil War, rifled artillery cannon were being mass produced, and the first efficient and effective breech-loading cannon also saw employment in that conflict. By the Spanish-American War of 1898, smokeless gunpowder was in widespread (although not yet universal) use. The single greatest advancement in artillery occurred with the development of the French 75-mm cannon in 1897, which for the first time employed an effective recoil mechanism. Although various recoil techniques had been proposed since the middle of the 19th century, the French 75 mm was the first gun to be mass-produced and deployed with such a system. An artillery recoil system is a hydraulic, pneumatic, or spring-type shock absorber that decreases the energy of the recoil and eliminates the “opposite reaction” of the gun that moves it backward in response to the “action” of the gun’s firing and, thus, requires it to be re-aimed after each shot. The recoil mechanism permitted effective indirect artillery fire for the first time in history (engaging targets that the gun cannot see through the use of observers) and revolutionized the use of field artillery.

Today, most mortars rarely contain any recoil system, remain smooth bore, and are fired by dropping projectiles down the muzzle, which considerably reduces their weight and enables these systems

to be carried by the infantry. Modern field artillery systems are nearly exclusively breech loaded, rifled, and contain recoil systems of various designs. Ranges in excess of 30 kilometers can be achieved with accuracy by most modern 155-mm field artillery systems, and even the heaviest 155-mm system can sustain rates of fire well above one round per minute.

The advent of recoil systems, indirect fire techniques, considerable enhancements in accuracy, advanced projectile effectiveness and lethality, significant improvements in the flexibility of projectile types (e.g., smoke, gas, high explosives, and shrapnel), and much better reliability and precision brought artillery into preeminence in the First World War. A formal system of controlling and directing fires was established, consisting of forward observers serving with the combat arms to request, observe, and adjust fires; a fire coordination element with headquarters units to coordinate the use of field artillery; a fire direction element to translate the forward observers’ directions into firing commands to the guns; and the artillery pieces themselves. During World War I, World War II, the Korean War, and the Vietnam War, field artillery and mortars were the greatest killers on the battlefield. By 1914, artillery enjoyed a reputation as “The King of Battle” as indirect artillery fires dominated any engagement. During these years, the artillery mastered refinements such as manipulating the fall of projectiles to conform to a terrain feature such as a ridge or trench line; massing of artillery pieces to command a point on the battlefield; integrated missions with different types of guns or projectiles; “time on target” fire missions, at which artillery rounds fired from dispersed artillery units at varying ranges and with different times of flight would arrive simultaneously; rolling barrages designed to advance at the rate of an infantryman; box barrages designed to isolate a specific target to facilitate raids and attacks; and zone and sweep missions capable of ranging artillery projectiles across a piece of terrain of varied dimensions.

The Electronic Numerical Integrator and Computer, the world’s first electronic, digital computer, was developed to calculate field artillery ballistic firing tables during World War II. By 1959, electronics had advanced to the point that the Field Artillery Digital Automatic Computer was fielded. Essentially a large, heavy table with folding legs, it

had limited capability, and an efficient manual fire direction center could beat it, yet it represented the initial tactical computerization of the artillery.

The Post–Cold War Era

By 1990, North Atlantic Treaty Organization and Warsaw Pact field artillery had achieved the pinnacle of development as an industrial warfare force that could command the battlefield with firepower and lethality. The U.S. Army fielded the Tactical Fire Direction System, which consisted of an integrated digital fire control system and a console-sized battery computer system used for all fire direction computations, and individual firing data could be electronically transmitted to each firing piece by a device called the gun display unit. Digital phased array radar systems known as the Firefinder facilitated rapid and accurate counterfire. Conventional field artillery pieces were augmented by the multiple-launch rocket system, a single launcher of which is capable of simultaneously placing devastating fires on an entire square kilometer. Conventional field artillery could employ a wide and diverse range of customized projectiles far beyond the conventional high explosive round, including antipersonnel such as flechette rounds (short-range rounds developed by the U.S. Army for Vietnam, containing a multitude of small metal darts), various poison gas rounds, scatterable antipersonnel and antivehicular mines, obscuring smoke, white phosphorous for marking objectives or targets, antitank, illumination, improved conventional munitions capable of engaging different target types over a large area with deadly effects, and even remotely delivered sensors. The result was an integrated, robust, highly mobile, and flexible system that absolutely controlled the battlefield. North Atlantic Treaty Organization and U.S. artillery systems played a major role in Operations Desert Shield and Desert Storm in the Saudi Arabian–Kuwaiti–Iraqi deserts in 1990–1991. Since then, refinements such as the Advanced Field Artillery Tactical Data System have continued to accelerate and miniaturize field artillery support systems.

However, the field artillery has proven less versatile and capable in the military operations other than war that have dominated the globe since the Persian Gulf War. Field artillery has seen significantly reduced employment in counterinsurgency operations of the later decades of the 20th century.

In the Somalia deployment by the U.S. Army in 1992–1994 (originally to provide humanitarian aid, later to end rival clan conflicts), a single artillery illumination round was fired. Artillery saw no employment whatsoever in operations in Haiti in 1994–1995 (to restore to power the democratically elected president of Haiti). This is because field artillery was not capable of precise targeting, and the absence of such precision artillery tends to cause extensive collateral damage such as the destruction of adjacent structures and inflict serious civilian casualties. An early effort to improve accuracy was the M712 155-mm Copperhead laser-guided artillery round, fielded in the early 1980s by the U.S. Army and only recently withdrawn from active service (in 2007). The Copperhead followed the guidance of a laser beam to strike with considerable accuracy, although the “footprint” within which it could operate was limited, it could only be used on static targets, and its accuracy was dependent on technical limitations of the laser beam itself. The round was also prohibitively expensive at nearly \$500,000 apiece.

The increased growth in field artillery systems was also to blame for this reduction in utility, as subsequent field artillery systems became so heavy as to demand considerable transportation assets. They are difficult and slow to deploy, complex and challenging to sustain, and have limited tactical flexibility to respond to hybrid wars and insurgency. U.S. secretary of defense Donald Rumsfeld realized this when in the spring of 2002 he cancelled the U.S. Army’s cherished “Crusader” 155-mm field artillery concept, a hideously expensive and technically intricate, 41-ton behemoth of an artillery piece, whose effectiveness was limited to conventional combat with an industrial-age mechanized force supported by a well-established logistical tail.

Artillery is also constrained in current Global War on Terrorism operations due to range and terrain restrictions. The artillery has always been concerned with range, and various methodologies have been explored to increase range, such as rocket-assisted projectiles, which generally lacked accuracy but retained larger payload capacity and are favored by the U.S. Army, and various types of base bleed/extended-range projectiles favored by European militaries (which significantly extend range without a deterioration of accuracy but have limitations in payload and thus explosive capability). Rocket-assisted

projectile rounds contain a rocket motor that provides additional thrust, while base bleed/extended-range projectiles contain a small quantity of propellant in the end of the round that does not provide any thrust but increases the air pressure at the base, thus extending its range, and also contain an aerodynamically enhanced shape. In Afghanistan, most fire missions are necessarily conducted at a high angle because of the extremes of topography, which reduces accuracy and causes increased wear to the carriages. The heavy weight of the M198 155-mm howitzer (16,000 pounds) has also limited its use in remote locations in Afghanistan, as the road system in that country is poor and the terrain demanding. The extended ranges at which artillery is being employed in Afghanistan often require maximum propellant charges, which place additional stresses on the carriages and frequently demand the use of rocket-assisted projectile rounds, which further degrades accuracy.

The recently fielded M777 155-mm howitzer is a considerable improvement in mobility; this is the first 155-mm howitzer fielded by the U.S. Army and the United Kingdom to weigh less than 10,000 pounds, and it has proved invaluable in operations in Afghanistan. The M777 155-mm howitzer can sustain rates of fire of two rounds per minute and can achieve a maximum rate of fire as high as five rounds per minute (although this rate of fire cannot be maintained). Its reduced weight enables it to be maneuvered relatively easily and rapidly across various types of ground, considerably enhancing its utility in challenging terrain such as Afghanistan. Although field artillery has not been extensively employed in Iraq, the considerable distances, comparatively lower density of population, and isolation of numerous forward operating bases and combat outposts in Afghanistan have led to considerable employment of artillery-delivered firepower there. For example, for 15 months in 2007–2008, the 2nd Battalion, 503rd Airborne Infantry of the 173rd Airborne Brigade Combat Team employed 36,225 artillery and mortar projectiles in Nuristan and Kunar Provinces.

The U.S. Army recently (2007) fielded the M982 155-mm artillery projectile Excalibur, which may prove to be the most significant field artillery advancement since the recoil mechanism was perfected by the French more than a century ago. As recently as the late 1980s, electronic technology had

not sufficiently matured to enable delicate, precision electronics to survive the brutal G-forces and rotational spins generated by a modern howitzer. The Excalibur exploits recent miniaturization and “hardening” of electrical components to install Global Positioning System technology inside an artillery projectile. The Excalibur round has been described as “unbelievably accurate” by artillerymen firing it in Iraq, enabling it to be successfully employed within 50 meters of friendly troops. It is accurate to within 10 meters at 14 miles; and future versions are intended to achieve 10-meter accuracy at 24 miles. With such precision, engagement of individual houses is now possible, a feat that has been repeatedly demonstrated in Iraq.

With the deployment of relatively lightweight 155-mm howitzers such as the M777, and the Global Positioning System–guided Excalibur projectile, it is conceivable that field artillery will regain the mobility and precision necessary to function in a population-centric counterinsurgency battlefield, where a precise, timely engagement is more to be desired than the massive, preplanned, thundering barrages of the battles of Somme and Verdun during World War I.

Douglas R. Cubbison

See also Civil War, American; Global War on Terrorism; Haiti, U.S. Intervention in; Iraq Insurgency (2003–2011); Korean War (1950–1953); North Atlantic Treaty Organization; Somalia Intervention; Spanish-American War (1898); Vietnam War; War in Afghanistan; World War I; World War II

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ASIA

The end of the Cold War had different effects on the strategic environment in Asia and Europe. On the one hand, the collapse of the Soviet Union terminated a military confrontation between two military alliances, the North Atlantic Treaty Organization and the Warsaw Treaty Organization. This resulted in the expansion of the North Atlantic Treaty Organization and the European Union, including most European states west of Russia, as well as the dissolution of the Warsaw Treaty Organization in July 1991. On the other hand, with the end of the Cold War in Asia, the U.S. military presence in the region was reduced, while Russia ceased to be a significant actor on the Asian security scene. As a result, a sort of strategic vacuum removed the lid over local conflicts in the Korean Peninsula, the Taiwan Strait, and the South China Sea. In addition, as power relationships in Asia became fluid and uncertain, long-standing rivalries began to inflame tensions. Moreover, after the September 11, 2001, attacks in the United States, terrorism has emerged as a new strategic challenge for Asia. This entry describes the recent security environment in Asia since 1989, focusing on some potential flash points.

Tension on the Korean Peninsula

Since 1991, North Korea's nuclear and ballistic missile programs have posed serious international security threats. Although North Korea concluded a

safeguards agreement with the International Atomic Energy Agency in 1992, North Korea refused International Atomic Energy Agency inspections in 1993–1994 and ignored the South-North Joint Declaration of the Denuclearization of the Korean Peninsula in 1991 as well as the request of the UN Security Council in May 1993. Tensions ran high on the Korean Peninsula when North Korea threatened to withdraw from the Nuclear Non-Proliferation Treaty and then to go to war if sanctions were imposed by the international community. In May 1993, North Korea also fired a Nodong missile into the Sea of Japan, which demonstrated that Japan was within the 1,000-kilometer range of the missile.

However, following former U.S. president Jimmy Carter's visit to Pyongyang in June 1994, South-North talks were resumed. Finally, the U.S.-North Korean Agreed Framework was signed in October 1994 to replace North Korea's nuclear power plant program with light water reactor power plants and for a step-by-step normalization of relations with the United States. In March 1995, the United States, South Korea, and Japan created the Korean Peninsula Energy Development Organization as a responsible consortium for implementing the energy-related parts of the agreement, including provision of heavy fuel oil for North Korea.

North Korea admitted to having a secret uranium enrichment program when U.S. officials visited Pyongyang in October 2002. The following month, the Korean Peninsula Energy Development Organization decided to suspend further heavy fuel oil shipments to North Korea. In December 2002, Pyongyang declared the Agreed Framework dead and announced that it would restart operation of its frozen nuclear facilities and construction on its 50- and 200-megawatt reactors. In January 2003, North Korea announced its withdrawal from the Nuclear Non-Proliferation Treaty.

The Six-Party Talks were established in August 2003 to seek a diplomatic solution to the problem of North Korea's nuclear weapons program. The six parties (China, North Korea, Japan, South Korea, Russia, and the United States) signed a "Statement of Principles" in September 2005, whereby North Korea agreed to abandon that program in exchange for a package of security assurances and economic and political incentives. The process was divided into three steps: (1) a freeze, (2) disablement, and (3) dismantlement.

Six rounds of the Six-Party Talks from 2003 to 2007 failed to resolve the fundamental issue of North Korean nuclear arms. After North Korea launched seven missiles into the Sea of Japan in July 2006, including a long-range Taepodong-2 with the theoretical capacity to reach the continental United States, and conducted its first nuclear test in October 2006, the Six-Party Talks in February 2007 agreed to provide economic and diplomatic benefits to North Korea in exchange for a freeze and disablement of Pyongyang's nuclear facilities. The United States decided to remove North Korea from the list of state sponsors of terrorism in October 2008. However, disagreements over the verification protocol between Washington and Pyongyang stalled the process. North Korea finally announced its withdrawal from the talks in April 2009 and conducted its second nuclear test in May 2009.

The expectation that North Korea would return to the Six-Party Talks was shattered by the sinking of the South Korean naval warship *Cheonan* in March 2010, which killed 46 South Korean sailors. Although a multinational investigation team announced that a North Korean torpedo attack caused this destruction, China and Russia refused to take up this issue at the UN Security Council because Pyongyang denied involvement in the attack. Tensions on the Korean Peninsula were further heightened by Pyongyang's November 2010 shelling of a South Korean island, killing two South Korean soldiers and two civilians. It was North Korea's first direct artillery attack on South Korean territory since the 1950–1953 Korean War. Massive joint military exercises by the U.S.–South Korea alliance in the Yellow Sea were held immediately after the shelling, featuring a U.S. aircraft carrier and F-22 aircraft. North Korea then disclosed the uranium enrichment facility with 2,000 centrifuges, which could be used to produce fissile material suitable for nuclear weapons, replacing its existing plutonium-based facilities.

After Kim Jong-Il's sudden death in December 2011, the United States and North Korea reached the February 29, 2012, "Leap Day Agreement" of suspending nuclear weapons tests and uranium enrichment in exchange for food aid. Since North Korea launched a long-range ballistic missile on April 13, 2012, the bilateral agreement could not open the door to the eventual resumption of the Six-Party Talks. The new regime under Kim Jong-un,

the youngest son of Kim Jong-Il, officially maintains the *Songun*, or "Military First" policy. However, the internal balance of power in Pyongyang's decision-making circle seems to increasingly shift from the military to the Korean Workers Party, as shown by the fact that Choe Ryong-hae was promoted to director of the General Political Bureau of the Korean People's Army from party secretary. On the one hand, this would further deepen links between the Korean Workers Party and the Chinese Communist Party. On the other hand, it is possible that intense power struggles destabilize a collective leadership during a transition period.

The Taiwan Strait

The Taiwan Strait had been the most sensitive and complex issue in Asia that could lead to potential U.S.-China conflict during the Cold War era. Although China, Taiwan, and the United States have expected to maintain the status quo in the Taiwan Strait since the early 1970s, each party had different definitions of the status quo. China tried to prevent Taiwan from independence, insisting that Taiwan is a part of "one China." (Republic of China, ROC, is part of "one China" in that People's Republic of China, PRC, is only one sovereign state and the sole legitimate representative of both mainland China and Taiwan.) Taiwan as an independent entity rejected any form of unification with China. The United States did not allow any unilateral action that might alter the peaceful status quo.

Since the late 1980s, political tensions across the Taiwan Strait surged dramatically due to democratic regime transition and a national identity change in Taiwan. In February 1991, the Lee Teng-hui government redefined cross-strait relations as "one country, two equal political entities." Following the announcement of the sale of 150 F-16 fighter jets to Taiwan in August 1992, the United States granted a visa to President Lee in mid-1995. In his speech at Cornell University, he said that "the Republic of China on Taiwan is a sovereign state."

In response to the deviation from the one-China principle by Taiwan, China conducted a series of missile tests in the waters surrounding Taiwan from July 1995 to March 1996. China intended not only to warn the Lee Teng-hui government against moving away from the one-China policy but also to send a message to the Taiwanese electorate that voting for

Lee Teng-hui in the first direct presidential election in 1996 meant war. At the same time, China's objective was to coerce the United States to end its indirect support for Taiwanese independence. Responding to Chinese missile tests and military exercises, the Clinton administration deployed two aircraft carriers in December 1995.

Ultimately, the 1995–1996 Taiwan Strait Crisis ended without war. U.S.-China-Taiwan relations tentatively improved after the crisis until 2000, although new tensions emerged in May 1999 when the United States accidentally bombed the Chinese embassy in Belgrade. In 1998, the U.S.-China Agreement on Establishing a Consultation Mechanism to Strengthen Military Maritime Safety was signed as a confidence-building measure. However, the crisis was a critical turning point in post-Cold War U.S.-China-Taiwan relations. On the one hand, after the crisis, China has demonstrated clearly its willingness to use force despite its announced policy of “peaceful unification” since 1979. In March 2005, China adopted the anti-secession law, suggesting that China would not allow Taiwan to secede and that the Chinese were willing to fight for this cause. To make this threat credible, China has steadily upgraded its missile, submarine, electronic, and amphibious attack capabilities.

On the other hand, the United States began to expand the closer military ties with Taiwan to levels unprecedented since 1979. In March 2000, the Democratic Progressive Party and its candidate Chen Shui-bian won the second presidential election, ending Taiwan's 55 years of rule by the Kuomintang, or Nationalist Party of China. President George W. Bush stated in April 2001 that the United States would do “whatever it takes” to help Taiwan defend itself. The Bush administration decided to approve the sales of diesel-electric submarines, P-3 antisubmarine warfare aircraft, and four decommissioned USS *Kidd*-class destroyers.

However, U.S.-Taiwan relations have changed again with the increasing complexity and unpredictability of Taiwan's political environment. As President Chen Shui-bian was reelected in May 2004 and adopted the more provocative position that Taiwan already “is an independent, sovereign country,” the United States sought to balance criticisms of the Chinese military buildup with its commitment to defend Taiwan, stating that U.S. support for Taiwan is not unconditional but has limits. This

represented a marked departure from the early days of the Bush administration, when the White House seemed to choose “strategic clarity” rather than “strategic ambiguity” on Taiwan as its long-standing policy.

Fears of cross-strait contention were eased in March 2008 when Ma Ying-jeou of the Kuomintang party was elected as president, advocating greater policy caution and more engagement with China. Taiwan moved quickly to start bilateral talks that had been stalled since 1998. As a result of three rounds of cross-strait talks from June 2008 to April 2009, both sides agreed on cross-strait crime fighting, mutual judicial assistance, and promoting mainland investment in Taiwan. The United States welcomed the improvement of cross-strait relations, but in October 2008, the George W. Bush administration notified Congress of its intention to sell a package of defense articles and services to Taiwan to maintain the “status quo” between the two sides. In January 2010, the Obama administration announced \$6.4 billion arms sales to Taiwan that involved PAC-3 missile defense systems, Black Hawk utility helicopters, and Harpoon antiship training missiles—based on the assessment that the balance of forces across the Taiwan Strait has continued to shift in China's favor.

The South China Sea

The South China Sea is home to the world's second busiest international shipping lanes. More than half of the world's supertanker traffic and 80% of the crude oil to Japan, South Korea, and Taiwan pass through this area. Because of its geographical importance, territorial disputes over the islands in the South China Sea have been regarded as Asia's major security flash point. They are claimed in whole or in part by Vietnam, China, Taiwan, the Philippines, Malaysia, and Brunei.

The Paracel Islands in the South China Sea have been under the control of China since the end of combat in January 1974 between the naval forces of South Vietnam and China. At that time, Chinese forces sank three Vietnamese supply ships, killed 72 Vietnamese, and captured 9. In May 1988, a naval confrontation between Vietnam and China took place again over Johnson South Reef in the Spratly Islands. By the end of 1988, China occupied six atolls in the Spratly Islands. A strategic vacuum in

the South China Sea, brought about by the 1990 Soviet Union departure from Cam Ranh Bay in Vietnam and the 1992 U.S. withdrawal from Subic Naval Base and Clark Air Base in the Philippines, prompted disputing claimants to recalculate the strategic implications to the South China Sea.

In 1992, China passed the Law of the People's Republic of China on the Territorial Waters and Contiguous Area. It unilaterally justified China's claims in the South China Sea and the right to use force to protect its islands and their surrounding waters. Foreign ministers of the Association of Southeast Asian Nations (ASEAN) signed the ASEAN Declaration on the South China Sea in July 1992, where it provided that all parties were to apply the principles based on self-restraint, the nonuse of force, and peaceful resolution of disputes. However, China occupied Da Lac Reef, claimed by Vietnam, soon after the ASEAN Declaration.

Moreover, in February 1995, China encroached on the Philippines-claimed Mischief Reef in the Spratly Islands. The Mischief Reef incident marked the first time that China unilaterally changed the status quo at the expense of an ASEAN member state and covertly established its presence in an area claimed by the Philippines within its Exclusive Economic Zone. The United States opposed the threat or use of military force to assert any nation's claim but reiterated its long-standing policy on the South China Sea that the United States took no position on the legal status of competing claims. Indeed, the United States stated that the 1951 Mutual Defense Treaty with the Philippines did not cover Mischief Reef. In October 1998, a Philippine Military surveillance aircraft reportedly noticed four naval supply ships with about 100 workers constructing a landing strip for aircraft off Mischief Reef, although China claimed that it was only replacing the temporary shelters for fishermen with permanent ones constructed in 1995.

Since 1995, China has not seized additional disputed islands in the South China Sea. In November 2002, all ASEAN claimants and China signed the Declaration on the Conduct of Parties to diminish the threat of war in the South China Sea and to create an environment for cooperation, peace, and stability in the region. However, the implementation of the Declaration on the Conduct of Parties depends on the goodwill of its parties. Above all, the fundamental conflicts over Taiwan have not been resolved.

Therefore, the stalemate in the South China Sea may be unlikely to continue. Indeed, China has been strengthening its naval power. Other claimants also have an incentive to expand their maritime capabilities to strengthen their positions preparing for the possibility of local naval clashes. Chinese aggressive patrolling in the South China Sea has led to several incidents, such as China's confrontation with the surveillance ship USNS *Impeccable* in March 2009.

Growing Power of China

In conjunction with its rapid economic development, China has been modernizing its military since 1979. Chinese defense spending has increased by double-digit rates annually since 1989. The 1991 Persian Gulf War made China recognize the urgency of building force structure, strategies, and tactics. As a result, China has dramatically improved its military capabilities on land and sea, in air, and in space. In particular, the pace and scope of its naval modernization effort appear to have been reinforced by the 1995–1996 Taiwan Strait Crisis. A powerful Chinese navy does not only bolster China's anti-access and area-denial capabilities but also enables Beijing to defend China's expanding national interests.

Until the 1980s, China's naval strategy was known as "near-coast defense" to protect its coastline from invasion. Admiral Liu Huaqing, as the commander of China's navy from 1982 to 1988, advocated developing the navy to keep pace with China's rapid economic growth and changes in modern naval warfare. Transitioning to "near-seas active defense" in the 1980s, China sought a much larger area than before, covering the waters within and around the "first island chain," from Japan to the Ryukyu Islands to Taiwan to the Philippines to Borneo. Thus, the Chinese navy is now responsible for the Yellow Sea, East China Sea, and South China Sea, as well as areas adjacent to the outer rims of that chain of islands.

The new strategy has carried new missions. Instead of simply supporting the army's land operations, the navy is to focus on reunification with Taiwan, maritime territorial disputes, securing sea lines of communication, and deterring or defending against enemy attack from the sea. Following the 1995–1996 Taiwan Strait Crisis, China became mainly focused on potential Taiwan scenarios, such

as a blockade or invasion of the island and countering U.S. intervention in a cross-strait conflict.

Today, the Chinese navy appears to be moving toward a new strategy of “far-seas operations,” with responsibilities extending out to the “second island chain” running from northern Japan to the Northern Mariana Islands to Guam. The increased responsibilities follow “New Historic Missions” and “Diversified Military Tasks” of the Chinese military, which Hu Jintao advocated in 2004. These new concepts require the military not only to enhance its combat capabilities but also to respond to nontraditional security challenges by participating in “non-war military operations.”

According to the data of the U.S. Office of Naval Intelligence, by 2009, China had deployed 74 destroyers and frigates, 53 diesel submarines and 6 nuclear-powered attack submarines, 58 medium and large amphibious ships, and more than 80 missile patrol boats. The U.S. Department of Defense estimates that the percentage of modern units within China’s submarine forces has increased from less than 10% in 2000 and 2004 to 50% in 2009 and that the percentage of modern units within China’s force of surface combatants has increased from less than 10% in 2000 and 2004 to about 25% in 2008 and 2009. Transforming from large numbers of low-capability, single-mission platforms to a smaller force of highly capable, multimission systems, China has now the largest navy in Asia. In December 2010, China officially admitted that it has embarked on an aircraft carrier-building program, which could be used for power projection operations as well as those in Taiwan-related conflict scenarios.

In line with China’s evolving strategy and its growing capabilities, Chinese navy ships have begun to conduct operations away from China’s home waters. In November 2004, a *Han*-class SSN (nuclear powered attack submarine) was detected in Japanese territorial waters near Okinawa after traveling far into the western Pacific Ocean. In October 2006, a *Song*-class SS (attack submarine) reportedly surfaced 5 miles away from U.S. Navy aircraft carrier *Kitty Hawk*, which reportedly was operating in international waters in the East China Sea, near Okinawa. In December 2008, China deployed two destroyers and a support ship to waters off Somalia to conduct antipiracy operations. In March 2010, Chinese navy ships involved in China’s antipiracy

operations entered the Persian Gulf. In April 2010, a group of about 10 Chinese ships, reportedly including two *Sovremenny*-class destroyers, three frigates, and two *Kilo*-class attack submarines, transited Japan’s Miyako Strait on their way to and from antisubmarine warfare exercises in the western Pacific. At that time, Chinese helicopters flew close to Japanese destroyers that were sent to the area to observe the Chinese ships, prompting a protest from Japan.

Tension Between India and Pakistan

Relations between India and Pakistan have been marked by cycles of alternating periods of crisis and normalization. Both countries fought three conventional wars in 1947–1948, 1965, and 1971 during the Cold War era. The tension and bitter rivalry between India and Pakistan were rooted largely in competing claims to the Kashmir region. While the end of the Cold War did little to unravel this strained bilateral relationship, the possession of nuclear weapons provided the two countries with the opportunities to develop a slow but steady peace process.

The nuclear tests by India and Pakistan in 1998 appeared to trigger both escalation of tensions and creation of confidence-building measures. In February 1999, India and Pakistan announced the Lahore Declaration to reduce the risk of accidental use of nuclear weapons and discuss concepts and doctrines for confidence building in the nuclear and conventional fields. However, in May 1999, Pakistani army forces crossed the Line of Control, which separates Pakistan-occupied Kashmir from the Indian side, and occupied a mountain edge near the town of Kargil. After 2 months of fighting, the estimated number of total casualties on both sides varied from 1,200 to 2,000.

While levels of violence in Kashmir declined significantly from the 1990s, when they were at their peak, the situation became much more complex after the September 11, 2001, terrorist attacks on the United States. India used the opportunity to appeal to the international community to highlight the fact that the Kashmir issue was one of terrorism and India was its victim. Although India sought to isolate Pakistan by offering air bases and other logistical support to the U.S. military, the United States attached importance to Pakistan’s geographical

advantage and its close ties to the Taliban. As a result, the fact that the United States became a strategic partner with India and a key ally in the Global War on Terrorism with Pakistan contributed to the Indian-Pakistani rapprochement.

The December 2001 militant attack by Pakistani-backed terrorists on the Indian Parliament triggered a major crisis that stopped short of war, including a tense stand-off for several months involving more than half a million troops. Following this event, all lines of communication were almost shut down. However, in November 2003, Indian and Pakistani armed forces began a cease-fire at the Line of Control, ending 14 years of virtually daily artillery exchanges. In June 2004, India and Pakistan finally resumed a bilateral composite dialogue to bring about “peaceful settlement of all bilateral issues.” Despite the large-scale terrorist attack on Mumbai, India, in November 2008 that left some 165 civilians dead, the bilateral peace process was getting back on track in 2010.

Terrorism in India, the Philippines, and Indonesia

Since the September 11 attacks in the United States, South and Southeast Asia have experienced an upsurge in terrorist violence, the situation in Southeast Asia being less severe than in South Asia. In South Asia, many Islamist groups operate across national borders and have ties with international terrorist organizations. On the other hand, in Southeast Asia, regional affiliations among radical Islamists have become less significant as their capabilities have diminished since 2005 owing to successful security operations by the armed forces and national police. In general, connections between Islamic extremism and terrorist organizations in South Asia are more extensive than they are in Southeast Asia.

More than 60% of Muslims in the world live in Asia, while less than 30% of the population of Asia is Muslim. There exists much diversity in the ethnic backgrounds and the practices of Islam. Islam in Southeast Asia is relatively more moderate than in South Asia. In addition, Islamic radicals in Southeast Asia focus more on the political aspects of jihad, with strong local roots and separatist goals, than on the religious and tactical aspects. This section takes

up the cases of India, the Philippines, and Indonesia as regional hotspots of terrorist activity.

India

In 1989, an ethno-religious insurgency erupted in Indian-controlled Kashmir. The Jammu and Kashmir Liberation Front, an indigenous organization, was initially at the forefront of this movement. Several anti-India militant groups fighting in Kashmir are based in Pakistan and are closely linked to Islamist groups there. Many also are said to maintain ties with international jihadi organizations, including al Qaeda. The following terrorist outfits are most often blamed for terrorism in India: Lashkar-e-Taiba (LeT), Jaish-e-Mohammed (JeM), Harakat ul-Mujahideen, and Hizbul Mujahideen.

JeM claimed responsibility for an October 2001 suicide bomb attack on the Jammu and Kashmir state assembly building in Srinagar, which killed 31 people. LeT has been linked to numerous terrorist attacks in India, including bombings in New Delhi in 2005, bombings in Varanasi and Mumbai in 2006, and the terror assault at the financial hub of Mumbai in 2008. Pakistan's support for a host of Kashmiri insurgent and terrorist groups has fundamentally transformed the indigenous features of the Kashmir insurgency and rendered it almost intractable.

Many separatist groups in India's northeastern states have been implicated in lethal attacks on civilians and have been designated as terrorist organizations by India under the 2002 Prevention of Terrorism Act. More than 6,000 people, one third of them insurgents, are estimated to have been killed since 1992 in related violence in the states of Nagaland, Assam, Manipur, and Tripura. Among the dozens of insurgent groups active in the northeast are the United Liberation Front of Assam, the Nationalist Social Council of Nagaland, the National Liberation Front of Tripura, the National Democratic Front of Bodoland, and the United National Liberation Front.

There also exist communist insurgent “Naxalites” in India. They have engaged in violent struggle on behalf of the landless poor and the tribal people and lower castes. These groups, most active in inland areas of east-central India, claim to be battling oppression and exploitation to create a classless society. Most notable of India's Maoist groups

are the People's War Group, mainly active in the southern state of Andhra Pradesh, and the Maoist Communist Center of West Bengal and Bihar. In September 2004, the two groups aligned to form the Communist Party of India (Maoist).

The Philippines

The southern Philippines have long been a sanctuary and training and recruiting ground for terrorist organizations. Militant organizations like the Abu Sayyaf Group (ASG) and the Moro Islamic Liberation Front (MILF) operate in the Sulu archipelago and the easternmost island of Mindanao.

The ASG, formed in the early 1990s, has a record of killings and kidnappings and has had links with al Qaeda. The ASG's armed strength has declined from an estimated 1,000 to about 400 through U.S.-supported Philippine military operations since 2002. The ASG has ties with military factions of the MILF and Jemaah Islamiyah (JI). Since 2003, the ASG has carried out bombings and plotted bombings in cooperation with JI and the MILF, including bombings in Manila.

The MILF was formally established in 1984. With an estimated armed strength of 10,000 to 12,000, it has aimed at separation and independence for the Muslim region of the southern Philippines. There were strong links between some elements of the MILF and JI, including the training of JI terrorists in MILF camps and the planning of terrorist operations. The MILF and the Philippine government reached cease-fire agreements in 1997 and in 2003. In August 2008, the Philippine government and the MILF signed a Memorandum of Agreement laying out a framework for a settlement to end the MILF insurgency and recognizing the ancestral domain of Filipino Muslims. Renewed fighting between the government and the MILF broke out following the collapse of the accord, reportedly resulting in the displacement of more than 600,000 villagers and dozens of deaths. The government and the MILF managed to negotiate a new cease-fire agreement in July 2009. They also agreed in September 2009 on a new round of peace negotiations that would include the establishment of an International Contact Group.

Indonesia

Since the end of the Suharto regime in May 1998, terrorism has been the most serious issue in

Indonesia. Although a Muslim majority practices religious tolerance and democracy, radical groups have grown in influence by taking advantage of the country's internal problems, such as separatist movements, a severe economic recession after the Asian financial crisis, and the Muslim-Christian strife in the country's remote regions.

Until the conclusion of the 2005 peace accord, the Free Aceh Movement was the most active, taking responsibility for terrorist attacks in Indonesia. With the dissolution of the Free Aceh Movement, the Front Pembela Islam (Islamic Defenders Front), formed in 1998, was disbanded in 2002. The Laskar Jihad, formed in 2000, was also dissolved in 2002. Replacing those militant groups as the leading perpetrator of fatal terrorism was a group of JI in cooperation with al Qaeda. Since 2003, the major bombings have been carried out by a splinter group led by Noordin Mohammed Top.

Following bomb blasts in several cities on Christmas Eve, 2000, the 2002 Bali bombing, the most deadly terrorist attack since the September 11, 2001, killed approximately 200 and injured some 300, mainly Australians and Indonesians. Other bombings on such soft targets include the bombing of the Marriott Hotel in Jakarta in August 2003, the bombing of the Australian embassy in September 2004, and the second Bali bombing of October 2005. In July 2009, the near-simultaneous bombings of the J. W. Marriott and Ritz-Carlton hotels in Jakarta killed 9 and injured more than 50, including 6 Americans.

The 2002 Bali bombing convinced the Indonesian government to reverse its previous reluctance to investigate JI. Since the presidential election of Susilo Bambang Yudhoyono in 2004, the Indonesian government became both more assertive and more effective in its counterterrorist activities. Although Abu Bakar Ba'asyir, the leader of JI, was sentenced in April 2004 to 30 months' imprisonment for conspiracy in the 2002 Bali bombings, he was released in June 2006. In September 2008, many JI members reportedly joined Abu Bakar Ba'asyir's new organization, Jamaah Ansharud Tauhid, while Noordin Mohammed Top was reportedly killed during a raid by Indonesian police in September 2009.

Future Prospect of Asia

It is not easy to address long-standing conflicts like the ones of the Korean Peninsula, the Taiwan Strait,

the South China Sea, and India-Pakistan. In addition, transnational security challenges such as terrorism, piracy, as well as the trafficking of drugs and arms would continue to feed threats without effective international cooperation. Among the many challenges lying ahead and many problems confronting the region, the most critical factor in future Asian security is China's rapid rise in the international arena.

The growing power of China may not only impose direct threats to neighboring countries but may also leave the United States and its allies less well positioned to deal with the sensitive issues on the Korean Peninsula, the Taiwan Strait, and the South China Sea. Above all, it would inevitably change the basic structure of the regional system as well as the security order in Asia. Under the current uni-multipolar structure with one superpower (the United States) and four major powers (China, India, Japan, Russia), regional order in Asia has been maintained in an imperfect manner by the two aspects of hegemonic power and balance of power.

However, China had already surpassed Japan in 2011 and could reportedly reach the biggest economy, the United States, in the 2030s. India would catch up with Japan by 2030 and the United States by 2050. As a result of these dramatic power transitions, the U.S. hegemonic system would further erode, on the one hand, and the balance-of-power system among five powers, including the United States, would begin to operate, on the other hand.

As far as a significant power gap exists, China has reluctantly accepted the U.S. hegemonic system, even though it has expressed the desirability of multipolarization in the future. However, following the power transitions, China will begin to challenge the legitimacy of the U.S. military presence and then shift the assessment of its function from stabilizer to potential threat to U.S. national interests as well as regional security. In addition, uncertainty and miscalculations in the balance-of-power system are likely to be the sources of danger that cause security issues among major powers as long as cooperative regionwide institutions for enhancing transparency remain underdeveloped in Asia.

Yasuhiro Takeda

See also China, People's Republic of; India; Korea, North; Pakistan; Philippines; Taiwan; Terrorism

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ASIAN AMERICANS

As long as there have been Asians in America, they have participated in the U.S. military. Though few details are available about individual Asians, it is evident that as a group Asians had particular experiences that colored their association with the military. This entry examines the history of Asians and Asian Americans in the U.S. military and provides details on some of the more eminent individuals and units in the military.

Racial politics and international relations were decisive factors in shaping their involvement—from enlistment in the military to the conditions of service in it. During the latter half of the 19th century, an anti-Asian movement gave rise to a host of laws that essentially excluded Asians from the country and discriminated against those already here. As a result of restrictive immigration laws and the anti-miscegenation laws that were enacted to address the supposed “threat” that they posed to the livelihood

of White workers and the White racial character of the country, few Asians and Asian Americans were available for military service. Antipathy toward them persisted into the 20th century, when the country felt threatened by or became embroiled in wars with various Asian nations. At times, Asian and Asian American residents were seen as a national security problem and a source of social instability.

Early Military Service

The first known instance of Asian involvement with the U.S. military dates back to the War of 1812, sometimes called the Second War of Independence against England. “Manilamen,” Filipinos who had settled in Louisiana, signed up with the buccaneer Jean Lafitte to assist Andrew Jackson in the Battle of New Orleans (1815). Asians also participated in the American Civil War. More than 50 Chinese Americans fought on both sides of the conflict, including John Tomney, who served in one of the New York infantry regiments and eventually died of wounds sustained at the Battle of Gettysburg.

At the end of the century, during the Spanish-American War (1898), there were Japanese Americans serving in the U.S. Navy at the Battle of Manila Bay and Asian Indians in the U.S. Army. Some of the Asian Indians who had migrated from the west coast to Colorado, for example, volunteered for the 1st Colorado Regiment, U.S.V. (United States Volunteer), to fight in that conflict and the Philippine-American War (1899–1902). During the Philippine-American War, significant numbers of Filipinos joined the U.S. Navy and the Philippine Scouts, a military organization within the U.S. Army, founded in 1901. Because of the navy’s discriminatory policies, Filipinos (and later, Chinese) were eligible to enlist only as mess stewards. However, as soldiers in the Philippine Scouts, they were assigned the arduous task of suppressing Emilio Aguinaldo’s revolutionary forces, which had emerged in the wake of the collapse of the First Philippine Republic, and subduing the fierce Moro tribes on the island of Mindanao. In the campaign against the Moros, Private José B. Nisperos of the 34th Company was awarded the Medal of Honor for protecting his unit from annihilation.

In the course of General John J. Pershing’s failed Mexican Expedition (1916–1917) to capture the Mexican revolutionary leader Pancho Villa,

Mexican Chinese provided his forces with various goods and services. To protect them from retaliation, Pershing brought 527 of them back to the United States in contravention of the Chinese Exclusion Act (1882), which barred them from entering the country. Most of “Pershing’s Chinese” settled in San Antonio, Texas. Since Asians and Asian Americans were stereotyped as suitable only for manual labor, the government employed many of Pershing’s Chinese as auxiliary workers—laborers, carpenters, cooks, and blacksmiths—to support the army while it prepared for World War I. In the Great War itself, Asians and Asian Americans were conscripted as “non-Whites” into the National Army, where they were also assigned auxiliary work. But a few of them did see combat: Private Tomás Claudio, a Filipino American, was one of the marines to die at the Battle of Chateau-Thierry, and Sergeant-Major Tokutaro Nishimura Slocum, a Japanese American, fought with the 328th Infantry Regiment, 82nd Infantry Division (nicknamed the All-American Division).

World War II Service

During World War II, Asians and Asian Americans were integrated into regular units or served in segregated units commanded mainly by White officers. As non-White members of regular units, they were usually relegated to menial tasks rather than given combat missions; as members of segregated units, they were stigmatized and disparaged. Racial discrimination notwithstanding, they acquitted themselves well in the war. For some Asians, an important motivation was to aid their ancestral homelands against Axis aggression as well as affirm their claim to America as their adopted homeland. It was because of their sense of obligation to country and family that Asians and Asian Americans distinguished themselves in the war, winning numerous awards. For all of them, World War II was a watershed event that had important implications for their struggle for civil rights in America. Veterans returned home with a newfound confidence that they could overcome the racial barriers that had previously prevented them from advancing in American society.

Among segregated units, the previously mentioned Philippine Scouts was the largest and most experienced. As part of the U.S. Army’s Philippine Division, the Philippine Scouts constituted over half of General Douglas MacArthur’s U.S. Army forces

in the Far East. In the beginning of the Pacific War, the Philippine Scouts were America's frontline soldiers and were considered the mainstay at the Battle of Bataan. One of the first Medals of Honor was awarded to Sergeant José Calugas, a Philippine Scout, who later received a direct commission in the U.S. Army. He was among those who survived the infamous "Bataan Death March," which had resulted in an estimated 5,000–10,000 Filipino deaths. Afterward, he led a guerrilla unit against Japanese occupation forces. Meanwhile, on the other side of the world, another Filipino American would also be awarded the Medal of Honor, though belatedly. Staff Sergeant Rudolph B. Davila, 7th Infantry Regiment, 3rd Infantry Division, initially received the Distinguished Service Cross (DSC) for leading his men against enemy machine gun emplacements in an offensive near Aetna, Italy. In 2000, his DSC was upgraded to the Medal of Honor. He was the only Filipino American to receive the Medal of Honor in the European theater.

Approximately 250,000 Filipinos served with the United States military during World War II. They did so, however, as U.S. nationals rather than as citizens because the Philippines was still a territory in America's overseas empire. Against President Harry Truman's objections, Congress passed the Rescission Act (1946), denying them the veteran benefits that they were originally promised despite their service and sacrifice. After more than 60 years of effort, the Filipino veterans movement succeeded in recovering partial payment through a provision included in the stimulus bill that President Barack H. Obama signed into law in 2009.

Like the Filipinos, Chinese and Chinese Americans served alongside and in the American armed forces during World War II, beginning with those who served in the Chinese-American Composite Wing. The Chinese-American Composite Wing included the famous "Flying Tigers" or American Volunteer Group, which later became part of the U.S. 14th Air Force. The U.S. 14th Air Force also included the segregated all-Chinese American 14th Air Service Group (ASG). The 14th ASG was expressly organized for duty in the China-Burma-India Theater, which the Allied leaders originally thought would become a major area of operations against Japan. Besides providing support services to the air force, the 14th ASG had the additional assignment of performing liaison work between the American and Chinese

troops. About 10% of all Chinese Americans in the armed forces served in the 14th ASG.

Besides the Chinese Americans serving in the segregated 14th ASG, others trained as pilots and aircrew. Among the aviators was Hazel Ying Lee, the first Asian American woman to fly for the U.S. military as a member of the Women Airforce Service Pilots. She ferried fighter planes for the military and died in the line of duty. (At about the same time, her brother Victor was killed in combat in France.) In 1977, Hazel Ying Lee and other Women Airforce Service Pilots belatedly received recognition for their wartime service and were accorded full military status.

However, the majority of Chinese and Chinese Americans in uniform were either integrated into regular army units that fought in the European and Pacific theaters or served aboard naval vessels mainly as mess stewards. The most eminent was Captain Francis Wai of the 34th Infantry Regiment, 24th Infantry Division, one of the few Asian American officers allowed to serve in combat. He was posthumously awarded the Distinguished Service Cross for leading his men against enemy gun emplacements on Leyte, Philippines. In 2000, his award was upgraded to the Medal of Honor. To date, he is the only Chinese American to have received the nation's highest military award. Altogether approximately 15,000–20,000 Chinese Americans or 19% to 25% of the Chinese American community served in the armed forces during World War II.

America's Finest

The most acclaimed segregated Asian American military units were the Japanese American 100th Infantry Battalion (nicknamed "The Purple Heart Battalion" for the casualties it sustained) and the 442nd Regimental Combat Team (RCT). Because America was at war with Japan, these soldiers had the additional burden of proving their loyalty to America. Immediately after the preemptive strike at Pearl Harbor on December 7, 1941, Japanese Americans (most of whom were *nisei*, second-generation Japanese born in the United States) were initially classified as 4C, "enemy aliens," who were unacceptable for military service because of their nationality or ancestry. On February 19, 1942, President Franklin D. Roosevelt signed Executive Order 9066, empowering military authorities to

forcibly remove people of Japanese ancestry from the west coast on the spurious rationale of “military necessity” and incarcerate them in concentration camps. Historians regard this as the worst mass civil rights violation in American history. Japanese Americans living in Hawaii were spared due to the impracticality of interning almost half of the local population and the consequent dislocation of the local economy that this would cause.

Because of personnel needs later in the war, the government reversed its decision about the ineligibility of Japanese Americans for military service. By the end of World War II, there were proportionately more Japanese Americans in the U.S. Army than in the general population. Most of them were members of the 100th Battalion, made up of mostly Hawaiian Japanese Americans, or the 442nd RCT, which included *nisei* recruited from the concentration camps. Ironically, they would be among the first to liberate Dachau, the oldest concentration camp in Germany.

During the North African campaign, the 100th Battalion was originally assigned to guard supply trains but was later allowed to engage in combat operations in the arduous Italian campaign, landing at Salerno and joining in the assault on Monte Cassino. One of its legendary officers was Captain Oak Young Kim, a Korean American. Among his exploits was the capture of two German soldiers who provided intelligence that contributed to the capture of Rome. Had they not been ordered to halt 10 miles from Rome, the men of the 100th would have been the first Americans to liberate the Italian capital. Later, the 100th and 442nd were merged. Together, they fought in Italy before being reassigned to the invasion of southern France. In France, the 442nd RCT famously broke through a reinforced German line of resistance to rescue the “Lost Battalion,” 211 men from the 141st (“Alamo”) Regiment, 36th (“Texas”) Division, after 4 days of grueling warfare in the rugged Vosges Mountains, in eastern France. In the process, the 442nd suffered heavy casualties, exceeding the number of men whom they had saved.

The 442nd RCT became the most decorated unit in U.S. military history for its size and length of service. In less than 2 years, it participated in seven major campaigns in Italy and France, received seven Presidential Unit Citations (five in a single month during combat in the Vosges), and its members received 18,143 awards, including an extraordinary

9,486 Purple Hearts, representing a casualty rate of 314%, and 52 Distinguished Service Crosses.

Initially, there had been only one Medal of Honor awarded to a Japanese American. It was presented posthumously to PFC (Private First Class) Sadao Munemori of the 100th Battalion for sacrificing himself for his men during combat near Seravezza, Italy. On June 21, 2000, acknowledging that there had been racial discrimination in the bestowing of decorations in World War II and using its established criteria for the conferring of medals, the army upgraded the awards of 20 Japanese Americans and two other Asian Americans (the aforementioned staff sergeant Rudolph B. Davila and Captain Francis B. Wai) to the Medal of Honor for risking their lives above and beyond the call of duty in action against the enemy. On October 5, 2010, President Barack H. Obama recognized the Japanese American World War II veterans as a group by awarding them the Congressional Gold Medal, the highest civilian award given to an individual or group for deeds or service to the United States.

Less well known than the storied soldiers of the 100th Battalion and 442nd RCT were the Japanese Americans who performed an indispensable role in the Pacific and the China-Burma-India theaters as members of the Military Intelligence Service, where they served as interpreters, translators, and interrogators, often accompanying combat units in the field. Their achievements included the translation of the “Z Plan,” which contained Japanese strategy in the Central Pacific, leading to allied victories in the Mariana Islands Campaign. According to General MacArthur’s chief of intelligence, Major General Charles Willoughby, the work of the Japanese Americans shortened the war by 2 years.

Post–World War II Service

Recognizing the contributions of Asians and Asian Americans as well as other people of color during World War II, President Harry S. Truman eliminated racial segregation within the armed forces in 1948. Only since then have they been integrated and accepted on anything like an equal basis into the U.S. military. Still, they continue to cope with issues of fairness and trust in the military. Asian Americans who participated in the Korean and Vietnam Wars have suffered from the additional burden of being viewed with suspicion because of their ethnicity,

risking harassment and worse. Toward the end of the 20th century, the circumstances of Asians and Asian Americans had improved as the country's changing demography had given rise to an increasingly multi-ethnic military force. But as the Bruce Yamashita case shows, the problem of racism persists. In 1989, after suffering racial harassment because he was a Japanese American, Yamashita was dismissed from Marine Corps Officers Candidate School. In 1993, however, he received his commission after it was learned that there had been a consistent pattern of discrimination against him and other minority candidates. His case led to various reforms prohibiting racial and ethnic discrimination in the military.

Unfortunately, the problem of racial and ethnic discrimination in the military persists into the 21st century. There have been several reported incidents of alleged verbal and physical abuse of Asian Americans who are serving their country overseas. One incident that has received widespread public attention is the tragic case of Private Danny Chen. While serving in Kandahar, Afghanistan, Chen was the victim of constant racial slurs and physical abuse because of his Asian ethnicity, eventually driving him to commit suicide on October 3, 2011. As of this writing, eight of his fellow soldiers have been charged with various crimes, including involuntary manslaughter, negligent homicide, reckless endangerment, and assault.

These problems notwithstanding, Asian Americans continue to distinguish themselves in the U.S. military, though in unforeseen ways. In the wars in Iraq and Afghanistan, several have achieved prominence through protest. General Eric Shinseki and Major General Antonio Taguba are the best known. In 1999, General Shinseki was the highest ranking Asian American in U.S. military history when he became the 34th Army Chief of Staff. In 2003, he publicly disagreed with Secretary of Defense Donald H. Rumsfeld during the planning of the Iraq War, arguing that many more troops would be needed for the postwar occupation than had been originally estimated. Shinseki was forced to resign as a result of this controversy. Later, he was vindicated when his assessment was found to be correct. In 2009, President Obama appointed him to head the U.S. Department of Veterans Affairs. In 2004, Major General Taguba was assigned to investigate reports of abuse of prisoners in Abu Ghraib prison in Iraq. His report was highly critical of the army's torturing

of prisoners in violation of the Geneva Conventions. In 2007, Taguba was forced to resign. In 2008, in a preface to a report by Physicians for Human Rights on the treatment of prisoners in Iraq and Afghanistan, Taguba accused President George W. Bush's administration of committing war crimes and called for the prosecution of those responsible. Both Shinseki and Taguba are men of integrity who were forced out of the military for adhering to the values expressed in West Point's motto, "Duty, Honor, Country."

Concluding Comments

Asians and Asian Americans have a long and honorable record of service in the U.S. military. Along with the usual suffering and deprivation that such service entails, they had to shoulder the burden of racism in the military. They risked their lives to defend the country that had disowned and discriminated against them. In demonstrating their loyalty to the country, they hoped to be accepted as legitimate members of it. For Asian immigrants, military service was a way to citizenship, overcoming the anachronistic Naturalization Act of 1790 that had limited citizenship through naturalization to "free White persons." For Asian Americans, military service was an affirmation of their citizenship and an expression of their civic responsibility. For Asians and Asian Americans, it was an assertion of their commitment to the U.S. Constitution and its ideals, with which they identified. Through their struggle and sacrifice, they proved the truth of President Roosevelt's words that "Americanism is not, and never was, a matter of race or ancestry."

William Wei

Author's Note: Asian Americans are Americans of Asian and Pacific Islander ancestry. Broadly speaking, the term encompasses any ethnic group that traces its origins to Asia and the Pacific. In the United States, however, Asian usually refers to East Asians such as Chinese, Japanese, and Koreans, as well as South Asians such as Asian Indians and Southeast Asians such as Filipinos and Vietnamese, to name the most well known. Pacific Islander is usually reserved for the indigenous natives of Hawaii, though technically the term includes inhabitants of Polynesia, Melanesia, and Micronesia.

See also Diversity

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ASSOCIATION OF THE UNITED STATES ARMY

The Association of the United States Army (AUSA) is a private, nonprofit educational organization that advocates for and supports all the components of the U.S. Army—the active force, the National Guard, the U.S. Army Reserve, the army’s civilian workforce, plus the family members and retirees of each component. This entry describes the mission and structure of AUSA.

Founded in 1950, the association’s focused mission is to represent the army by being the voice of all the members within its components, foster public support of the army’s role in national security, and provide professional, educational, and information programs. AUSA has 125 chapters

located worldwide. It is made up entirely of individual volunteers and corporate members who conduct programs and activities designed to engender community support for the army. The chapters are grouped in nine regions: seven within the United States, one in Europe, and one in the Pacific. Membership is open to everyone, not just army personnel, nor is membership mandatory for soldiers. Specifically, since its founding, AUSA membership has been and is open to members of all the army’s components plus its retirees, veterans, government civilians, businesspersons, industry representatives, military academy and Reserve Officers’ Training Corps cadets, family members, and concerned citizens. AUSA chapters have donated millions of dollars to meaningful support programs that include college tuition assistance, educational scholarships, and aid for wounded warriors and their families.

The organization’s central office, run by a paid administrative staff within 14 directorates, is located in Arlington, Virginia. It is governed by a council of trustees consisting of 21 members, many of whom are retired military veterans of senior rank, and advised by nine standing advisory committees. The advisory committees are Army Civilians, Awards, Chapter Operations, Finance and Audit, Noncommissioned Officer and Soldier Programs, Reserve Components, Resolutions, Retiree and Veterans Affairs, and Standing Bylaws. The association publishes on a monthly basis the *Army* magazine and the electronically delivered *AUSA News*. The magazine is devoted to the advancement of the military arts and sciences and to representing the interests of the U.S. Army and its components. Articles in the magazine range from the coverage of U.S. Army operations in areas of hostility and the conduct of humanitarian programs involving army personnel, to descriptions of current force equipment and how it is used, estimates of future force development, and pieces on the army’s history. The electronically delivered *AUSA News* disseminates via the Internet the latest developments within Washington, D.C., on Capitol Hill, and in the Pentagon that affect the army.

AUSA’s prime mission is to educate the public on the army’s values by telling the army story. The mission is specifically accomplished by the following:

- Conducting national issues conferences, forums, and special meetings
- Conducting monthly breakfast forums by AUSA’s Industry Affairs Directorate featuring prominent



The Association of the United States Army symbol.

army and Department of Defense military and civilian leaders

- Providing the U.S. Congress with testimony and visits to Capitol Hill through AUSA's Government Affairs Directorate
- Conducting an annual meeting in Washington, D.C., featuring exhibits of state-of-the art equipment, professional development seminars, and forums airing the latest issues affecting the army, its soldiers, civilians, and their families
- Articulating and supporting the interests of all army families through its Family Directorate

Fund-raising for the association via membership mailings and the conduct of programs is vested in its Institute for Land Warfare, which also prints and distributes free of charge periodic professional research papers, background briefs, and special reports. The Institute for Land Warfare extends the influence of the association by informing and educating its members, its leaders, and the American public on the critical nature of land forces and the importance of the U.S. Army. Reports such as "The Evolution of the U.S.-Japan Alliance," "A 21st Century Campus for Battle Command Training," "The Fiscal Year Army Budget: An Analysis," and "Reforming the National Security Council for the 21st Century: Integrating Homeland Security and Transnational Threats" can be ordered free of charge by e-mailing ILWPublications@ausa.org or calling 1-800-336-4570.

Paul E. Zigo

See also Army, U.S.

Further Reading

Association of the United States Army: www.ausa.org

ASYMMETRIC WARFARE

Asymmetric warfare is a term that describes many conflicts in the post-Cold War era. Indeed, the period since the attacks on the United States on September 11, 2001, is sometimes called the "asymmetric warfare period." This type of warfare can be defined as any conflict in which one side with overwhelming military power tries to impose its will on a weaker enemy, while that weaker enemy tries to compensate

for its disadvantages, exploit the stronger adversary's vulnerabilities, and stop or disrupt the adversary's control. A simpler definition is an inferior power fighting a superior power as each side strives to exploit the other's disadvantages. In asymmetric conflicts, the weaker side is called an insurgency, and the stronger side's attempt to quell the insurgents is a counterinsurgency. This entry discusses examples of asymmetric warfare over the past century and provides details of recent and current asymmetric warfare in Iraq and Afghanistan.

Historical Background and Theories of Asymmetric Warfare

Although it has been a major focus of the Global War on Terrorism, asymmetric warfare predates 1989. Different names such as small wars, unconventional wars, or guerrilla wars have been used, but all share similar features. Among noteworthy historical examples were the American Indians of North America resisting Anglo-American expansion from the 1600 through the 1800s, the Boers resisting British imperialism in South Africa from 1899 to 1902, T. E. Lawrence and the Arabs contesting Turkish power in Palestine from 1916 to 1918, and the Viet Cong ejecting American military forces from South Vietnam between 1965 and 1973. These insurgents fought as guerrillas who ambushed their vulnerable enemies yet avoided pitched battles against vastly superior enemy forces. In each case, the supposedly superior Anglo-American, British, Turkish, and American forces endeavored to stop the insurgents from achieving their goals.

Anglo-American and British forces proved successful against Native American and Boer insurgents, in part because of the willingness of the Anglo-Americans and British to utilize extreme counterinsurgent measures like massacring Indian women and children in their villages and sending Boer women and children to concentration camps. Conversely, T. E. Lawrence and the Viet Cong succeeded in their goals by executing well-planned attacks against their Turkish and American enemies that reduced both material capabilities and combatant morale. The insurgent forces destroyed vehicles and killed and wounded service personnel. The other effective results of their attacks could be seen in diverting Turkish and American forces to react to insurgent attacks, arousing fears of insurgent ambushes, and

disrupting Turkish and American transportation. In the case of Vietnam, the televised images at home in the United States also magnified the detrimental effects of psychological defeats and setbacks. The Viet Cong exploited the negative publicity to speed the decline in civilian support for the American war effort and corresponding downturn in morale among American service personnel. These efforts can be seen as asymmetric from the perspective of the insurgents fighting a powerful adversary.

Insurgent forces draw on revolutionary beliefs, charismatic leadership, nationalistic fervor, religious zealotry, vengeful feelings, or other factors as motivations to engender fanatical support among some followers and passive support of the indigenous masses. The insurgents attempt to undermine their enemies' control with the goal of causing instability and inciting wider and wider rebellion or unrest. They utilize indirect means such as assassinations, suicide, or terrorist attacks that may have substantive or symbolic significance to their enemies and allies. These tactics minimize the cost in insurgent lives and maximize the effects of their attacks in the face of an overwhelming, yet slowly responding, foe. Thus, "asymmetric" fits as a label for such attacks of the weak against the strong.

The targeted nation-state or governmental authority strives to mitigate the disruptive effects of attacks. The counterinsurgency efforts may include relatively benevolent tactics like "winning hearts and minds," in which the nation or government works to maintain order and stability in nonmilitary ways such as improving communication or transportation infrastructure. Building roads, schools, and hospitals can, for example, provide proof that peace pays dividends for the populace, as opposed to the chaos and suffering caused by terrorist attacks. American occupation forces utilized this approach to one degree or another in the Philippines from 1899 to 1902 and in Haiti from 1915 to 1934. American efforts proved successful in the Philippines, where the indigenous masses gradually sided against the insurgents. However, building infrastructure and installing a centralized government in Haiti failed to ensure lasting stability when American forces withdrew. The nation fell back into its cycle of revolution and dictatorial rule that had existed before the Americans arrived in 1915.

Alternatively, if the nation or governmental authority ignores moral codes, counterinsurgency

could take the form of brutal retaliations, including incarceration, torture, or execution. In South Africa, in 1899, the Second Boer War erupted because British immigrants clashed with the Boer (farmers) already living there. The British army initially defeated the Boer rebels in conventional warfare but then fought a lengthy counterinsurgency against the stubborn Boer guerrilla fighters. To deprive the Boer insurgents of manpower and material support, the British rounded up their families and interned them in concentration camps. The internees suffered from starvation and disease at the hands of the British, and more than 10,000 died in captivity. By 1902, the atrocious British tactics took a toll on the Boers and brought them into negotiations. Other examples of vicious counterinsurgencies include the German army fighting against Yugoslav partisans in the Second World War and the Soviet army fighting against the Afghan mujahideen in the 1980s. In both cases, the occupation forces malevolently targeted the indigenous civilian population in reprisals against the insurgent forces.

Asymmetric Warfare After 2001

Since 2001, the terrorist tactics of nonstate actors (i.e., individuals or groups acting independently from any governments) like al Qaeda and governments like the Taliban have represented prime examples of asymmetric warfare. In the attacks on September 11, the nonstate terrorist group al Qaeda orchestrated a well-planned and expertly coordinated assault on American symbols of economic and military power. The terrorists drew on Islamic fanaticism and anti-American feelings. In killing some 3,000 unsuspecting people, the terrorists created fear and uncertainty among Americans, which they incorrectly hoped would leave the United States incapacitated and divided.

In the wake of the attacks in 2001, President George W. Bush initiated the Global War on Terrorism. The U.S. military sought to find and kill al Qaeda terrorists and eliminate the Taliban government in Afghanistan. Later, in 2003, Bush ordered an invasion of Iraq under the justification of stopping that nation's development of weapons of mass destruction and ending its aid to terrorist groups. American military forces quickly defeated the Iraqi forces and overthrew Saddam Hussein's regime, just as the American forces also easily defeated the

Taliban forces in Afghanistan and ejected the Taliban from power 2 years earlier, in 2001. In both Iraq and Afghanistan, however, American forces needed to kill the insurgents and rebuild the infrastructure of each nation.

From 2003 until 2007, American forces floundered in attempts to create a peaceful, democratic Iraq from the rubble of decades of dictatorship. Internal religious and ethnic divisions exacerbated these efforts. Not only were American forces contending with insurgent activities like suicide bombings and improvised explosive device attacks that represented the hallmarks of asymmetric warfare, but they also faced sectarian civil war among the competing Iraqi groups.

The initial American strategy sought to find and kill insurgents. Beginning in 2007, however, the American counterinsurgency strategy shifted in what has been called the “surge.” Several additional American units deployed to Iraq to increase security levels and to establish stable, productive, and peaceful economic and political systems. The surge’s new strategy, as espoused and followed by U.S. Army General David Petraeus, called for American troops to form close working relationships with Iraqis and gain their trust. American units began living with Iraqis and focused on protecting the civilian populace from insurgent attacks. Americans also worked side by side with Iraqi military forces and trained them in counterinsurgent techniques. These efforts proved successful in reducing both American and Iraqi casualties in the years since 2007. With the American military withdrawal from Iraq in 2011, it is unclear whether the government, military, and social structures established by 8 years of American occupation will remain intact in the long term.

In Afghanistan, however, neither the goal of killing insurgents nor that of rebuilding infrastructure has been completely achieved after more than a decade of military operations. American forces could not consistently bring superior firepower and technological superiority to bear against the insurgent fighters. Nor could they always utilize nonmilitary measures to end the insurgents’ influence among the Afghan people. For example, high unemployment and the opium trade represented two serious challenges in countering the Afghan insurgency. The al Qaeda and Taliban insurgents exploited unemployed Afghans, whose only options for income seemed to be fighting the Americans or working in the opium

trade. The insurgents offered cash prizes for successful attacks against American and Afghan government forces, and they utilized income from opium sales to fund their terrorist activities. Countering the economic realities required the United States to subsidize Afghan farmers so that they do not grow opium and provide alternative employment for the Afghan people. This goes straight to key concepts of asymmetric warfare. If it is not possible to kill insurgents, then it may be possible to deprive them of the indigenous and economic support necessary to maintain their operations. So asymmetry can be found in the techniques, tactics, and procedures of counterinsurgents and insurgents.

Other factors like length of conflict and numbers of casualties have helped extend the insurgent causes in Iraq and Afghanistan. For example, the higher the casualty rates, the longer the conflict and the less the American people support the Global War on Terrorism—or Overseas Contingency Operations, as it has been called by President Barack Obama since 2009. Al Qaeda, the Taliban, and other terrorist groups utilize various media to broadcast images of their acts, thereby undermining public support among Americans and inspiring anti-American sentiment around the globe. Every victory or defeat can be magnified by this psychological warfare in American military parlance.

In the future, asymmetric conflicts may be won or lost as much in binary code as they will be won or lost in the streets or on the airwaves. Terrorist and insurgent groups will increasingly target the computer networks of nation-states and government authorities. In so-called cyber warfare, a well-placed computer virus or a skilled hacker could bring governmental functions to a grinding halt by destroying or damaging digital infrastructure. The collapse of power grids, for example, could leave whole populations without electricity so necessary for survival. This in turn could make people vulnerable to the age-old insurgent objective of creating instability and fear to undermine faith in governments and the cohesion of social order.

David J. Ulbrich

See also al Qaeda; Counterinsurgency; Cyberwar; Global War on Terrorism; Guerrilla Warfare; Mines, Land; 9/11 (2001); Petraeus, David; Psychological Warfare (PSYOP); Surge, Iraq War; Terrorism; War in Afghanistan

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ATHLETICS

See Sports

ATTACHÉS, MILITARY

Military attachés, military officers assigned to a diplomatic mission, have become fundamental, if unheralded, members of embassies and consulates across the globe. Their missions run the gambit from diplomatic negotiations to the passive gathering of military intelligence. The mere assignment of a military attaché to a specific post signifies some type of foreign policy decision of a nation. Thus, military attachés may be assigned to capitals of friendly nations to strengthen military ties or posted to nations whose foreign policies may lead to confrontations. In both these instances, and the many cases that lay between, the military attaché is an asset, serving with the diplomatic corps overseas, a professional military officer trained to work within diplomatic circles. This entry discusses the history and mission of military attachés.

History of Military Attachés

The history of the military attaché system is somewhat misleading. While the initial use of military attachés as official organs of national foreign

policy, both in name and in mission, is traced back to the 19th century, military officers have been used to accompany diplomats into enemy and allied camps and territories since the Roman era (and probably well before) to gather and analyze information on foreign armies and their defensive/offensive capabilities. The more modern versions of the military attaché may have started as early as 1806, when Napoleon assigned army officers to foreign capitals to gather intelligence on their defenses and military preparations. While the military attaché position slowly became a fundamental position within embassies and consulates around the world, its progress can be charted in fitful increases during times of crisis and renewed international tensions and an understandable decline during times of relative peace or economic distress.

It should not be surprising then that in the 20th century, the number of military attachés serving in embassies and consulates throughout the world increased dramatically just before, during, and after World War II. By the late 1930s, nations had assigned military attachés to many of the major capitals of the world and even to important locations in the far-flung corners of the globe. Not only were more attachés assigned to more locations, but also the number of attachés assigned to individual embassies and consulates increased. With the rise of naval power and air power, the technical challenges of reporting on these new developments often overwhelmed a single military attaché. Thus, important locations, such as Berlin, had a head military attaché and several assistants as well. After World War II, the onset of the Cold War only increased the importance of having military attachés assigned to countries throughout the world by both sides to enhance intelligence collection and keep open channels with military leaders. From meager beginnings in the Napoleonic era to the creation of a vast military attaché system used by nearly every major power in the 20th century, the military attaché became an indispensable asset to key embassies and consulates throughout the world.

The Military Attaché's Mission

The primary mission of the military attaché is to provide a military officer at embassies and consulates throughout the globe to support a nation's diplomatic corps. Military attachés can facilitate talks between

their nation's military and the host nation's military, as well as maintaining friendly contacts within the armed forces of allies. Thus, the military attaché, through professional and social contacts, provides a line of communication that can prove invaluable to an alliance. Not only is the military attaché able to use these contacts to facilitate cooperation and joint adventures, but this also helps the attachés accomplish their intelligence-gathering mission.

Intelligence gathering is probably the most recognized and touted mission of the military attaché. Yet very rarely are military attachés assigned to overtly conduct intelligence-gathering missions. As an official member of the diplomatic mission serving in a host country, the military attaché is bound by the same rules and courtesies as the rest of the diplomats. Any violation of diplomatic agreements would quickly end in the host nation demanding the recall of the officer, or even more embarrassingly, the military attaché could be recalled by his or her own government. Thus, even though most people associate military attachés with spying, the fact is that they are closely scrutinized, both by their own diplomatic corps and by the host nation's counterintelligence services.

This does not mean that military attachés do not have an intelligence-gathering mission; they do, but they often work using passive measures. Intelligence can be gathered through monitoring newspapers, attending military maneuvers and demonstrations, or merely requesting and receiving permission to visit certain military facilities. In open democratic societies, all of these events can and have generated volumes of military intelligence, while in more closed societies, passive intelligence gathering tends to be less fruitful.

Military attachés have also been used in more active intelligence-gathering missions. But the nation assigning its military attachés to conduct such operations runs the risk of violating diplomatic and military agreements, with harmful consequences often far outweighing the usefulness of any intelligence gathered.

Conclusion

Military attachés fill a unique position at their assigned locations throughout the globe. They support the mission of the embassy or consulate by carrying out diplomatic missions, either through

military discussions with the host nation's military or by organizing and assisting in joint operations. These professional military officers also collect intelligence on the host nation and their neighbors through passive means, though on rare occasions, they also use more active measures. Thus, military attachés act in direct support of the diplomatic corps, as well as fulfilling a military mission. It is a balancing act as these professional officers work for two masters—their armed services and the diplomatic corps. It is a testament to their professionalism and service that they are unheralded members of embassies and consulates throughout the world, fulfilling their missions within the rules and regulations of their assignments.

James F. Rose

See also Intelligence, Human; Professionalism

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ATTRITION WARFARE

Attrition is a style of warfare characterized by the effort to destroy an opponent's ability or means to resist. The primary goal of attrition warfare is to seek out and destroy the mass of the enemy's forces. Such an approach seeks to pit friendly strength against enemy strength and by this method destroy the enemy's capacity to fight. Forces employing attrition generally rely on mass to achieve this effect.

In the offense, attritionist forces measure success by the amount of ground they control, the number of enemy personnel that they have killed or captured, and the stocks of enemy equipment that have been seized or destroyed. In the defense, many of these same measures of effectiveness are still considered valuable. The goal of an attritionist force in the defense is to prevent enemy penetration. This entry discusses the history of attrition warfare and contrasts it with maneuver warfare.

Impact of the Industrial Revolution

Attrition warfare has been used, and has been effective, throughout history. The coming of the industrial age, permitting the mass production of weapons and ammunition, changed the scale on which attrition warfare could be conducted. Industrialization allowed massive amounts of artillery to subject the enemy to intensive preparatory fires prior to an assault by waves of infantry. The objective of the artillery bombardment was to annihilate enemy defenders or to impair their ability to resist effectively.

Such bombardments could last for hours, or even longer, and could consume quantities of ammunition inconceivable before the Industrial Revolution. For example, the British pre-assault bombardment against the Germans during the battle of the Somme, in France, in 1916 lasted for a week. This technique reached its zenith during the First World War and was encapsulated in the phrase “The artillery conquers, the infantry occupies.”

Artillery preparation of the objective was meant to substitute the weight of metal for the weight of numbers and prevent the wholesale slaughter of friendly soldiers during the assault. Defending soldiers adjusted by digging in ever deeper. As a result, no matter how long or heavy the bombardment, lengthy artillery preparation generally met with little success during the First World War. Even after the weeklong bombardment at the Somme, the assaulting British troops still suffered horrendous casualties at the hands of their German foes and achieved little in exchange for their losses.

By definition, attrition warfare requires that the force seeking to attrite its enemy must possess greater combat power than the force it is attempting to subdue. In addition, the attrition-style force must possess the means to carry on the fight. Due to the large logistical requirements and the potential for heavy casualties, attrition warfare places a great burden on a military force. Attrition warfare comes with other costs that transcend purely military considerations.

The ability to conduct attrition warfare also depends on national resolve and resources. Nations utilizing attrition warfare must have a civilian population willing to absorb potentially staggering casualties among its military forces in order to achieve victory. The industrial output required to sustain a

conflict of attrition may be great and may stress the economic capacity of the state. This is particularly true if the fighting is intense and protracted.

Attrition Warfare and Maneuver Warfare

Attrition warfare and its counterpart, maneuver warfare, are absolutes. Whereas attrition warfare seeks to wear down an enemy by the use of sheer numbers of personnel and materiel, maneuver warfare seeks to avoid the enemy's strengths and exploit the enemy's weaknesses. In practice, most military organizations exist somewhere along the continuum between these two poles. No force can be said to be purely maneuverist, nor are there any purely attritionist forces. While attritionist forces generally behave in a manner more consistent with attrition warfare, they may employ some aspects of maneuver warfare.

It is also possible for attrition and maneuver warfare to be utilized concurrently by different commanders within the same military force or even by the same commander at different levels of war. The Soviet Army in World War II is often cited as an example of an attrition-style force. During 1944–1945, however, while still predominantly employing attrition at the tactical level due to their overwhelming numerical and materiel superiority over their German opponents, the Soviets utilized maneuver warfare brilliantly at the operational level. Through this combination, the Soviets rapidly reconquered the territory lost to the *Wehrmacht*—as Germany's armed forces were known from 1935 to 1945—in the early stages of the war and drove on to seize Berlin.

Characteristics and Culture of Attrition-Style Forces

In combat, the goal of attritionist forces is to effectively synchronize diverse units and effects in order to bring to bear on the enemy the maximum possible destructive capability. Careful synchronization and detailed orders to subordinates also help minimize the potential for “friendly fire” incidents. Synchronization is an effort to impose order on the chaos of the battlefield. A high degree of synchronization can only be achieved through centralized control.

The role of subordinate leaders and units is not to upset the plan painstakingly crafted by their higher headquarters. Attrition warfare requires subordinates who are obedient to orders. Subordinates are

expected to do as they are told, regardless of whether or not they agree. Subordinates who take initiative and act without orders can disrupt the carefully synchronized plans developed by higher headquarters. Such disruptions are to be avoided.

Forces that employ attrition generally possess a military culture that facilitates this style of war. The primary characteristics of forces employing attrition warfare are rigidly hierarchical command structures in which information flows up and decisions flow down; an inward focus on process, inputs, and procedures; and a system that values imposed discipline rather than self-discipline.

Synchronization of effects and efforts to exert control over battlefield events occurs at the highest levels of the military organization and generally results in a rigid and stratified chain of command. This hierarchy allows leaders at the top of the organization to receive information that flows up the chain of command, make decisions that will effectively synchronize efforts across the force, and disseminate decisions for execution. This decision-making process often results in rigid battle plans. Given the requirement for information to reach decision makers and be processed, and for orders to flow back to executors, actions can occur relatively slowly. This centralized system of command and control allows leaders at every level to maintain control of their subordinates' actions.

One method for speeding up the transmission of information up the chain of command and expediting orders down is through clearly defined processes. Forces utilizing attrition usually focus inward on the processes that facilitate the effective use of firepower. This commitment to process extends into virtually all facets of an attrition force.

Training methods reflect this focus on processes, with subordinate units mastering a relatively small number of drills to be applied in a multitude of situations. Leaders are judged primarily on how proficient their unit is in conducting these drills. The result is that personnel are trained with the goal of making them virtually interchangeable; they are essentially parts in a machine.

Attrition-style forces often rely on imposed discipline to encourage desired behaviors. Individuals who are treated as mere functionaries, regardless of individual talents or skills, do not often exert their best efforts. As a result, an attritionist system must

prescribe precise standards for virtually every situation. When these standards are violated, discipline results in an effort to correct the offender and as a warning to others.

Vietnam: A Recent Example

During the Vietnam War, the U.S. military was faced with a situation for which it was largely unprepared. Vietnam was in the throes of a civil war and was facing an insurgency backed by conventional forces from communist North Vietnam. Lacking experience in counterinsurgency, the U.S. military utilized an attrition strategy in an attempt to wear down the North Vietnamese Army and their Viet Cong allies. The U.S. forces conducted search-and-destroy missions during which, as John Prados argued in 2009, "troops entered enemy territory and laid waste to anything deemed valuable. They would also attempt to force a battle, holding the enemy in place while commanders marshaled the capabilities to annihilate them" (p. 137). The ultimate purpose of search-and-destroy missions was to inflict casualties on enemy forces faster than they could be replaced. Facilitating this effort, U.S. forces were able to call on an unprecedented weight of firepower in battle. While the North Vietnamese Army and Viet Cong did suffer tremendous losses, the rate of casualties never approached the level necessary to reach a "tipping point" at which North Vietnam would find the cost of the war unsustainable.

Current Thinking

Most modern, Western militaries have shifted their philosophy of warfighting away from attrition to a more maneuver-based style. There are a number of reasons for this. Most Western militaries are no longer composed of poorly educated conscripts able to do little more than follow commands; many modern forces are made up of relatively well-educated professional soldiers who are capable of more than blindly following orders. The higher quality and motivation of volunteers have enabled relatively junior soldiers to assume increased leadership roles when compared with their conscript counterparts.

Getting volunteers to join the military requires pay and incentives that are competitive with their potential civilian employers. When pay and benefits are coupled with the staggering sums spent to

recruit, equip, and train a modern force, the amount of money represented by any modern military is significant. In addition, these escalating costs have led to ever-smaller standing armies. Most nations have a large investment in their modern armies and do not wish to hazard their destruction unnecessarily. The cost of going to war is too great; in some cases, even victory could not balance the cost in lives.

Attrition warfare is not an attractive option for a smaller force that is facing a larger force. These smaller professional forces may face potential adversaries whose forces are much larger. As a result, the smaller professional forces began to search for a way to overcome their numerical disadvantage and still win. In many cases, a doctrine based on attrition warfare was displaced, at least in part, by one based on maneuver warfare. For many of the armies that adopted maneuver warfare, this process of change is still ongoing. In most cases, attrition warfare is entrenched in the doctrine, processes, and culture of the force. This is a change that will take many more years to be completed. Regardless, attrition warfare has been utilized throughout history and has been extremely effective. It will likely remain effective in the future. Attrition warfare is unlikely to disappear and is likely to be employed by forces with the means to do so.

Conclusion

Attrition warfare has proven successful throughout history, but this was not without cost. To effectively employ attrition, one must have more combat power than one's adversary. A nation must also create a force imbued with the military culture that is necessary for attrition warfare to be successful. One must be willing to pay the heavy cost in logistics or soldiers' lives that comes with success and the even higher costs that accompany defeat.

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See also All-Volunteer Force; Combat Power; Culture, Military; Levels of War; War, Principles of

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AUSTRALIA

Australia is a nation of 21,263,000 people located in the southwestern Pacific region and is a member of the Commonwealth of Nations and a pivotal ally of the United States in both regional and international affairs. Australian military and foreign policy in the 20th century has been intimately tied to its relationship with both Great Britain and the United States. This entry describes the government and political parties of Australia and discusses Australian military forces, alliances, and policies and the historical development of Australian military and foreign policy.

Government, Politics, and Foreign Policy

Australia's government blends elements of the British parliamentary system with the American federal division of powers between states and the central government. The formal head of state is Queen Elizabeth II, whose personal representative is the governor-general, who generally maintains a distance from the day-to-day workings of the Australian government. The one notable exception was the 1975 dismissal by the governor-general of the government of Prime Minister Gough Whitlam, which caused a constitutional crisis in Australian political life. The government is divided into three branches. Parliament, made up of the Senate and House of Representatives, forms the legislative branch. The executive branch is represented by the Federal Executive Council, made up of the governor-general and state governors

advised by the prime minister. The judicial arm of the government is the High Court of Australia. Two major political parties exist in Australia today. The Labor Party, the oldest established political party in Australia, is generally considered center-left on the political spectrum. The other party is a coalition of two center-right groups, the Liberal Party and the National Party. Traditionally, Labor has been the strongest of the political parties in Australia. The current prime minister is Julia Gillard, the first female prime minister in Australian history, who came to power in June 2010 replacing her Labor colleague Kevin Rudd after an internal power struggle within the Labor Party.

Australian foreign policy is generally guided by a strong commitment to multilateralism and a focus on Pacific and Asian affairs. Australia has traditionally viewed itself as the leading voice of British Commonwealth affairs in the region and has sought to stake out a place in the region as a leading power. Leading issues of concern for Australian foreign policy include free trade, economic cooperation among Pacific and Asian states, and support for the United Nations and its role in mediating international affairs. Since the UN's inception in 1945, Australia has viewed it as one of the central supports for extending its influence globally, primarily through the use of Australian military forces in peacekeeping missions in the Pacific region as well as elsewhere.

Military Forces

The Australian military forces are referred to jointly as the Australian Defense Force (ADF). The ADF is made up of the Royal Australian Navy, the Australian Army, and the Royal Australian Air Force. The integrated structure of the Australian military mirrors the American model of the Department of Defense to some degree, but Australian military forces have achieved a higher degree of integration through the ADF with its single chain of command. Australian military personnel number 59,023 active personnel with an additional 21,850 personnel in reserve forces, making it the largest in Oceania. The 2011 Australian military budget amounted to A\$26.5 billion, which equated to 1.8% of Australia's GDP for the 2011–2012 fiscal year. Prior to the late 1970s, Australian military doctrine focused on the idea of forward defense. This doctrine called for close

cooperation with major allied powers such as the United States and Great Britain to thwart potential threats to Australia at as great a distance as possible. This doctrine changed in the 1980s with a shift to emphasizing the need to be a self-reliant military force, with the primary emphasis being the protection of the northern maritime approaches to Australia. Since the late 1980s, Australian military policy has focused primarily on the application of Australian military power in support of UN peacekeeping missions, notably in Somalia in 1993, Rwanda in 1994, and East Timor in 1999.

Recent Australian military policy was outlined in the 2009 white paper *Australia in the Asia Pacific Century: Force 2030*, which places the greatest emphasis for Australian military policy on meeting direct threats to Australia's security, followed by the need for stability in the southwest Pacific area. To meet these goals, the white paper stated that the ADF must be capable of dominating the naval and air approaches to Australia while also being able to project Australian military power in the region in terms of humanitarian and peacekeeping missions. To ensure this goal, the Australian government has committed itself to an overhaul of the military equipment available to the ADF as well as an expansion of the Royal Australian Navy and Royal Australian Air Force.

Independence to World War II

Australia achieved full independent status on January 1, 1901, when it became a fully federated state. Throughout the first few decades of its existence, Australia continued to rely heavily on the British government for representation with foreign governments as well as for continued protection by the Royal Navy. Australian involvement in Europe during World War I was central to establishing an Australian sense of national identity. Key to this was the Australian experience during the Gallipoli campaign (April 1915–January 1916), when the Australians' faith in their relationship with the British was shaken due to perceived incompetence on the part of British planners and commanders and what was considered the undue sacrifice of Australian soldiers at Gallipoli. In the interwar period, Australian-British relations continued to deteriorate as Australia sought a greater commitment from the British government for defense spending in the region, especially in light of the

growing potential threat of imperial Japan. A key stumbling block between the Australians and British was debate over the funding of the massive naval base at Singapore, designed to act as a deterrent to Japan. The Australians expected the British to foot the majority of the bill, but the British government was unwilling to carry the cost of such a massive project that would benefit nations such as Australia most directly. It was during this period that discussion emerged among Australian leaders of establishing a closer relationship with the United States to meet the security needs of Australia in the Pacific region.

World War II

The outbreak of World War II in the Pacific in December 1941 was a key moment in the development of Australia's relations with the British and the Americans. The Labour government of Prime Minister John Curtin purposefully set out to construct a closer relationship with the United States by establishing for the first time an independent Australian foreign service post in Washington, D.C., with Lord Richard Casey named as the first Australian ambassador to the United States in 1940. The fall of the Singapore naval base on February 15, 1942, led to a conscious decision by the Curtin government to look to the United States due to the British inability to meet Australian security demands in the Pacific. Disagreements between the two powers over the wartime use of Australian military forces under the command of American General Douglas MacArthur were an important element in what was often a tumultuous relationship. The end of the war in August 1945 brought new disagreements over the peace treaty with Japan. The Australians pushed for a harsh settlement with Japan that included trying the Japanese emperor Hirohito for war crimes and providing for heavy reparations payments for prisoners of war. The United States was determined to maintain the postwar reconstruction of Japan as a wholly American operation and worked to exclude Australia as much as possible from the peace process and occupation. Eventually, both sides compromised by allowing a small British Commonwealth Occupation Force, made up, primarily, of Australian troops, after the 1947 decision of the British to withdraw their troops for budgetary reasons, to be stationed in Kure Atoll and for the creation of the Allied Council for Japan, a four-member advisory board to General Douglas MacArthur, on which

the Commonwealth representative was Australian William MacMahon Ball.

The Cold War and After

In the aftermath of World War II, the emerging Cold War between the United States and Soviet Union led to a polarization of the world's nations. Australia found itself torn between its traditional Commonwealth relationship and its newfound alliance with the United States. Several key issues arose by 1953 that helped solidify the bond between the United States and Australia. Chief among these were the election of Robert Menzies in 1949 as Australian prime minister, the outbreak of war in Korea in 1950, and the signing of the ANZUS (Australia-New Zealand-United States Tripartite Agreement) Treaty in 1951, brought into effect in 1952. Menzies's election was primarily motivated by the strident anticommunist message he utilized during the election, including a promise to outlaw the Australian Communist Party, which he attempted to do in 1950. Australia's stature as an ally grew in 1950, when it became one of the first world powers to supply combat forces to help stymie the North Korean advance in the summer of 1950. The Australians provided both naval vessels as well as the 77th Fighter Squadron, stationed in Japan. Australian policymakers pushed hard to make sure that Australia would be among the first nations to answer U.S. president Harry Truman's call for ground troops for the UN effort in Korea. Australian troops formed a key component of the British Commonwealth Force that fought under the UN flag in Korea, with three battalions of Australian troops eventually seeing action. A formalized military alliance between the two powers was reached in 1952, signaling the fulfillment of a decade-long quest for a security commitment from the United States on the part of Australia. The formalization of the alliance under ANZUS helped make the relationship between the two powers the central aspect of each nation's foreign and military policies in the Pacific region. ANZUS would provide the rationale for Australian military involvement in the Vietnam War in support of American policies there and would supplant the Southeast Asia Treaty Organization after 1963 as the principal U.S. defensive alliance in the Pacific and Asia. Australia has continued to be a principal supporter of American foreign policy, dedicating troops and resources to the U.S.-led invasions of Afghanistan in 2001 and Iraq in 2003.

Recently, Australia and the United States have sought to reaffirm their long-standing military relationship. In November 2011, President Barack Obama and Prime Minister Julia Gillard signed an agreement that would expand the American military presence in the South China Sea region, utilizing Australia and Australian holdings as bases. The agreement allows for the stationing of 2,500 U.S. Marines at Darwin in northern Australia as well as the possible use of the Cocos Islands in the Indian Ocean to base U.S. Air Force and Navy air forces and unmanned drones. Analysts argue that this move toward a greater military state of cooperation has been primarily aimed at limiting the growth of Chinese military power in the south Pacific and Indian Ocean basin, something that both governments deny.

Travis J. Hardy

See also Alliances; ANZUS Security Treaty

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AVIATION, ARMY

Aviation was first used in combat in the United States during the American Civil War when officers in the Union and Confederate Armies recognized the advantages of adding a third dimension to the battlefield. From above, observers in balloons conducted reconnaissance. Into the 20th century, technological advances expanded the role of aviation to encompass

broader tactical and strategic objectives. By the end of World War II, the U.S. Army saw the potential of the helicopter and worked to incorporate it into warfighting doctrine. During the Vietnam War, the helicopter proved incredibly useful, and in 1983, the army established aviation as an independent branch, which allowed further development and professionalization of army aviators. Today, Army Aviation's global missions deliver a wide variety of capabilities with unmanned aircraft systems (UASs), fixed-wing service and reconnaissance aircraft, and the world's largest fleet of helicopters. This entry discusses the history, aircraft, and missions of the Army Aviation branch.

Early History

In 1861, President Abraham Lincoln was impressed with the intelligence-gathering possibilities of manned balloons and appointed Thaddeus Lowe as chief of Army Aeronautics. At the beginning of the Civil War, the Union and Confederate Armies experimented with balloon reconnaissance. The Union army also used balloons to gather geographical information to make better maps. Their efforts were limited, however, because of the precarious nature of the equipment, the frequent shoot downs, and the imprecision of intelligence because of the time it took information to reach the field commanders.

In 1898, the reconnaissance balloon made its reappearance in Cuba during the Spanish-American War. Although using balloons helped pinpoint the enemy, it also gave away friendly positions to Spanish artillery, which eventually shot the balloons down. For the next several years, the army did nothing more than maintain a few balloons.

World War I

By the time the United States declared war on Germany in April 1917, the Army's Aviation force consisted of only about 1,200 men, 250 aircraft, and five balloons; all of which fell under the Signal Corps, which was responsible for providing observation and courier services to the branches of the army. During the war, Aviation proved such a specific and worthy capability that the American Expeditionary Force commander, General John J. Pershing, separated Aviation from the Signal Corps and established the Air Service. Air Service units were attached to ground units and provided commanders with aerial

reconnaissance, real-time battlefield reports, and adjustments for field artillery. Other units were bombardment or pursuit units, whose job it was to attack enemy positions or shoot down rival aircraft. By the time the Armistice was signed, ground commanders grew accustomed to having Aviation assets under their command and wanted them to remain as part of their permanent force.

Postwar demobilization, an isolationist foreign policy, influential pacifists groups, and international arms limitations treaties kept the U.S. armed forces small during the years following World War I. Yet despite these factors, the 1920 National Defense Act established the army's Aviation units as a separate arm. The act also helped the Air Service organize and train officers and enlisted men in the tactical and technical aspects of combat aviation. In 1926, the Air Corps replaced the Air Service. Over the next several years, the Air Corps set records for flight endurance, and one of its pilots was the first to make a complete flight using nothing but cockpit instrument indicators. Despite these accomplishments, acquiring modern equipment and establishing aviation as a serious military capability did not come easy for the Air Corps. Brigadier General William Mitchell, a strong advocate and promoter of military aviation, was court-martialed in 1925 for accusing senior War Department officials of incompetency and treason because they refused to recognize aviation's potential. Although Mitchell's career ended in resignation, he influenced enough younger officers to continue advancing theories in tactical and strategic combat aviation.

The rise of international threats in the mid-1930s forced the U.S. government to increase the armed forces enlistment authorizations and funding for equipment and training. The ensuing growth spawned an army restructuring, and the Air Corps was redesignated the General Headquarters Air Force (GHQ) in 1935. The GHQ developed staffs and special departments that were dedicated to organizing aerial pursuit, bombardment, and observation units. The GHQ also built hard surface runways, established bombing and gunnery ranges, purchased modern bomb sights, and implemented better individual and collective training. Yet despite continual improvements in equipment and appropriations for additional aircraft, on the eve of World War II the army's Aviation arm was still much smaller and less sophisticated than most European air forces.

World War II

The U.S. Army entered World War II with the assumption that air power had more of a strategic than tactical role in warfare. Without the danger of the homeland suffering aerial bombardment, theories resided in the assumption that large bombers could intercept a naval threat while it was still at sea. Senior officers were overconfident in the invulnerability and accuracy of long-range bombers, which reflected their early emphasis on the strategic role of combat Aviation.

Early in the war, General George C. Marshall, the chief of staff of the army, authorized organic Aviation assets to Army Ground Force units. Ground commanders embraced the resource and found productive uses for the aircraft. The field artillery, in particular, used airplanes to spot and direct fires. Other units used aircraft for reconnaissance and courier services. As the war progressed, the capabilities of combat aircraft increased and the strategic and tactical value of bombers and fighters became complex and exclusive. By war's end, the gap between the different types of aircraft and their roles and ever-increasing capabilities prompted the creation of the U.S. Air Force. The creation of the air force in 1947 also formally established Army Aviation as a separate and unique entity in the U.S. military.

The Rift

In 1948, Secretary of Defense James Forrestal drafted the "Key West Agreement," which divided air assets between the air force, army, and navy. Experiences from World War II classified aerial warfare into three categories: (1) air superiority, (2) close air support, and (3) air interdiction. During its first years of existence, it was thought that the air force was capable of executing these missions fully. This theory limited the army's Aviation mission and equipment sets. In 1949, a Joint Army and Air Force regulation mandated that army fixed-wing and rotary-wing aircraft would not exceed 2,500 and 4,000 pounds, respectively. These weight limits were established to ensure that the services would not duplicate platform capabilities. In 1957, the Secretary of Defense increased the army's aircraft weight limits. Despite these increases, the army remained very limited in its ability to carry its own troops to the battlefield. These mandates, and other regulatory documents signed by the secretaries of defense in 1951 and 1956, prohibited the army from conducting close air support with army aircraft. Yet during this time, the

air force increasingly invested in multirole fighters, which diminished the service's ability to conduct its close air support mission for the army. By the 1970s, the army's efforts to provide its own air support produced a fleet of versatile and lethal helicopters.

The Rise of Vertical Lift

In 1938, the U.S. Congress authorized \$2 million for research and development of a rotary-wing aircraft. The legendary helicopter engineer and pilot Igor Sikorsky met the government's need with the X-R4 in 1942. The following year, 15 R4-A helicopters were delivered to the army. During World War II, the U.S. Army and Navy used the R4-B, R6-A, and the R5-A in the south Pacific to ferry replacements parts for aircraft "flying the Hump" between Burma and China. The versatility of the new aircraft was profound as several Liberty ships were modified to allow helicopter operations. These aircraft also served as downed pilot rescue and medical evacuation platforms.

During the mid-1950s, the Airmobility Division was established at Fort Benning, Georgia, to create doctrine, organization, and materiel requirements for airmobile operations. Also, during this time, successful experiments with helicopter gunnery expanded the role of rotary-wing aviation on the battlefield. Improved technology and a growing civil helicopter industry contributed greatly to the development of tactical theory and operating procedures. By the end of the decade, the army consolidated its many programs and initiated several boards to clearly define Army Aviation objectives and system requirements for aircraft manufacture.

In 1962, the army detailed its plans to develop units that relied on organic helicopters for maneuver, firepower, logistical support, and command and control. Key to these developments was the UH-1 Iroquois, also known as the Huey. The Huey fit the army's need for a light, tough, and versatile helicopter that could be outfitted for transport, a flying command and control center, or a weapons platform. In 1965, the Defense Department finally agreed that the army would have helicopters.

Korea and Vietnam

The first large-scale use of helicopters in combat by the U.S. military was in the Korean War. The use of helicopters eased the challenges posed by Korea's mountainous terrain. Most notable was the H-13, which served as a medical evacuation (MEDEVAC) and observation platform.

The Vietnam War solidified the helicopter's role in modern warfare. Without the helicopter, tactical and strategic objectives would have been much more difficult to achieve due to the country's underdeveloped infrastructure and mountainous terrain. Poor road networks and remote outposts made helicopter transportation and fire support invaluable to ground commanders. In November 1965, a battalion of the 1st Cavalry Division defeated almost 2,000 North Vietnamese troops in the Ia Drang Valley. This was the first major combat in which helicopters served in all aspects of the battle to include carrying troops to the battlefield, resupply, MEDEVAC, close air fire support, and postvictory withdraw. Yet it was not the challenging nature of the terrain in Southeast Asia that defined Army Aviation and its level of usefulness to combat commanders. Although the high-density altitudes, unpredictable weather, and rugged landscape challenged pilots and their machines, the open terrain of Europe and the Middle East allowed Aviation to demonstrate its full potential.

Aviation Today and in the Future

Technological improvements in the last two decades of the 20th century greatly enhanced Army Aviation's capabilities. The development of night vision devices, laser-guided missiles, thermal imaging systems, improved engines and transmissions, and several types of UAS have given the army an invaluable edge over enemy forces. Today, the U.S. Army employs a variety of aircraft that carry out logistical, reconnaissance, and fire support missions.

Attack

The AH-64 Apache fulfills the army's need for an advanced attack helicopter. The heavily armed, tough, and agile helicopter suited the antitank role needed in Europe in the later years of the Cold War. Today, the Apache continues its attack and reconnaissance function in combat zones. The modern and upgraded version of the Apache, the AH-64E, has a fully digitized cockpit, improved targeting and navigation systems, and a 30-mm cannon and can carry up to 16 Hellfire antitank missiles.

Reconnaissance

The OH-58D Kiowa Warrior was first delivered to the army as an interim reconnaissance aircraft pending the completion of the RAH-66 Comanche, which was canceled by the army in 2004. The Kiowa Warrior

is a tough and versatile light attack and reconnaissance aircraft. Recent modifications in navigation and communication systems have made the Kiowa very effective in crowded urban centers as well as in vast deserts. The Kiowa Warrior's ball-like, mast-mounted sight enhances the aircrew's ability to conduct reconnaissance during day or night operations. The aircraft can be armed with a single heavy machine gun, 14 rockets, or four Hellfire antitank missiles.

The EO-5 and RC-12 fixed-wing aircraft also carry out the aerial reconnaissance mission. These unarmed aircraft are faster and fly higher than the Kiowa Warrior and are outfitted with electronic equipment that facilitate information gathering over large areas.

Lift

The UH-60 Black Hawk replaced the UH-1 Huey as the army's workhorse utility aircraft in 1979. The Black Hawk's dual engines make it more powerful and faster than the Huey. It can carry 11 fully equipped troops or sling load a 105-mm howitzer with its crew. The Black Hawk also serves as the army's primary MEDEVAC aircraft. The Special Operations Aviation Regiment uses the incredible diversity of the UH-60 by outfitting the aircraft with auxiliary fuel tanks for extended operations or a variety of weapon systems for combat missions. Recent modifications have made the UH-60M the world's premier utility military aircraft.

The cancellation of the Comanche in 2004 freed up funds that allowed the army to purchase a light utility aircraft. The UH-72 Lakota can carry out counter drug missions, VIP transport, civil search and rescue, or disaster relief, or serve as a MEDEVAC. The Lakota is not equipped to fly in a combat zone, which restricts its roles to permissive environments.

Cargo

The CH-47 Chinook entered service in 1962 and is the largest helicopter in the army's inventory. The Chinook is a twin-engine, tandem rotor helicopter that serves in a variety of roles with regular Army Aviation units and Special Operations Aviation Regiment. The impressive lift and speed capabilities of the aircraft make it ideal for a variety of challenging terrain. The Chinook can carry about 30 fully equipped troops and can sling about 14,000 pounds of cargo. The most recent CH-47F model introduced improvements to navigation systems,

the power train, and avionics. These improvements ensure that the Chinook will continue to serve the army well into the 21st century.

The UC-35, DHC-6, and the Gulfstream 5 carry out the army's VIP transportation mission. These aircraft deliver army general officers, civilian leaders, and combat commanders to important military and diplomatic missions that require face-to-face interaction.

Unmanned Aircraft Systems

UASs were first used in combat by the U.S. Army during Operation Desert Shield/Storm in 1991. In 2003, the army's Military Intelligence branch handed over authority of the UAS fleet to Army Aviation. The UAS provides real-time reconnaissance to combat commanders and can be more beneficial than a manned platform because it can often fly longer and does not expose personnel to enemy fire or other hazards. Today, the army primarily operates four types of UAS: (1) the RQ-11 Raven B, (2) the RQ-7B Shadow, (3) the MQ-5B Hunter, and (4) the MQ-1C Extended Range Multi-Purpose (Gray Eagle).

In 2004 and 2005, the army restructured its Aviation units and developed several combat aviation brigades. This action increased and diversified combat effectiveness, enhanced expedition, and streamlined maintenance procedures. Additional reorganization will take place as the army continues to integrate UAS into its combat aviation brigades.

Timothy J. Bracken

See also Air Force, U.S.; Close Air Support; Helicopters

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B

BANDS AND MUSIC

Stemming from the practice of taunting the enemy with deafening howls and songs, music has been an integral part of warfare for millennia. Hebrews blew rams' horns at the battle of Jericho, the Saracens played kettledrums and various horns on horseback and camelback to frighten European crusaders, Scots played bagpipes into battle, and Santa Anna's buglers played *El Degüello* when attacking the Alamo. Communication has also been a main element of military music as battle operations grew in size and scope, with signaling on trumpets and drums becoming necessary. With the drums of infantry units also supplying cadences for marching, fifes were later added to this "field music" to provide melodic interest, with trumpets and kettledrums doing the same in cavalry units. The *haut-bois* (predecessor of the modern oboe) found its way into European practices in the 17th century from the Middle East, and by the late 18th century, it had been joined by pairs of clarinets, horns, and bassoons—a combination that became known as *harmoniemusik*. Added later to this combination were bass drum, cymbals, tambourine, and triangle ("Turkish Music"), and the idea of a "band of music" was born for use in ceremonial and social functions. This entry discusses the history and role of bands and music in the U.S. military.

Early U.S. Military Music

These early functions of military music crossed the Atlantic and continued to develop throughout the

period of the American Revolution, and with the invention of the valve in the early 19th century, U.S. bands adopted brass instruments in the German tradition because of their carrying power. By the time of the Civil War, bands of 16 to 24 musicians were typical for most military usage, with tens of thousands of musicians enlisting in the Union and Confederate armies.

Performing as ensembles, infantry band musicians entertained and motivated and served in military ceremonies, reviews, concerts, guard mountings, drills, dress parades, and on the march from battle to battle—with cavalry bands doing the same, except often on horseback. As well, signalers continued to function in utilitarian roles in camp and battle, with infantry drummers sounding numerous calls—including "March," "Retreat," "Troop," "To Arms," "Assembly"—and cavalry trumpeters playing the likes of "Boots and Saddles," "To Horse," "Forward," "Charge," "To Arms," "Taps," "Tattoo," "Reveille," "Retreat," and "To the Standard." While there were some cases of bands playing under fire, in terms of battle duty, most musicians served as medical assistants, stretcher-bearers, and so on. By the end of the 19th century, the bugle had supplanted the fife and drum for signaling, and the idea of a symphonic wind band, with sections of like-instrument groups similar to those of the orchestra, was becoming the norm with bands fully encompassing brass, woodwind, and percussion instruments.

World War I

During World War I, all U.S. service branches had strong musical components, with the army leading

the way with 7,500 bandmen (numbering 48 per band from July 1918) included among the 2-million-member fighting force serving over the course of the war's last 2 years. Navy bands of about 22 musicians were assigned from a band-training center at the Great Lakes Naval Training Station, developed by John Philip Sousa, to ships and naval stations, and around 1915, Marine Corps bands began to be formed by branching off from the U.S. Marine Band. While it is unknown how many of these Marine Corps bands of 28 musicians were formed, at least some regiments stationed in Germany, including the 5th Marine Regiment, had their bands with them.

Although attempts were made to remove bands from front lines, musicians were still often in the thick of things—digging trenches and latrines—and serving as stretcher-bearers, ambulance drivers, and gravediggers. Sometimes, the only musical duty they saw was for burial ceremonies, playing hymns like “Nearer My God to Thee” and slow marches of Chopin and Handel.

Along with official bands, music among the ranks during World War I was also common with organized troop sing-alongs and various units raising funds for the purchase of songbooks and sheet music, musical instruments, and even pianos. Perhaps the most noted sing-along took place during the week before Christmas in 1914 prior to the U.S. entrance into the war when unofficial ceasefires took place on the Western Front when German, British, and, to a lesser extent, French soldiers exchanged seasonal greetings, small gifts, and Christmas carols with one another.

During the war, as U.S. Army bands were playing alongside those of its allies—especially those of France's *Garde Républicaine* and England's Household Guards Division—General John Pershing, commander of the American Expeditionary Forces in Europe, envisioned a band of the same quality representing the army in Washington, D.C. This vision came to fruition with the formation of the U.S. Army Band in 1922. While the noted marine band had been a part of the Washington scene since 1798, the U.S. Army Band was really the turning point for all of the armed services in developing permanent professional-level D.C. bands, with the U.S. Navy Band comprising 63 excellent musicians by 1923, and with the U.S. Air Force Band following in 1941.

Although there had been several attempts at musical education in the army and navy over the years beginning of course with simple on-the-job training,

most of this was done on a sporadic nonstandardized platform. Finally, in 1911, a formal school for army bandmasters was established at Fort Jay on Governor's Island in New York Harbor, accepting bandmen students by 1914 and moving to Washington, D.C., in 1921. Similarly, in June 1935, the Navy School of Music opened in Washington, D.C., operating in conjunction with the U.S. Navy Band and sending complete bands to ships or stations as needed.

World War II

The World War II era, like that of past periods, saw music as a unifier and motivator with army, navy, and marine bands playing for traditional military ceremonies but now also emulating the civilian big bands of the period. Because of this increased breadth, professional civilian musicians enlisted, with others receiving commissions. The most famous of the latter was Captain, and later, Major, Glenn Miller, who went on to lead the Army Air Force Band and the Army Air Force Orchestra in the United States and England. Recording several records at Abbey Road Studios for use in propaganda broadcasts with the War Department in addition to countless live performances, these ensembles featured several civilian vocal soloists of the time, including Johnny Desmond and Dinah Shore. Many military installations hosted recreation and other centers where personnel were able to listen to recordings, take music lessons, and borrow instruments.

While radio in civilian and military operations had been in its infancy during World War I, it was in full force by the 1940s. Thus, to keep abreast of civilian developments, along with the establishment of the Morale Branch in the War Department in 1942, the Armed Forces Radio Service was formed in Hollywood with the mission of recording shows, acts, and music featuring the country's top entertainers like Bob Hope, Bing Crosby, and Judy Garland to be broadcast over Armed Forces Network radio stations overseas. Along with these stations, several frontline stations existed as well, including the Fifth Army Mobile Radio Station, which, along with music, regularly broadcast Major League Baseball and National Football League games, complete with American commercials at the Italian front. The psychological aspect of music appeared during this era as well, with Axis and

Allied radio stations playing popular music along with distributing leaflets to build audiences among the enemy in an attempt to convince the enemy of the hopelessness of its cause.

Often composed of musicians from some of the finest schools of music in the country, the World War II period also saw several short-lived yet pertinent all-female military bands within the Women's Army Corps: the Coast Guard's SPARS (derived from their motto *Semper Paratus*: always ready), the Marine Corps Women's Reserve, and the Navy's Women Accepted for Volunteer Emergency Service. Initially formed to support bond drives, these bands drew enough spectators to warrant cross-country tours to raise money for the war and boost morale.

Emulating Pershing's practice of the previous war in attempting to keep bands away from the front lines, circumstances sometimes dictated otherwise. One band whose members served in battle was the 4th Marine Band, also known as the "Last China Band," which left Shanghai in November 1941. Enduring the siege of Corregidor, they were held captive by the Japanese for 3 years.

While music had been used to soothe convalescing soldiers since ancient times, World War II was a period when efforts in music therapy were taken to return soldiers to duty or to civilian life in the best possible physical and mental condition. Hospitals began employing live musicians and recordings to help with physical exercise; instrument instruction; organization of bands, orchestras, and choirs; and to aid with resocialization and neuropsychiatric treatment.

Musical training continued to be a priority during this era, with the U.S. Navy School of Music becoming a separate entity from the U.S. Navy Band in 1942. The marines also began training their musicians there in the late 1940s—and in 1951, army students began enrolling to make the school a tri-service organization, which it remains to the present day.

Korea and Vietnam

Due to the infiltration, sabotage, and behind-the-line attacks by North Korean troops, keeping bands from front lines was not always possible. When bands did have a chance to perform, they often traveled long distances to perform concerts for units close to the front line and often had little time for musical training.

Duty in Vietnam was similar. Bands gave powerful psychological support, with the appearance of rock and jazz groups in remote areas assuring combat soldiers that they had not been forgotten. Like other military personnel, band members often found themselves filling sandbags, painting artillery shells, building bunkers, serving guard duty, and doing police sweeps—sometimes playing concerts in a metropolitan area like Saigon during the day and undertaking search and destroy missions in the surrounding countryside at night. Moreover, during screenings of villages for Viet Cong soldiers, bands often performed for the noncombatant populace to keep them away from the screening area.

As in World War II, popular music was a strong part of the picture over American Forces Vietnam Network, as well as G.I.-operated underground radio stations playing mostly acid rock. But now, stereos and tape decks are also readily available—providing variety at any time with songs like "Five Hundred Miles" and "Leaving on a Jet Plane" offering comfort for the homesick and war weary. And in the tradition of overawing the enemy of bygone millennia, American helicopters conducted bombing raids blasting Wagner's "The Ride of the Valkyries" on exterior speakers—depicted later in the movie *Apocalypse Now*.

The 1970s

Accompanying military restructuring as a whole during the 1970s and 1980s, U.S. military bands went through several organizational changes and served primarily in musical capacities. Composed of 91 musicians and 30 support personnel from all branches, a special bicentennial band was formed to commemorate the country's 200th birthday. Following their first appearance in Dover, Delaware, on April 9, 1975, the band toured all 50 U.S. states, Canada, Mexico, Puerto Rico, and the Virgin Islands until their concluding performance at a Pentagon ceremony on December 9, 1976.

The 1990s

With Iraq's invasion of Kuwait in 1990, U.S. military bands were involved in conflict again with all four armed services having bands stationed in the Gulf undertaking a variety of musical and military duties. The navy had a detachment of the Seventh Fleet Band deployed on various ships in the Gulf performing

concerts for the crews. The Air Force Desert Band traveled throughout Kuwait and Saudi Arabia performing in various capacities. In addition to musical duties, marine bands, including both the 1st Marine Division Band and the 3rd Marine Aircraft Wing Band, were typically engaged in perimeter security. The army had eight bands serving in Kuwait, Saudi Arabia, and Iraq, with many bandsmen spending countless hours guarding perimeters—and sometimes not seeing their instruments for months at a time. Some bands performed as diversions as they had during the Civil War—like that of the U.S. Army 3rd Armored Division, which on at least one occasion performed on the enemy side of a berm, while the division advanced into Iraqi territory. And again, the psychological aspect appeared as it had in Vietnam, but this time, it was with tankers rather than helicopters going into battle blasting the strains of Wagner.

The Present

Like the previous decade, U.S. service band work has varied across the world since 2003. Along with work in the United States, ensembles of musicians (anything from full-band to pop-rock groups) have served in Iraq and Afghanistan and other Middle Eastern countries performing on large bases as well as in forward operation areas, playing in military capacities, promoting troop morale, and serving as diplomats to host nation communities. In addition to conflicted areas, some navy bands have been deployed to establish good relations in Africa, the Pacific Rim, and Latin and South America. Beginning in 2006, the U.S. Air Force began rotating active-duty and Air National Guard Bands to U.S. Central Command to provide musical support and offer a musical “taste of home” for forward-deployed U.S. military units and coalition partners throughout the region. Accompanying the work of Department of Defense bands, American psychological operations teams used hard rock/metal music to induce irritation and frustration among opposing forces or playing popular Afghan music from aerial and ground radio stations in an attempt to win the trust and gratitude of the Afghan people.

At the time of this writing, the Department of Defense is the largest employer of musicians in the United States, with nearly 6,500 musicians serving in active-duty, reserve, and National Guard bands. In addition to those serving in traditional bands,

each service branch employs musicians in premier/special bands in or near Washington, D.C., as well as with their respective academies. The air force has more than 1,000 musicians serving in the U.S. Air Force Band, the U.S. Air Force Academy Band, and 10 regional and 11 Air National Guard bands. The army has more than 4,000 musicians serving with the U.S. Army Band (“Pershing’s Own”), U.S. Army Field Band, United States Military Academy Band, the Old Guard Fife and Drum Corps, and 30 active-duty, 18 Army Reserve, and 53 National Guard bands. The navy employs more than 700 musicians in the U.S. Navy Band, the United States Naval Academy Band, and 11 fleet/area bands. The marines have more than 700 musicians serving in the U.S. Marine Band (“The President’s Own”), U.S. Marine Drum and Bugle Corps (“The Commandant’s Own”), and 10 Marine Corps bands. Beginning with 32 drummers and fifers in 1798, the U.S. Marine Band is not only the country’s oldest military band, it is also America’s oldest continuously active professional musical organization.

With all U.S. service bands, musicians audition prior to enlistment, and after basic training, those headed for traditional army, marine, and navy bands head for the Armed Forces School of Music at the Joint Expeditionary Base at Little Creek-Fort Story in Norfolk, Virginia, where they prepare for the challenges of performance within concert bands, military/ceremonial bands, orchestras, jazz bands, big bands, rock bands, country-and-western bands, and various classical ensembles. While air force musicians do not attend a technical school, they are assigned to the drum and bugle corps flight during basic training for initial skills training, after which they go directly to their assigned band—including the air force premier bands. Musicians of all services headed for the other premier/special service bands do not attend the Armed Forces School of Music but head directly for their bands on completing basic training.

The similar goals of each of the services within their bands are to provide musical support for military personnel in ceremonies and entertainment, community relations at home and abroad, and recruiting initiatives. The command structure differs slightly according to the organization of the respective service branch. While all premier/special bands are commanded and conducted by commissioned officers, direction and command differ among the other bands and vary among commissioned officers,



The U.S. Marine Forces Pacific Band plays for the Sergeant Major's Relief and Appointment on Marine Corps Base Hawaii, April 8, 2011. Marines, sailors, family, and friends were present for the Relief and Appointment Ceremony for outgoing Sergeant Major James W. Sutton and incoming Sergeant Major Robert E. Eriksson.

Source: U.S. Marine Corps photo by Lance Corporal Jody Lee Smith (released).

warrant officers, and limited-duty officers. Sizes of bands also vary from 34 musicians for some active-duty and National Guard bands to 170+ in several of the premier bands, which in turn make up various independent ensembles.

Along with these official government-sponsored music-making and broadcasting elements, recorded music, although a part of military daily life since the invention of the phonograph and radio, has played an even stronger role with the availability and portability of laptop computers, CD players, iPods, mp3 players, and other devices. While military personnel have always composed music with the aid of simple instruments to express their wartime feelings, because of new recording, mixing, and editing programs, recording music is now possible within combat theaters, and in one instance, 4th25 (pronounced "Fourth Quarter"), a group of American soldiers led by Sergeant Neal Saunders, released *Live From Iraq*, the first rap album written and recorded entirely in Baghdad.

Today's warriors, like those of the past, prepare themselves psychologically for combat, but rather than listening to martial airs played by a live band,

they "pump up" primarily to recorded metal and rap music before and during missions. Through the use of technology and throughout all branches and ranks and wherever they are serving, military personnel listen to a wide variety of music depending on a host of demographic qualifiers for personal enjoyment, to remember loved ones, for relaxation and religious purposes, to stave off boredom, or to heighten aggressiveness—for the same reason that warriors have listened to music for centuries.

Bruce Philip Gleason

See also Armed Forces Radio and Television Service; Communication; Culture, Military; Customs and Traditions; Drill and Ceremony; Psychological Warfare (PSYOP)

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The 298th U.S. Army Band, June 17, 1989. The 298th U.S. Army Band following Straße des 17 Juni (17th June Street) during the annual Allied Forces Day Parade.

Source: Cindy Swinarsky.

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BASE REALIGNMENT AND CLOSURE

Base realignment and closure (BRAC) refers to the process created by Congress in 1988 to close or realign surplus American military bases. This entry explains the origins, process, and political involvement in the BRAC processes.

Origins of Base Closure

The United States dramatically expanded its military base infrastructure during World War II, leaving it with a surplus of shipyards, army forts, air

bases, and a host of other military facilities when the war ended in 1945. The U.S. Department of Defense responded to this excess base capacity by closing hundreds of military facilities prior to 1977, until Congress in that year passed a highly restrictive law that eliminated most closures. The congressional act stemmed from both congressional fears of the political consequences of base closure–related job losses and anger over charges that former presidents Lyndon B. Johnson and Richard M. Nixon had closed bases for political reasons. However, the apparent end of the Cold War in the late 1980s caused Congress to recognize that the shrinking U.S. military did not justify the existing base structure, and thus in 1988, Congress passed the Base Realignment and Closure Act. That legislation created the BRAC Commission, whose members the Senate nominated and the president approved, to preside over four base closure rounds. Those rounds, in 1988, 1991, 1993, and 1995, closed 97 bases and realigned more than 300 other facilities by reducing their size and scope. However, the Department of Defense personnel numbers had dropped by 36% between 1989 and 2003, while only 21% of U.S. military bases closed; so by 2004, the Department

of Defense still had 25% excess base capacity and thus requested an additional BRAC round. After considerable hesitation, Congress finally approved a BRAC round for 2005, though Defense Secretary Donald Rumsfeld changed his estimate of surplus base capacity from 25% to around half that size. Unlike previous BRAC rounds, the 2005 BRAC round closed very few large bases, though it did merge the operation of several colocated bases under the rubric of “joint bases.”

BRAC: The Process

The BRAC creators understood well the political consequences of base closure, and thus attempted to make the process both nonpartisan and transparent. Thus, the 1988 BRAC legislation specified both the BRAC commissioner appointment process and the BRAC base evaluation process. The secretary of defense appointed the BRAC commissioners for the 1988 round, though subsequent rule changes mandated that the Senate nominate six of the nine BRAC commissioners for presidential approval (three were presidential appointments) for the subsequent three rounds. Once formed, the BRAC Commission issued a broad set of closure guidelines, and the Department of Defense, in response to those guidelines, issued a “data call” from each military base. The results of the data calls, covering items like contribution to military missions, cost of facilities, quality of life, and numerous other measures, formed the basis of the military decisions on base closure. The data generated from each service then was fed into a cost-estimating program known as Cost of Base Realignment Actions to systemize the closure and realignment process. Then the Department of Defense derived a preliminary base closure and realignment recommendation from these data and forwarded that list to the BRAC Commission. The BRAC Commission then reviewed the Department of Defense suggestions, though the BRAC rules empowered the commission to add bases that it believed met the closure/realignment criteria and to remove those from the Department of Defense list that it believed should change status. The commission also held public hearings and selected commissioners visited each base on the Department of Defense list, seeking to maintain process transparency.

Following deliberations, the BRAC Commission submitted its closure and realignment list to the

president, who could either approve it in its entirety or send it back to the commission for reconsideration. Once the BRAC list received presidential endorsement, it went to Congress, where both chambers could only disapprove of the BRAC list through a joint resolution, so that Congress could not add or remove individual bases. The actual base closure and realignment process started after the completion of presidential and congressional actions. While BRAC laws mandated that actual closure or realignment start 2 years after the final decision, the BRAC rules offered several options to comply with the decisions. One option was to simply close the facility, transfer its functions and military personnel to another base, and offer the land and buildings for sale. Another option was to privatize the operation of the base, shifting from a service to a contractor. A third choice was to transfer an active-duty base to operation by either the reserves or the National Guard, while a fourth option allowed the transfer of military bases to a conservation organization for wildlife or heritage preservation. Finally, should all else fail, the military could just abandon a closed base.

Prior to any conversion, a closed base generally required cleanup. The military occupants of most bases often dumped toxic waste, insulated with asbestos and coated with leaded paint. Base firing ranges were filled up with unexploded ordnance over decades of use. BRAC rules required that bases must be cleaned to federal government standards before they could be converted to other uses. Since base toxic records were often incomplete, the initial costs of cleanup were often low, and thus, as they mounted, they often ate into the projected savings from base closure. Base cleanup problems often took years to remediate, thus delaying conversion and adding to the lost savings, with the cleanup bill probably exceeding \$14 billion for the 1988–2005 rounds. Conversion also required efforts to preserve historically significant sites on closed bases, and in the early closure rounds, conversion had to factor in a congressional requirement that closed bases must be considered for use by homeless persons (repealed in 1994).

Because closure can cause the loss of hundreds or thousands of jobs in the local community, BRAC worked with local reuse agencies to expedite conversion to alternative uses and to assist displaced base workers with training and job searches. Some bases successfully converted to other functions, sometimes

resulting in more jobs and income than had come from the former base. Bergstrom Air Force Base became a municipal airport for Austin, Texas, and the Charleston Naval Shipyard became the new home to dozens of civilian businesses after its 1993 closure. San Francisco's Presidio came under the jurisdiction of the Presidio Trust, which has both preserved the historic sites at the base and made it economically self-sufficient. The Port of Oakland now operates the property of the former Naval Fleet Industrial and Supply Center in Oakland, California, as a container terminal. Some active-duty bases became Army Reserve or National Guard bases (there are more aircraft at Carswell Joint Reserve Base in Texas now than there were when it was an air force base). There are also base closure failures, where conversion was difficult or the costs of cleanup became prohibitive. Craig Air Force Base near Selma, Alabama, remains largely deserted despite decades of efforts to convert it to civilian use, and San Francisco's Treasure Island Naval Station and the neighboring Alameda Naval Air Station still have not been converted to alternative use after their 1993 closure. In some cases, adequate funding for conversion never materialized, in other cases, civic leaders could not agree on base reuse, and in yet other situations, the cost and challenge of environmental cleanup prevented reasonable conversion.

BRAC: The Politics

Prior to 1977, hundreds of surplus military bases closed, but sometimes charges arose that political motives were behind some closure decisions. Critics accused President Lyndon B. Johnson of closing bases in states that voted against him in the 1964 election, and later President Richard M. Nixon faced similar charges for closing bases in Massachusetts, the only state that voted for his rival in the 1972 election. Partly in response to these charges (which both presidents denied), Congress made base closure almost impossible in 1977 before reluctantly agreeing to BRAC.

To assume that BRAC would take the politics out of base closure was probably unrealistic, however. Military bases can generate millions of dollars in revenue for their surrounding communities, from civilian jobs on base, from impact funds to offset the cost of the base to the local area, and from community spending by the military. Moreover, the 2005 BRAC process included consideration of National

Guard bases, which added state governors to the political mix. So while BRAC changed the political rules, political figures simply found new ways to influence base closure. They had several avenues available, including the nomination of BRAC commissioners, the funding of new base projects to reduce the possibility of closure, and the use of data to either make their base more favorable or reduce the value of a rival base.

Beginning with the 1991 BRAC round, the Senate nominated BRAC commissioners, allowing senators to choose nominees who might spare bases in their states. Thus, one of the nominees for the 1995 BRAC process included a former base lobbyist and several retired officers who had been base commanders in states represented by their nominees. Another nominee was married to a representative who had two bases in his California district. It is unclear whether or not the presence of these and other commissioners with ties to bases affected the process because the closure record on the bases they "represented" is mixed, but their appointments created the impression that BRAC had not entirely eliminated politics from the base closure process.

Members of Congress could also steer funds to their bases for rehabilitation, new construction, or "re-missioning" (moving one function from one base to another to help keep it open). Since one criterion used in base closure decisions was value of new construction, congressional members spent billions of dollars during the BRAC periods trying to make bases in their states and districts closure resistant.

Political figures also tried to use base information as a lever, engaging in tactics like leaking negative information about rival bases (e.g., one base's political supporters noted the hurricane vulnerability of a rival base in Florida), and in 2005, the communities of El Paso, Texas, and Lawton, Oklahoma, contested with quality-of-life data over which city would be a better host to an army base as the army considered moving its Artillery School from Fort Bliss, Texas, to Fort Sill, Oklahoma.

In some cases, political "resistance" was more symbolic than real, with scenes of political leaders denouncing the closure of a local base as inherently unfair, or detrimental to national security, or, in one case, taking the closure decision to the Supreme Court in a quixotic campaign to be seen doing something (the appeal lost). It is also the case that most base closure decisions came from the objective

BRAC process and that political influence on base closure was secondary to that process.

Conclusions

The BRAC process succeeded in closing hundreds of military bases after Congress virtually prohibited such actions in 1977, saving around \$16 billion in initial savings and generating annual savings of \$6 billion (less than 1% of the total annual defense budget, though). However, environmental cleanup continues at some of these bases so the total savings remains unknown. These rounds cost around 107,000 civilian jobs at closed bases, though some of these workers later found new jobs when the base converted to another use. The 2005 BRAC round was the most limited, and even the 2005 BRAC Commission chair claimed that its cost-savings expectations were inflated and that another round might be needed. However, given the growing political opposition to base closure, and the magnitude of the six previous rounds, another BRAC now appears quite unlikely.

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See also Appropriations, Military; Armed Services Committee, House; Armed Services Committee, Senate; Bases, Foreign; Bases, U.S.; Congressional Relations, Military; Economy and National Defense

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power served to counter the threat posed by the Soviet Union and, later, the People's Republic of China. Following the end of the Cold War, the United States closed a number of bases, especially in Europe and the Philippines. U.S. involvement in the Persian Gulf War, and the more recent conflict in Afghanistan, however, led to a significant expansion of the American presence in the Middle East and Central Asia. The end of U.S. involvement in Iraq and a diminishing role in Afghanistan, however, are combining with mounting fiscal constraints to drive a continuing reduction in the number and size of the more than 600 U.S. military sites overseas.

Pre-1945 Foreign Bases

Before World War II, most foreign bases were naval bases, located primarily in U.S. territories acquired in the 19th century and early 20th century—including the Philippines, Hawaii, Guam, American Samoa, Midway, Panama, Cuba, and Puerto Rico. During World War II, the United States, through a lend lease agreement with Great Britain, gained the right to build a network of bases on British territory in the Western Hemisphere in order to counter German and Italian expansion. America's entrance into the war led to the establishment of more than 2,000 bases on all continents except Antarctica.

U.S. military presence in foreign countries did produce significant tensions, even among close allies. For instance, the higher standard of living of the American troops based in England led to many British civilians complaining that American GIs were overpaid, oversexed, and over here. Large military bases have historically attracted large numbers of prostitutes, and U.S. bases abroad were no exception. In the case of military bases in underdeveloped regions of the world, the opportunity for sexual exploitation of the civilian population escalated.

Victory against Germany and Japan led to a reduction in the number of overseas bases. Even before the war ended, many staging bases in Australia and Great Britain had been rendered obsolete as the war shifted closer to Japan and Germany. The rapid demobilization of the American armed forces after the end of hostilities further encouraged the closing of bases. Only in Germany and Japan did the number of U.S. bases expand for the United States to oversee postwar rebuilding in the defeated nations.

BASES, FOREIGN

Following the Second World War, the United States dramatically expanded its overseas military presence, creating a global network of bases in dozens of countries around the globe. This projection of American

Foreign Bases in the Cold War Era

The Cold War encouraged the United States to establish new bases around the world. Initially, many of these bases in Europe, North Africa, and Asia were forward bases for bombers with the Strategic Air Command. As the Cold War deepened, the United States increased the number of conventional forces deployed abroad to serve as a deterrent to possible Soviet or Chinese aggression, especially in Europe. After the Korean War ended, the United States continued to maintain a significant troop presence in South Korea and bolstered forces stationed in Japan.

During the early Cold War, U.S. bases overseas embodied the military and economic strength of the United States in this era. The United States maintained these bases without any assistance from host countries and strove to make them into “little Americas.” The military encouraged service members, and even enlisted personnel, to bring over their families. To serve their needs, an array of schools, churches, social organizations, shops, and restaurants were built and maintained that served to minimize the need for cultural exchange with indigenous populations.

The placement of bases in foreign countries required complex negotiations with host governments on a range of issues, ranging from providing land for the American presence to limiting the jurisdiction of foreign courts with regard to crimes committed by U.S. troops. The growing assertiveness of newly independent countries led to several countries calling for the United States to remove bases from their nation, especially in North Africa. At the same time, growing technological advances in delivery systems for nuclear weapons and communications made many of these bases obsolete and further encouraged the United States to withdraw from them in the 1960s and 1970s.

During the Cold War, the U.S. overseas presence remained strongest in West Germany and Japan. After signing a mutual security treaty with Japan in 1960, the United States agreed to defend Japan from any potential threat from its neighbors in exchange for the United States placing a number of military sites in the country (the largest and best known being in Okinawa).

Foreign Bases After the Cold War

After the collapse of the Soviet Union, the Department of Defense (DOD) downsized its overseas

operations, especially in Europe and Asia. The United States sought to maintain a military presence in the Philippines, but nationalist sentiment led the United States to withdraw from bases that the United States had maintained for nearly a century, most notably Clark Air Force Base and Subic Bay Naval Base. Although the United States downsized, it did not entirely eliminate its military presence abroad, and many Cold War-era bases provided important staging points for the wars in Iraq and Afghanistan. Even though Germany opposed the Iraq War (2003), it has allowed American military casualties to be evacuated to Landstuhl Regional Medical Center.

Nations’ willingness to provide a location for a foreign power’s forces became a major question after the Cold War—an issue highlighted during the Persian Gulf War. U.S. installations had faced violent opposition from German terrorists in the 1980s and from Filipino communist insurgents around the same time, but the larger issue increasingly gained recognition in the evolving post-Cold War era. Ironically, some scholars argued that the U.S. military presence in Middle Eastern countries such as Saudi Arabia (which experienced a large buildup of U.S. military presence during the Persian Gulf War) led at least in part to the 9/11 terrorist attacks.

The U.S. presence abroad has obviously not gone without protest or incident. The difficulty of maintaining military installations in large, foreign, civilian populations has often been made more difficult by the laws regulating how U.S. troops are punished for crimes committed against foreign citizens. In 1995, three U.S. servicemen raped a 12-year-old Japanese girl in Okinawa, highlighting the significance of this issue. In the wake of that crime, the U.S. servicemen utilized the Status of Forces Agreement—originally agreed to 1960—as a means of escaping criminal prosecution for their crime. Despite vocal protest by Okinawans and the prefect’s governor, two of the three men were sentenced to only 7 years in prison, and the third man was sentenced to just 6½ years. This example, moreover, reflected an ongoing trend; from the time of Okinawa’s reversion in 1972 up to the time the rape was committed in 1995, more than 110 rapes had been committed by U.S. servicemen in Okinawa, a small subset of the 4,784 crimes committed by U.S. servicemen during that period. Negative social effects of overseas basing have also included the development of a large class of prostitutes and the proliferation of “camp towns” around bases in countries like South Korea.

Recent Issues

As of this writing, the U.S. DOD maintained 666 foreign installations worldwide. Of them, 316 serve the U.S. Army, 114 the U.S. Navy, 216 the U.S. Air Force, and 20 the Marine Corps. Only 21 of these locations are classified as “large sites,” and most (576) are listed as “small sites.” It is estimated that the United States spends about \$250 billion each year on overseas basing, though that number has been cut significantly in the past 2 years (there were more than 700 overseas bases as recently as 2010). The number will likely continue to shrink in areas such as western Europe and northeastern Asia, and the focus will probably continue to shift toward smaller, less costly operations in the Middle East.

This trend toward smaller bases has been a major factor affecting the way the United States operates overseas. On top of the cost, there has been a major push in recent years to limit troop contact with host populations, in addition to a general move away from quartering families overseas. Currently, and in years to come, the major geographic trend of foreign basing will move farther away from traditional industrialized allies of the United States and closer to smaller, less wealthy nations. The root of this shift is obviously the Global War on Terrorism, which has identified as its primary enemy a fanatical terrorist group that does not operate out of a large geographic location like the Soviet Union or China. In addition to the declining wealth and size of host nations, many countries may be less open to large numbers of young Americans establishing outposts in their territories.

The Middle East has obviously become the focus of military basing in recent years. With the U.S. expulsion from Morocco and Libya during the Cold War, expansion into other Middle Eastern countries has been considerably more difficult, largely due to local resistance to colonial-type influence. After the Persian Gulf War, increasing anti-American tensions in the Middle East became a cause for concern that was rarely addressed until the September 11, 2001, terrorist attacks. The realization that many countries no longer wished to support U.S. military bases as launching pads for war (particularly Germany and France) became evident as bases were sought from which to carry the fight against Iraq in 2003.

The DOD was subsequently forced to find a number of new locations from which to operate in

the Middle East, as traditional sites in Europe and Asia were no longer viable. New locations for U.S. bases springing from this trend include Djibouti and the Horn of Africa, and there are currently a number of other U.S. bases in Middle Eastern countries like Bahrain, Kuwait, Oman, Turkey, and the United Arab Emirates.

As of 2012, the new Defense Strategic Guidance policies issued by President Obama and the DOD recognize the necessity of Gulf region cooperation with U.S. interests to continue pursuing combat in Afghanistan, defend Israel, and prevent Iran from gaining nuclear capability. This suggests the ongoing importance of the U.S. role as a “global policemen,” while still recognizing the significant number of U.S. bases in traditional locations such as western Europe and Japan.

Conclusion

U.S. bases in foreign countries have been a source of prosperity for some nations and resentment for many others. Crime committed by service members, as well as environmental damage caused by the bases, has not endeared the U.S. military presence to many nations, though the effects of military basing overseas have also often been positive, both economically and politically (the biggest examples being Germany in the immediate aftermath of World War II). The end of the Cold War and the collapse of the Soviet Union, as well as the increasing presence of China on the global stage, demanded major shifts in DOD strategy for overseas operations. As the United States aims to end its wars in Central Asia, concerns are shifting toward locations in the Middle East, North Africa, and the Horn of Africa. The presence of larger cultural differences between U.S. forces and local populations require ongoing shifts in all elements of U.S. basing strategy.

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See also Bases, U.S.; Occupations

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BASES, U.S.

Military bases are the foundation of the national defense infrastructure, serving as centers of housing, operational training, and logistical coordination. Defense installations have always been a part of the American military experience, ranging from small outposts guarding against Native American raids on the national frontier, to harbor forts protecting strategic ports, to the 21st-century military communication centers facilitating operations on a global scale. While serving a variety of functions over the span of American history, these facilities are the geographic embodiment of the power of the American military. These installations also wielded considerable influence on nearby civilian communities. Military bases often serve as sites of economic stimulus, social upheaval, environmental change, and demographic growth. During the late 20th century, issues surrounding the nation's domestic military base infrastructure became topics of heated political controversy. This entry focuses on the expansion of the military base system during World War II and the Cold War, the impact of these bases on nearby civilian communities, the influence of military bases on the Civil Rights Movement, and of the closure and realignment of the military base structure to reflect the new priorities of the Defense Department and the American people.

Expansion of the Military Base Infrastructure During World War II and the Cold War

While the American armed forces has relied on a network of military bases to function throughout its history, during the mid 20th century the scale of this network increased dramatically to meet the demands of two global conflicts—(1) World War II and (2) the Cold War. During World War II, the War Department and the Navy Department established hundreds of new facilities to train, house, and coordinate the millions of new servicemen and service-women who entered the military in the wake of Pearl Harbor. While these two departments built installations throughout the nation, many of these new bases were established in the southern and western regions of the United States, bringing to these areas billions of dollars of federal spending and tens of thousands of soldiers, sailors, and marines, as well

as their families, and civilians seeking work on these new facilities.

After World War II, many of these installations decreased in size or were deactivated, ending the presence of the military in many communities. As America entered the Cold War, however, the Defense Department established new bases, expanded existing facilities, and reactivated formerly closed installations. While the establishment, expansion, and reactivation of bases usually reflected military needs, political influence often played an important role in determining where bases were placed and which were reopened. Local political and business interests coordinated with state and congressional representatives to attract military bases, expand them over time, and keep them safe from closure.

The Impact of Military Bases on Civilian Life

The rationales for the vigorous defense of military installations by local, state, and national politicians centered on the important impacts military bases have on local communities, especially in regard to economic, demographic, and social conditions. While these influences possessed both costs and benefits, the overall burdens associated with defense installations usually were outweighed by their advantages.

Economic benefits were perhaps the most important feature associated with the presence of a military base. While many bases were often designed as self-contained military cities with their own housing, social services, and entertainment, personnel stationed at military facilities often spent their incomes in local businesses off base, providing the community with a reliable customer base. New businesses even emerged, catering specifically to service members and relying almost exclusively on the military base for their clientele.

Military bases often employed substantial numbers of civilian workers, providing an important source of well-paid jobs to the community. Civilians often staffed base offices, kitchens, laundries, and other facilities. Civilian staffs on military bases became more important after the end of the draft in 1972, as the number of soldiers available for noncombat duties declined. Recent trends in outsourcing and government agencies obtaining private sector contracts for such services ensures the importance of civilian workers on military installations.

Historically, the wages and benefits enjoyed by civilians on military bases have outpaced compensation for civilians laboring off base. Military bases represented sources of stable and remunerative civilian employment, especially in regions of the country lacking a diversified economic sector.

Defense installations also drove demographic growth. Military veterans often retired near bases to have ready access to military hospitals or base commissaries where they could purchase consumer goods at far lower prices than at local businesses. The retirement benefits used by veterans and the money spent by military personnel and civilian workers increased local tax revenues, increasing the ability of local municipalities to fund education, social services, and support civil infrastructure. In sum, military bases often brought substantial economic benefits to the communities they neighbored.

However, these economic benefits were usually accompanied by significant costs. Communities possessing a military base often failed to develop a diversified economy, relying on federal spending as the sole source of jobs and tax revenue. The arrival of thousands of military personnel and their families could also cause significant overcrowding in local schools, congestion of local transportation networks, overburdened hospitals, and stresses on other community facilities. Over the course of the Cold War, Congress authorized funding to alleviate this overcrowding, but such funding often deepened the dependence of local municipalities on federal appropriations to maintain their civic infrastructure.

If military bases brought economic costs and benefits, they also brought social change in both positive and negative ways. Defense installations often drew military personnel from across the nation, providing a measure of cosmopolitan influence to sometimes parochial communities. This cosmopolitan influence was welcome when it brought social and cultural uplift to the civilian community, influences that numbered among the prouder elements of the American military tradition. Less welcome were more suspect elements of this same tradition: drunkenness, prostitution, petty crime, rape, and public violence. Military and civilian police often struggled to regulate these behaviors, and civil-military relations were sometimes strained regarding these issues.

One further drawback that must be accounted for in this balancing of the costs and benefits of military bases for local communities is the environmental

impact of the presence of the military. Military training often left undetonated ordnance scattered across defense installations, often leaving the area unsuitable for agricultural production, housing, or any other civilian use. More problematic was the improper disposal by the military of toxins on military bases, which polluted local aquifers and threatened local air quality. Substantial federal funding was appropriated to address these issues, but health problems relating to environmental pollution are sometimes higher in civilian communities near a military base than those without such a facility.

Military Bases and the Civil Rights Movement

Perhaps the most important impact military bases had on local communities concerned race relations, especially in the American South. During World War II, the American military existed as a segregated institution. On military bases, this meant African American soldiers slept in separate barracks, ate in separate messes, and even worshipped separately in base chapels. African Americans frequently endured unequal conditions off base as well. Often, Black soldiers could only obtain service at local restaurants, entertainment venues, and public transportation in sections reserved for “colored only.” Especially in the South, African Americans often endured disproportionate racial violence from local police forces and civilians, resulting in a series of violent clashes between military and police forces.

Victory in World War II brought significant changes regarding the military’s stand on civil rights. In 1945, the War Department appointed a commission led by Lieutenant General Alvan Gillem Jr. (known as the Gillem Committee) to investigate the wartime service of African Americans and the conditions they endured on military bases at home and abroad. On the basis of the Gillem Committee’s recommendations, President Harry S. Truman issued Executive Order 9981 commanding the desegregation of the American military in 1948. This order transformed military bases into integrated spaces for the first time. In some parts of the nation, military bases represented the most racially integrated spaces in the area.

In the American South, however, off-base conditions for African Americans remained highly segregated and often dangerous. The arrival of the Civil Rights Movement in 1954 following the

U.S. Supreme Court's decision in *Brown v. Board of Education* soon inspired legal challenges and protests by African American servicemen stationed on southern bases. Like their civilian counterparts, military protesters often encountered brutal reprisals from civilian police and civilians defending Jim Crow. To combat segregation in military communities, Secretary of Defense Robert McNamara issued a directive in 1963 that used the military's economic influence within local communities to eliminate discriminatory practices. Military base commanders were authorized to mark "off limits" any restaurant, entertainment venue, housing complex, or other public facility that refused equal service to African Americans. If a commander designated a business "off limits," no serviceman could lawfully frequent that establishment. Many businesses near bases depended on military clientele for survival and could not afford to be marked off limits. While racial animosity sometimes lingered, in the two decades after McNamara's directive, African American servicemen could safely dine, shop, and travel off base. The military's economic and social influence on nearby communities played an important role in the elimination of segregation, contributing to the grassroots activism and federal legislation that helped advance the Civil Rights Movement.

The End of the Cold War and the BRAC Commission

While military bases often represented the foundation of many local economies, collectively they represented a sizeable cost to the Defense Department and ultimately to the American people. Beginning in 1977, the American military establishment attempted to reduce this cost by closing bases whose strategic missions were obsolete or duplicated by other installations. Congressional representatives generally opposed base closures because of fears that facilities in their districts might fall prey to budget cuts. Thus, despite a decade of effort from military officials, congressional intransigence prevented the closure of a single base from 1977 to 1988.

The end of the Cold War forced legislative compromise. After decades of conflict, the trillions once spent by the federal government on defense were converted to a "peace dividend" funding social services. The American military endured significant

cutbacks in funding and manpower, leaving many bases without a clear mission. Yet closing these bases still proved problematic. It was widely agreed among both American political and military leaders that the base closure process should reflect military necessity and the national interest and not the parochial interests of individual congressman. To meet these goals, in 1988, the Congress created the Base Realignment and Closure (BRAC) Commission, an independent body that investigated which military facilities should be retained, reduced, or closed altogether. The BRAC Commission's investigations yielded the largest reduction in military facilities since 1945, and by 1995, more than 500 military bases had been closed or realigned, saving billions of taxpayer dollars.

However, these savings often came at a high price for military base communities. The closure of a base meant the loss of jobs, federal investment, tax revenue, and even a sense of community identity. Communities without diversified economies usually suffered the hardest when bases closed, with those left unemployed by a base closure lacking alternative job sectors to transition into. Some towns successfully converted the spaces left behind by the American military into new industrial or commercial centers, but many struggled to achieve this, especially if the environmental legacies of the former military presence proved particularly toxic.

The military challenges of the 21st century have again redefined the national needs for the military base infrastructure. The global military operations initiated after 9/11 prompted new demands on military bases during the Global War on Terrorism. When the BRAC Commission last met in 2005, its recommendations focused less on base closures and instead on Secretary of Defense Donald Rumsfeld's efforts to transform the American military into a lean, flexible institution capable of rapid operational effectiveness on a global scale. Those military installations that had survived the various cuts of the BRAC Commission have increased in size and economic influence on neighboring civilian communities. America's present military bases will continue to play an important role in the effectiveness of the armed forces and play an important role in the social and economic prosperity of the communities surrounding these bases.

Daniel Hutchinson

See also African Americans; Appropriations, Military; Base Realignment and Closure; Bases, Foreign; Civil-Military Relations; Congressional Relations, Military; Economy and National Defense; Family, Military; Police, Military; Rumsfeld, Donald

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BATTLESHIPS

The battleship is the most formidable artillery-based vessel in naval service. It has the largest guns and the most armor for survival in combat. Though initially constructed to duel other battleships, they are also expedient in interdicting near-shore routes favored by the enemy and are excellent support vehicles for landing forces during a contested assault on a foreign shore. This entry describes the designs, uses, armament, and speeds of battleships from the early 20th century to the modern age.

Early History

The modern battleship came of age after the Russo-Japanese War of 1904–1905. Both the increasing size of the secondary armament (smaller caliber than the main battery but intended for battle line combat) and the decisive naval battle of Tsushima (May 1905) gave evidence for the need for the greatest number of the largest caliber guns in combat. Shell

splashes of the smaller caliber guns were becoming less distinguishable from the main battery, and the purpose of the secondary battery changed from action against the enemy battle line to protection from the increased capability of torpedo boats. Thus, HMS *Dreadnought*, the first commissioned all-big-gun battleship, gave its name to the new type, with 12-inch guns standard (11-inch, for Germany).

Design Considerations and Construction

Battleship armament and size increased steadily in the years immediately preceding the Great War (World War I). The Royal Navy increased caliber from 12 to 13.5 to 15 inches in 4 years. The German Fleet increased to 12 inches and later to 15 inches for two battleships. The United States and Japan increased from 12 to 14 inches for the war. Both navies would build 16-inch battleships before the Washington Naval Disarmament Talks of 1922.

As a military asset, battleships were to take their place in the battle line, to engage and defeat the enemies of the nation, especially other battleships. For this, they were given armor, heavy artillery, and a propulsion system to move them about. The armor was meant to be proof against the opponent's artillery, usually with specific ships or likely enemies in mind. Propulsion was a compromise of what was technologically feasible, given a specific fuel source and space. All were factors of cost to the nation in terms of building, maintaining, and, since 1922, treaty obligations. A battleship was a large asset that had large costs in fuel, ordnance expenditure for training, crew levels, and maintenance. While they excelled in armed conflict against an adversary with a seacoast, they lacked versatility in duties. Consequently, they spent a lot of time in mothballs or training cruises.

Speed was a concern for the larger battle cruisers. Speed for dreadnought battleships was generally 20 to 21 knots—24 knots for the *Queen Elizabeth* class. British battle cruisers traded speed (27–29 knots) for armor, though armed with the same heavy guns. Germany traded a 2-knot speed inferiority for increased internal protection.

The Washington Naval Treaty of 1922 and subsequent meetings settled on a 5-5-3-1.75-1.75 ratio for battleship tonnage for Great Britain, United States, Japan, Italy, and France, respectively. Provision was made for replacement of older battleships with

newer construction provided that the tonnage ratio was maintained, not necessarily the numbers of ships. Gun size was limited to 16 inches. Tonnage per ship was limited to 35,000.

After Germany and Japan renounced the treaty guidelines in the mid-1930s, all parties capable of building battleships began a new naval arms race. Japan would build the largest new battleships, the 70,000-ton *Yamato* class with 18.1-inch guns. The United States stayed with 16-inch guns but focused on speed—28 knots for *North Carolina* and *South Dakota* classes and 33 knots (officially) for the *Iowa* class. The continental powers and Great Britain settled on 15- and 14-inch guns, respectively, and speed of 28 to 30 knots.

Purpose

There is no weapon system in the world that comes even close to the visible symbol of enormous power represented by the battleship.

—General P. X. Kelly, U.S. Marine Corps (Retd.)

Influencing nations by battleship diplomacy has long been the political expedient to make foreign powers amenable to one's will. From Admiral Matthew C. Perry's visit to Japan in 1853 to the Royal Navy's *Orion*-class battleship's visit to Germany to celebrate the opening of the Kiel Canal in 1914, the battleship has been used to impress others by its size, capabilities, and offensive potential. As a movable symbol of a nation's technological superiority and manufacturing capability, these ships had no equal.

Throughout World War II, battleships maintained two usages for which the aircraft carrier was not suited: (1) long periods of close-in support of ground troops, especially a contested invasion, and (2) at night. Support of invasions and general combat in the littoral area is the modern battleship's forte. Allocated to second-line battleships in both World Wars, this firepower support gave the assault force ashore a quick and responsive artillery presence, which was not lost on the defenders. Battleships, even old ones, carried artillery far larger than anything a land army could haul along. This advantage worked at night and during inclement weather, both times of restricted aircraft involvement. For the newer battleships, antiaircraft protection of the aircraft carriers was the primary duty.

Until the end of World War II, the battleship had a mystique about it and a rabid following. Josef Stalin had visions of constructing his own battleships up to his death in 1953, and the United Kingdom and France each completed a battleship after the war. These ships did the statesmanship duties of showing the flag, as did their predecessors. By 1960, however, the cost to operate and maintain these assets was not seen to bring the same returns as before. As the world became more global, new nations arose in the former colonial spheres; with the nonconventional wars being fought, such symbols of resolve lost their luster and their place in the current political arena.

Following World War II, the newer U.S. battleships were put in reserve except for the *Iowa* class. The older ships were either passed on to state delegations as memorials or were expended at Bikini Atoll during the Able and Baker atomic tests of 1946, after which the ships were scuttled as too radiologically hot to return for scrapping stateside. Other countries scrapped their battleships by 1960 and Turkey by 1971.

Only the *Iowa* class was used for anything after World War II. They were used in Korea for shore bombardment, but even these exercises alternated with training cruises, especially the midshipmen of the Naval Academy. All were placed in the mothball fleet during the early 1960s, while their older cousins were scrapped or moved to seaside states as museums.

Reinstatement

As an exercise and political ploy, The USS *New Jersey* was taken out of mothballs and upgraded with new weaponry for use in the Vietnam War. The *New Jersey* was used for two deployments for gun-fire support in South Vietnamese waters only. Except for a later deployment to Lebanon in 1983–1984, she was retired once again.

This experience underscored the feasibility of including all four *Iowa* class ships—(1) USS *Iowa*, (2) USS *New Jersey*, (3) USS *Wisconsin*, and (4) USS *Missouri*—in President Ronald Reagan's 600-ship navy. They were modernized extensively, especially the crew spaces and command and control with a new Combat Engagement Center, given the latest in naval missile and antimissile technology: 16 Harpoon antiship missiles in four Mark 141 launchers of four missiles each; 32 Tomahawk cruise

missiles in eight launch boxes of four missiles each; the latest in antiair and antimissile defense, namely, four Vulcan Phalanx CIWSs (Close-In Weapon Systems) covering a full 360°; and the latest radars and unmanned aerial vehicles (UAVs) for spotting. They each lost four of their 5-inch 38-caliber dual turrets and all other light guns. They each retained their main armament: nine 16-inch 50-caliber in three triple turrets and 12 5-inch 38-caliber in six twin mounts. With such a change in weaponry, the crew demands were lowered to about 65 officers and 1,500 crew, down from the 2,100 officers and men when first commissioned and the 2,900 carried at the close of World War II.

After the fall of the Iron Curtain and the demise of the Soviet Union, the ships' purpose was uncertain. The invasion of Kuwait by Iraq brought a short-lived career extension with Operation Desert Shield and then Operation Desert Storm (Persian Gulf War) in 1990–1991. They were relegated to reserve status during President Bill Clinton's administration. The USS *Missouri* and *Wisconsin* were reactivated for use in Operation Iraqi Freedom (Iraq War) in 2003 by President George W. Bush in which they fired the first shots (Tomahawk cruise missiles). The ships have since returned to their museum status, although they have had regular refits and maintenance.

Discussion About Usage

Battleships are expensive units to maintain both in asset allocation and the fact that they are still oil fired. In a navy of nuclear-powered smaller craft, oil-fired battleships are a true anachronism. Conversion to nuclear power would not be cost-effective for the allocation of shipyard space, crew assignment, and security and maintenance issues.

In the modern age, the aircraft carrier can still project combat power farther inland than can the battleship, cruise missiles excepted. The operational footprint of an aircraft carrier is the combat range of its aircraft; for the battleship, it is the range of its artillery, 23 nautical miles—well within the range of antiship missiles. Against individual insurgents in the modern combat arena, the targets for such heavy ordnance are not there, and the intelligence for finding such targets is spotty at best. In the role of humanitarian aid, the aircraft carrier, with its much larger deck space for helicopter operations, is more readily amenable to render assistance.

Battleships have not been stricken from the navy roster, however. Congressional mandates keep these ships maintained until a suitable replacement can be in hand for the shore combat support role. The amount of maintenance varies on each vessel, with the newly demothballed *Iowa* getting the least, and *Missouri* and *Wisconsin*, the last activated, getting the most. However, there is not much need for more than these two battleships for the foreseeable future.

Susan Dearborn Mills

See also Iraq War (2003); Persian Gulf War; Strategy, Naval; Training, Naval Officers; Vietnam War; Warfare, Surface; Weapons, Antiaircraft

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BENEFITS, MILITARY

Military personnel receive a total financial compensation package that comprises both pay and benefits. Unlike pay, which comes in the form of direct monetary payments, benefits are typically provided either as *in-kind goods and services* (e.g., military housing, paid leave, meals, health care, and educational assistance for active-duty service members) or as *deferred payments* only available to veterans and retirees (e.g., retirement pay and disability pay). In addition, benefits may include other rewards and privileges whose monetary value is more difficult to calculate—for example, citizenship for soldiers who are not already citizens at the time of enlistment or military honors at funeral services. This entry examines the evolution of military benefits and then

describes the types of benefits for active-duty and retired U.S. military personnel and their families.

Background

Military benefits resemble employee benefits in the civilian world in important ways: They can be treated as part of the overall compensation package, they contribute to efforts to recruit and retain personnel, and they enhance the overall quality of life for service members. However, many benefits evolved to fulfill specific military purposes, sometimes mitigating the distinctive hardships and hazards of military life, at other times simplifying the complex requirements of military administration and logistics. For example, in ancient Greece, Athens and other city-states addressed the ever-present risk of death or injury on the battlefield by providing official pensions for disabled veterans and children orphaned by war. In 17th-century Europe, armies began providing uniforms, weapons, housing, and meals for soldiers as a means of streamlining their increasingly unwieldy systems of military pay, billeting, and food provision.

Military benefits can also satisfy broader social or political goals. Indeed, even retirement benefits and pensions, which are usually considered to be a fairly transparent form of deferred financial compensation in the civilian world, have in the military context often served as instruments of social policy or political strategy. In ancient Rome, during the 1st century BCE., the policy of providing land grants for time-served veterans—promoted by ambitious generals such as Sulla, Pompey, and Caesar—not only provided for the material well-being of retired soldiers but also served to ensure their loyalty in contemporary political struggles. The military retirement homes and pensions that appeared in France during the 1600s reflected, in part, a changing relationship between soldiers and the states they served—a tendency that took on even greater momentum in the years after the French Revolution. And in the 19th-century United States, pension benefits for Union Civil War veterans were heavily conditioned by political party competition and the practices of patronage politics.

As all-volunteer military establishments have become increasingly common across the world, military benefits have come to be understood primarily as a subset of military compensation. It remains a matter of debate whether benefits are the most cost-effective

way for military organizations to recruit, retain, and reward personnel, and many commentators advocate increasing cash payments for service members rather than maintaining or extending benefits.

Benefits in the U.S. Volunteer Force

Benefits represent nearly 60% of the overall compensation package for members of the U.S. military. Key categories of benefits for American military personnel include housing, meals, health care, paid leave, survivor and disability payments, subsidized retail privileges, and retirement benefits.

Health Care

Active-duty military personnel, and their spouses and other dependents, are eligible for full health care coverage. Most treatment is provided through the government's own network of military hospitals and clinics, but a wide range of options is available through the military health care system, which is administered in a manner similar to that of a civilian health maintenance organization. Many members of the reserves are eligible to buy separate government-subsidized health insurance plans, and they receive full health care coverage when mobilized for active duty.

Survivor and Disability Benefits

Service members can buy government-subsidized life insurance, and survivors of service members who die on active duty are eligible for survivors' pensions and other monetary benefits. Service members with service-connected disabilities are eligible for disability payments administered through the Department of Veterans Affairs (VA).

Subsidized Retail Privileges

Service members are eligible to shop at *commissaries* and *exchanges*, which provide economical and tax-free shopping options for service members, particularly those assigned to isolated posts. Commissaries are similar to civilian grocery stores, while exchanges sell general goods, with larger exchanges carrying a selection similar to a civilian department store.

Retirement Pay and Other Retirement Benefits

U.S. service members become eligible to receive retirement pay after they have completed 20 years of

service, with increased pay for members who complete 30 years of service. Retirement pay is administered by the Department of Defense rather than by the VA and is legally and administratively considered to be reduced pay for reduced service—similar to a retainer payment—rather than an actual retirement pension. Military retirees may also participate in the military health care system.

Tax Advantage

Certain categories of U.S. military pay (including the *basic allowance for subsistence* and the *basic allowance for housing*) are exempt from taxes, creating a substantial tax advantage for service members who receive them. Somewhat confusingly, however, this tax advantage is technically classified by the U.S. government as a component of pay rather than as a benefit.

Administration of Benefits

Although some countries distinguish between military benefits and veterans' benefits, the only fundamental distinction between the two in the United States is administrative: the VA administers veterans' benefits, while the Department of Defense administers military benefits, including retirement pay and retiree health care.

Alfred A. Saucedo

See also Benefits, Veteran; Disability; Leaves and Furloughs; Pay, Military; Veterans Affairs, Department of

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BENEFITS, VETERAN

Offering veterans' benefits to citizens for military service is a long-established practice in the United States. At different times, benefits have ranged from medical assistance, pensions, loans, educational and vocational assistance to psychological counseling and preferential treatment in federal hiring practices. Veterans' benefits have generally been offered as a reward for military service, an inducement to enlist, a recognition that military personnel are asked to risk their personal well-being, and as an acknowledgment that veterans have been denied opportunities for personal advancement by being removed from civilian life. But the provision of veteran benefits has been far from automatic; both the nature and the generosity of the benefits offered has been conditioned by factors such as the economic health of the nation, differing ideologies about citizenship and military service, and the influence of veterans' lobbies. This entry examines the history of veterans' benefits in the United States, focusing on legislation passed to assist returning servicemen and service-women and their dependents (especially widows and orphans).

Early Veterans' Benefits

From America's founding, colonial legislators followed the English precedent of offering benefits to civilians to encourage service in colonial militias for duties such as frontier defense. This tradition continued as the colonies moved toward independence. Just over a month after the signing of the Declaration of Independence, the threat posed to Americans' security by the British during the Revolutionary War prompted the Continental Congress to draft the first national veterans' benefits law. The initial legislation—instigated to boost enlistment and morale—promised pensions to soldiers disabled during service in the Continental Army. This law established the precedent that the government has an obligation toward disabled veterans. Under this law, veterans would receive half of their pay if injured during service. Clearly, an injured veteran suffers a disproportionate burden of the national defense, and down to the present day, the need to provide disability assistance remains among the most widely accepted form of veterans' benefits.

Far more contentious was the legislation that soon followed that expanded veterans benefits to include pensions to able-bodied veterans and soldiers' dependents. Initially, all soldiers received mustering out pay, while a May 1778 law provided officers of the Revolutionary War a pension of half pay for 7 years. Two years later, the Continental Congress extended this benefit for life. In 1816, Congress established the precedent of providing for veterans dependents when it extended pensions to widows and orphans of the War of 1812 at the rate of half pay and for a period of 5 years. The liberalization of veterans' benefits was not without opposition. Thomas Jefferson and many of his supporters were apprehensive about the corrosive effect on the nation's moral character of offering pensions and payments to nondisabled veterans. To them, the virtuous citizen-soldiers who won the Revolution required no recompense for performing their civic republican duty.

Civil War Era

Although objections would resurface many times in the debates over veteran benefits that followed, the rewards tended to become more liberalized throughout the 19th century. The 1832 Service Pension Act, for example, provided pensions to veterans even when there existed no obvious financial or physical need. After the cannons fell silent in 1865, the government had the problem of how to deal with nearly 2 million Civil War veterans. The past three decades of the 19th century saw an unprecedented expansion of the veterans' benefits system. Union veterans—Confederate veterans received no federal recognition—received pensions under the 1862 General Pensions Act and were given preferential treatment for land grants under the 1862 Homestead Act. Disabled Union soldiers received disability compensation at a rate determined by their rank and the degree of their disability. For the first time, veterans also gained preferential treatment when applying for federal employment. Injured and disabled veterans also received medical care through the National Home for Disabled Volunteer Soldiers.

The expansion of benefits after the Civil War did not always occur in response to veteran hardship as veterans organizations began to exert considerable influence on legislation. The powerful veteran lobby group the Grand Army of the Republic pressured

Congress to pass legislation such as the Dependent Pensions Act of 1890. Under this act, veterans could claim disability pensions even if they did not incur the disability while on active duty. The act, therefore, offered what amounted to an old-age pension scheme for veterans as their health deteriorated later in life. Such acts meant that the burden of caring for veterans fell more heavily on the government than at any time previously.

The expansion of benefits also came at enormous financial cost. By the mid-1890s, veterans' benefits accounted for almost 43% of the government's total expenditure. The cumulative weight of veterans' legislation meant that at a time when the United States was rejecting European-style socialism to combat the inequalities of industrialization, veterans were becoming a privileged class relative to their nonveteran peers. As Theda Skocpol notes in *Protecting Soldiers and Mothers: The Political Origins of Social Policy in the United States* (1992), the concept of rewarding veterans was more palatable to a "Gilded-Era" mind-set because veterans had *earned* their benefits as opposed to the European model of providing a social safety net to those in need simply by virtue of them being citizens.

World War I

At the outset of World War I, the War Risk Insurance Act of 1914 offered federally backed insurance for America's shipping fleet and personnel. Following America's entry into the war in 1917, the Life Insurance Act was amended to include America's 4.5 million World War I veterans. The government also offered veterans vocational training for the first time to help compensate for time away from civilian life—time that could have been spent developing skills for employment or advancing civilian careers. Both benefits would feature heavily in future veterans' legislation.

But the most contentious veteran benefit—and the cause of one of the most tumultuous episodes in the history of veteran benefits—was the proposed bonus payment. The 1924 World War Adjusted Compensation Act promised veterans a life insurance payment that would be due in 1945. Though passed in an era of relative economic prosperity, President Warren Harding raised the old Jeffersonian warning of the dangers of the bonus on the nation's moral fiber. He vetoed the bill, arguing that the government

did not have any significant financial obligation to able-bodied veterans who were merely performing their civic duty. Extraordinarily, he even implied that the joys of military service were sufficient reward when—in vetoing the bill—he claimed that World War I veterans “emerged from the great conflict not only unharmed, but physically, mentally and spiritually richer for the great experience” (Daniels, 1972, p. 29). Harding’s objections notwithstanding, Congress overrode his veto, and veterans looked forward to receiving their bonus in 1945.

However, as a consequence of the financial hardships brought on by the Great Depression, thousands of veterans marched on the nation’s capital in 1932 requesting early payment of the bonus. Many of the so-called Bonus Army set up camp on Washington’s Anacostia Flats, notoriously prompting President Herbert Hoover to send in the army using tanks, tear gas, and brute force to evict them. In his first term, Hoover’s successor Franklin D. Roosevelt was hardly more of a friend to the veteran. One of his first acts as president was to pass the Economy Act, which slashed veterans’ benefits with a view to redistributing the funds to needier sectors of society. It took a congressional override of Roosevelt’s veto in 1936 to secure the payment of the bonus to World War I veterans. Congress also set about streamlining the benefits system, and in 1930, it consolidated the three existing veterans agencies—(1) the Bureau of Pensions, (2) the Veterans’ Bureau, and (3) the National Home for Disabled Volunteer Soldiers—into the Veterans Administration (VA). Thereafter, the VA would be responsible for administering services such as medical and domiciliary care, pensions, and disability and education benefits. Frank T. Hines, a veteran of the Spanish-American War and World War I, headed the agency from its inception until 1945.

World War II

World War II led to an unprecedented number of veterans entering American society, and—as happened after the Civil War—veterans’ lobby groups played a significant role in determining how the government would treat them. After the harrowing experience of the Bonus Army, and with growing fears that World War II veterans would come home to unemployment lines, the government began early planning for their return. Early-World War II

legislation provided for life insurance, mustering out pay, and guarantees that their old jobs would be there for them when they left the service. The 1943 Disabled Veterans Rehabilitation Act offered vocational rehabilitation services for wounded World War II veterans. Some 621,000 veterans received assistance under this program. But the capstone legislation—and one of the most important pieces of legislation passed in the 20th century—was the 1944 Servicemen’s Readjustment Act, or “G.I. Bill of Rights.”

More than 600 different proposals for veterans’ legislation circulated around Capitol Hill before 1944. Most proposals—including those supported by the Roosevelt administration—favored the concept of offering training and education over a direct financial handout. The idea of benefits that allowed self-improvement for the veteran seemed more in keeping with America’s individualistic ideals as opposed to the wealth redistribution nature of cash bonuses. But in January of 1944, the veterans’ group the American Legion released its own proposal for rehabilitating veterans, which it termed a “Bill of Rights for G.I. Joe and G.I. Jane.” Comprised mainly of World War I veterans, the legion wanted to ensure that the next generation of veterans would be treated better than their own. Their proposal called for unemployment insurance, funding for education, vocational training, and home loans. Spurred on by a media lobbying campaign by the legion, Congress debated the legion’s plan and reached widespread accord on its main tenets. The G.I. Bill of Rights passed rapidly through both legislative houses and was signed into law by Roosevelt on June 22, 1944.

In its final form, the 1944 G.I. Bill offered veterans unemployment insurance at the rate of \$20 a month for 52 weeks—creating what was popularly known as the “52–20 Club”—and low-rate loans for homes or to invest in farming or businesses. But the G.I. Bill is perhaps best known for the education benefits offered to veterans. The bill provided veterans with a monthly living stipend and paid their tuition up to \$500 a year—enough to cover even the most expensive American colleges. Veterans needed to have served only 90 days and to have left the service in good standing. More than 2.2 million veterans entered higher education under the bill, swelling college enrollments and changing the nature of higher education.

Historians and politicians have widely credited the 1944 G.I. Bill with expanding the nation's middle class and contributing significantly to America's postwar prosperity. Not every veteran shared in the benefits equally, however. Minority veterans were still denied access to many institutions of higher education, while some African American veterans—particularly in the South—found difficulty in claiming their benefits when confronted by prejudiced local administrators.

Cold War and Vietnam Era

The 1944 G.I. Bill seemed to have provided a widely agreed on model for veteran benefits as Korean War veterans received similar rewards with little debate in 1952. The main difference in the 1952 bill was that the VA paid money for tuition directly to the veteran instead of to their school—a change prompted by a congressional investigation into the 1944 bill that found that some schools were raising tuition to maximize the money received from the government.

But Congress began to scrutinize more closely the provision of liberal veterans' pensions by the late 1950s. In 1956, a presidential commission on veterans' benefits—headed by the decorated general Omar Bradley—recommended that the government scale back its obligation to able-bodied veterans to meet the enormous costs of providing for America's Cold War draft army. This led Congress to pass the Veterans' Pensions Act of 1959—over the vociferous objections of veterans' organizations—which more closely tied pension rates to a veteran's income and financial needs.

The same air of economic restraint engendered by the Bradley Report infused debates over the 1966 G.I. Bill. Initially, the education benefits provided by this bill proved to be far less generous than the previous G.I. Bills. Several reasons accounted for this retrenchment. Fiscally conservative politicians—such as Texas Democrat Olin Teague—argued that education benefits ought to provide veterans *some* assistance, but not the full ride that World War II veterans had enjoyed. Second, the bill covered all Cold War veterans whether or not they served in a combat zone or in a time of declared war. Because this broad designation covered so many veterans—many of whom might have suffered no real hardship from service—the benefits were set at a lower level than for previous G.I. Bill recipients who had served

in times of war. This decision to reward peacetime veterans further transformed the nature of veteran benefits. Civilians could now potentially enlist in the military with the expectation of future reward without the likelihood of combat service. A third factor reducing the amount of benefits offered was Lyndon Johnson's desire to redirect federal spending to more universal Great Society programs such as the Higher Education Act. Finally, Johnson's determination to minimize the domestic impact of the war early on led him to oppose a G.I. Bill as generous as the World War II or Korean bills because he did not yet want to cast the Vietnam War as a similarly full-blown conflict. As a consequence of the lower education benefits, many Vietnam combat veterans felt short-changed by the government when they returned home. Johnson's fiscally conservative successors did little to help their situation thereafter as both Richard M. Nixon and Gerald R. Ford fought against meaningful increases in educational allowances.

Vietnam veterans faced a similarly drawn-out battle to obtain federal assistance for their psychological needs. Throughout the 1970s, there were increased reports of Vietnam veterans suffering emotional trauma as a result of their service. Concerned veterans and some psychologists pushed Congress for the enactment of laws providing for clinical assistance. Yet, repeatedly, their pleas fell on deaf ears as some lawmakers—including aging World War II veterans such as Olin Teague in the House—refused to acknowledge any special needs on the part of Vietnam veterans. Not until 1979 did the government begin a program of outreach centers to help afflicted veterans. In 1980, the official recognition of posttraumatic stress disorder in the mental health community's guiding document *Diagnostic and Statistical Manual* (3rd ed.; *DSM-III*) led to a more formal acceptance of postservice counseling as a necessary part of the government's obligation to its soldiers thereafter.

All-Volunteer Force

After the United States moved toward the all-volunteer force in 1973, the justifications for veterans' benefits altered somewhat. Since 1940, the United States had relied predominantly on a draft army to meet its military manpower needs, and previous benefits had been offered, in part, to compensate draftees for the time they were removed from civilian life.

Now that the nation's military was to rely on volunteers, offering benefits became a vital way of enticing civilians into service. Because the recipients of benefits after 1973 were now volunteers, early education programs were less generous than the previous G.I. Bills. Legislators presumed that enlistees were making informed career choices by joining the military and did not need generous compensation for service. All-volunteer force programs such as the Veterans Education Assistance Program required veterans to contribute their own money into an education fund. The government would then match the amount at a ratio of 2:1. Initially, participation in all-volunteer force programs was low and the military was falling short of its recruitment goals. These shortfalls prompted the passage of the Veterans' Educational Assistance Act of 1984. More commonly known as the Montgomery G.I. Bill after the bill's architect Mississippi democrat Gillespie V. "Sonny" Montgomery, the bill resembled previous iterations of the G.I. Bill by offering veterans tuition payment and monthly living stipends. The 1991 "Gulf Act" liberalized the Montgomery G.I. Bill benefits for veterans of the 1991 Persian Gulf War.

Veterans serving in the U.S. Global War on Terrorism and beyond received a new G.I. Bill, which was signed into law in July 2008 and went into effect in August 2009. The architect of the "Post-9/11 Veterans Education Assistance Act of 2008," or "Post-9/11 G.I. Bill," Democratic senator Jim Webb intended the legislation to cover most of the educational costs of veterans similar to the World War II G.I. Bill and, indeed, the bill soon became one of the most extensive and generous of the G.I. Bills passed since 1944. Beginning in 2009, the bill provided assistance to all veterans who had served at least 90 days since September 10, 2001. Most veterans earned up to 36 months of entitlements and could claim their benefits up to 15 years following discharge. The benefits covered tuition up to the equivalent of the cost of an in-state public institution degree, and the tuition was paid directly to the veteran's school. Post-9/11 veterans could also claim housing benefits and up to \$1,000 for books and supplies under the new bill. Furthermore, funds could be made available to veterans attending a school whose tuition was more expensive than the veterans' earned allowance: If schools signed up for the Yellow Ribbon program, the VA would provide matching funds to cover the difference in tuition

rates. More than 770,000 veterans had taken advantage of the Post-9/11 G.I. Bill by the conclusion of its first 3 years. Despite the successes and widespread praise for the Post-9/11 G.I. Bill, the historical battles over veterans' benefits suggest that the future treatment of the nation's veterans will continue to be subject to economic and political whims.

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See also All-Volunteer Force; American Legion; Conscription; Medical Disability, Veteran

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BLACKWATER

Blackwater USA, renamed Blackwater Worldwide (2007), rebranded as Xe Services LLC (2009), and most recently renamed Academi (2011), is the world's largest, most powerful, and best known private security/military company (PSC/PMC), offering manifold services (above all, military training, security guards and patrols, intelligence, and consulting) to both government and private clients. It has been emblematic of the character, developments, and consequences of the outsourcing of war and security. This entry discusses the origins of Blackwater, its subsidiaries and facilities, the role of Blackwater in the Global War on Terrorism and as a U.S. government contractor, and controversies and accusations.

The Beginnings

Blackwater USA, headquartered in Moyock, North Carolina, began as a private military training facility. The idea of incorporating enterprise for training government and private customers was born among a group of Navy SEALs (Sea, Air, and Land Teams). Although the inspiration came probably from Al Clark, it was Erik Prince, a radical right-wing Christian activist, a supporter and subsidizer of the Republican Party, and a multimillionaire, who provided the money, thus becoming the founder and chairman of the company. They and Gary Jackson sought to use post-Cold War military downsizing, which had deteriorated training infrastructure and capabilities, to their advantage. In December 1996, Prince incorporated Blackwater Lodge and Training Center, which opened for business in May 1998. The company's name was inspired by the black waters of the Great Dismal Swamp of North Carolina; it was close to there, in Moyock, on more than 6,000 acres of land, that Blackwater built the world's largest and most all-inclusive commercial security training complex.

It was soon training law enforcement personnel and civilians in the use of various types of weapons, regularly hosting a police and military handgun competition (Shoot-Out at Blackwater), leasing out its camp (frequently to the SEALs), and training special weapons and tactics police teams at its "R U Ready High School" mock facility for simulated school shootings.

In February 2000, Blackwater received its first, 5-year General Services Administration contract, which created a list of services it could sell to federal agencies (by 2006, this brought the company \$111 million). However, the first crucial military contract came following the al Qaeda attack on the USS *Cole* in October 2000, after which the U.S. Navy realized the need to train sailors for combating terrorist threats. With a \$35.7 million contract, it hired Blackwater to train some 16,000 sailors in force protection, shipboard security, search-and-seizure techniques, and armed sentry duty. In September 2001, the company won a Federal Bureau of Investigation contract and promptly grew into the prime training provider for various wings of the government, including not only the Department of Defense (DOD) but also departments such as Energy and the Treasury. The company, with significantly growing profits, built a solid market position, became well connected with the federal structures of government, and began expanding its focus and range of services.

The Structure

Over the years, Blackwater set up operating divisions or subsidiaries as follows:

1. Blackwater Lodge and Training Center (now, U.S. Training Center, including a number of live-fire shooting ranges, mock-ups of urban settings, an artificial lake, and a naval ship; since 1998, it has trained hundreds of thousands of U.S. government personnel and allied forces)
2. Blackwater Security Consulting (incorporated in 2002 and specializing in security services)
3. Blackwater Target Systems (created in 2002 to provide solutions, design, construction, and maintenance of training ranges and shoot house systems; the company patented, e.g., the BEAR multitarget training system)
4. Blackwater Air (established in 2003 with the acquisition of Aviation Worldwide Services and

- its subsidiaries, such as an air carrier, Presidential Airways, specializing in out-of-the-ordinary air transportation services)
5. Blackwater Canine (training and deployment of narcotic- and explosive-detecting dogs)
 6. Blackwater Armored Vehicle (an R&D company, whose major achievement is Grizzly—an improvised explosive device–safe armored personnel carrier for urban combat)
 7. Blackwater Maritime (containing a fleet of naval and maritime equipment and simulation devices for training, support, and antipiracy/antiterrorist security)
 8. Greystone Limited (an affiliated company incorporated offshore in 2004 in Barbados, classified by the U.S. government's Central Contracting Office as a "tax-exempt corporate entity" specializing in "security guards and patrol services")
 9. Raven Development Group (a construction subsidiary, which built the Moyock training center, developed into a mobile provider of construction and real estate services)

The Blossoming: The Global War on Terrorism

At the turn of the 21st century, Blackwater was well established and ready to expand its profile. The goldmine opportunity came with the September 11, 2001, attacks and the Bush administration's neo-liberal objective of outsourcing security. In 2003, Blackwater Security Consulting obtained its first high-profile, 11-month contract for protecting the head of the Coalition Provisional Authority, Paul Bremer. The company assigned almost 40 bodyguards and air transportation services through Boeing helicopters.

In March 2004, in cooperation with the Kuwaiti firm Regency Hotel and Hospital Company, Blackwater won a contract with Eurest Support Services, a subcontractor to Kellogg Brown & Root, which had a deal with the U.S. Army to provide the troops in Iraq with logistical support such as meals and laundry. Blackwater was to guard kitchen equipment transports. On March 31, 2004, in Fallujah, one of the convoy teams ran into a fatal ambush, in which insurgents not only killed the four contractors but also mutilated and burned their bodies. Two desecrated corpses hanging from a bridge over the

Euphrates drew wide media coverage. The gruesome images came to be one of the iconic pictures of the war in Iraq, while the incident made public the role the PSCs had already played in combat. The tragic incident, known as the "Blackwater bridge," not only prompted the American siege of Fallujah (on April 4, 2004, more than 1,000 U.S. Marines were deployed in Operation Vigilant Resolve) but also, ironically, proved to be the springboard for the company's future prosperity. An influential Washington lobby company, Alexander Strategy Group, helped capitalize on the infamous ambush, and in June 2004, Blackwater won a valuable (\$300 million) and prestigious international security contract. Under the Department of State's Worldwide Personal Protective Services (WPPS) program, it was hired to guard U.S. diplomats, notably Paul Bremer and the then ambassador John Negroponte, other officials, and American facilities—the embassy in Baghdad and five regional occupation headquarters. Of the three PSCs to receive the WPPS contracts (the other two being DynCorp and Triple Canopy), Blackwater got the greatest share. Under this deal, as of May 2008, it had 1,090 contractors worldwide (out of 1,574), including 698 in Iraq (out of 1,400). Originally, Blackwater was assigned \$229.5 million; however, in 2005, it won the second WPPS contract (for 1 year but annually renewed, last time in 2008), and by only September 2006, it was estimated to have accrued \$337 million.

Blackwater ran about 60 convoys a week in central Iraq. It started out employing former U.S. Special Forces soldiers, ex-GIs, and retired police officers, but the dramatic increase in the demand for private security services made it recruit foreigners as well. In 2004, 20% of its contractors were not U.S. citizens (controversially, it had a sizeable group of Chilean soldiers, many of whom had served under the Pinochet regime, later to be replaced with considerably cheaper Bosnian, Colombian, Filipino, and Jordanian recruits), while 30% lacked a formal military training. An employee with Blackwater could earn on average \$500 to \$800 a day, but sometimes much more, while the contracts were generally short term (usually for 2 months), yet extendable.

The WPPS contract turned the firm into something of a Praetorian Guard in Bush's Global War on Terrorism. It made it an essential player in U.S. operations, brought enormous profits, attracted new clients, and won fame (and infamy). The company also

secured contracts to train Iraqi police and military forces as well as Afghan troops. Soon, it expanded its services in Afghanistan, where it provided protection to the Central Intelligence Agency (CIA) station in Kabul, while its Presidential Airways, under the \$34.8 million contract with the U.S. Air Force, performed “short takeoff and landing” flights. After one of its planes crashed with U.S. soldiers onboard, the investigations undertaken by both the army and the National Safety Board revealed severe violations of safety regulations. Later, the families of the three soldiers killed sued Blackwater for wrongful deaths. The accident became one of the many heated controversies soon to flare up over the company’s (mis) conduct.

The Global War on Terrorism has turned out to be a remarkable business for the PSCs. Although it is hard to estimate how much profit Blackwater made on government contracts, in 2001–2007 it must have been more than \$1.5 billion, excluding urgent orders and lucrative “black” (secret) contracts with the CIA. It is likely that in the period 2001–2011, the agency awarded up to \$600 million in classified deals to Blackwater. According to unconfirmed but plausible reports, in 2004, it was hired to locate and kill Taliban and al Qaeda operatives, assist in the transportation of detainees, and conduct “snatch and grab” operations—that is, the clandestine night raids with agency officers against suspected insurgents in Iraq and Afghanistan.

Additional Services for the Government

Standing firmly in the security services market, the company was searching for new business opportunities, and it was employed to secure U.S. interests in the oil and gas-rich Caspian Sea region. In July 2004, the DOD contracted Blackwater to train an elite Azeri force modeled after the Navy SEALs and to set up a training center/military base in Baku.

In August 2005, Hurricane Katrina opened the home market for Blackwater’s deployment. Immediately after the disaster, the first heavily armed contractors arrived in New Orleans, largely destroyed and plunging into chaos and violence. They not only guarded private firms, banks, hotels, and wealthy inhabitants but also, under a contract with the Department of Homeland Security’s Federal Protective Services, secured the governmental reconstruction works. By June 2006, Blackwater received

about \$73 million for its post-Katrina services, earning some \$243,000 a day. Encouraged by this rewarding opportunity, the company commenced seeking contracts with local governments in other U.S. states.

In August 2007, along with four other PSCs, Blackwater won the biggest deal ever. Worth up to \$15 billion, it was a 5-year counternarcotics training contract with the DOD’s Counter-Narcoterrorism Technology Program Office.

The Twilight of the Number One PSC?

In Iraq, Blackwater’s contractors, by conducting their duties recklessly and rather aggressively, made enemies, which jeopardized U.S. counterinsurgency efforts. They often engaged in battles with insurgents, and it is difficult to classify the character of their activity because sometimes it resembled a police special weapons and tactics-type of operation, while on other occasions it came close to a military special operations-like action. This was the case, for example, with the April 2004 defense of the U.S. headquarters in Najaf against hundreds of Iraqi insurgents: Before the U.S. Special Forces arrived, eight Blackwater personnel were sent into action and succeeded using various methods, relying on a helicopter to resupply the forces with ammunition and transport a wounded marine. Because the way they fought off insurgents was hardly distinguishable from combat, the company had the highest shooting incident rate among all PSCs operating in the country. From January 2005 to September 2007, it was involved in 195 incidents of open fire, with the contractors shooting first on 84% of occasions. The crossover point came with the incident on September 16, 2007, when the Blackwater guards escorting a diplomatic convoy opened fire at the Baghdad traffic circle in Nisoor Square, killing 17 Iraqi civilians and wounding 24. The investigation concluded that the shootings were not justified. The Iraqi government claimed greater control over foreign contractors and their subjection to the local law. On the U.S. side, the government sought to impose tighter scrutiny on Blackwater’s activities. In October 2007, the State Department announced that it was assigning its own diplomatic security service agents to monitor all of the company’s security convoys in Iraq and installing video cameras in its vehicles. Finally, the Iraqi government refused Blackwater an operating license,

and in May 2009, the company ceased its activities in the country; its assignments were taken over by its competitors: Triple Canopy and DynCorp. The Nisoor Square incident cost Blackwater a profitable presence in Iraq and its reputation.

Controversies and Accusations

Among the gravest charges against Blackwater, many still under investigation, have been murder and manslaughter, conspiracy, corruption, tax evasion, false statements, violations of U.S. arms export control regulations, and using shell companies to secure contracts without being recognized as Blackwater (more than 30 such firms were created, and at least three of them concluded deals with the U.S. military or the CIA).

In 2005, the families of the four contractors killed in Fallujah in March 2004 filed a suit for wrongful death against Blackwater, alleging that the company failed to provide basic security to its employees (the contract with ECC required at least three men per vehicle on security missions, while only two were sent; they had no map and were traveling in unarmored vehicles). This lack of preparation, resources, and support for its personnel were also the findings of the Congressional Committee on Oversight and Government Reform. Blackwater countersued the families for \$10 million, claiming that they violated the contracts of their relatives, which forbid any suit against the company. In 2011, a federal court dismissed both cases after no progress was achieved in court-ordered arbitration.

At the end of 2009, the Department of Justice opened an inquiry into whether Blackwater sought to bribe Iraqi government officials, as there had been leaks that the company authorized secret payments of about \$1 million to buy permission to continue its work in Iraq following the 2007 incident.

In April 2010, federal prosecutors announced weapons charges against five former senior Blackwater executives, including its ex-president, Erik Prince. In August, the company reached a settlement with the State Department, agreeing to pay \$42 million in fines for the violations of the U.S. export control regulations (e.g., for illegal export of weapons to Afghanistan and Iraq and sniper training for Taiwanese police officers). The deal enabled it to continue competing for government contracts.

Although just before leaving Iraq in June 2004, Paul Bremer issued Order 17, which immunized contractors from prosecution in Iraq, some of Blackwater's men faced trial in the United States. In December 2008, five were charged with manslaughter at Nisoor Square in 2007. Burdened by legal obstacles, the cases were dismissed in 2009 by a federal judge in Washington, D. C. Nevertheless, in April 2011, a federal appeals court reopened the criminal case against four ex-Blackwater personnel. While their process continued, another former contractor was sentenced to 2½ years in prison for shooting an unarmed Afghan civilian in Kabul in 2009, becoming the first Blackwater former contractor to be sentenced for criminal offense.

Last but not least, the argument for the cost-effectiveness of PSCs proves to be highly dubious. According to the Congressional Committee on Oversight and Government Reform, Blackwater costs were 4 to 10 times higher than the costs of a U.S. soldier. The corporation charged the government \$1,222 per day for each contractor—over six times more than the salary of a serviceman. Even after adding the expenditures of training, housing, feeding, and arming a soldier, the PSCs turn out to generate not savings but greater cost to the U.S. federal budget.

Avoiding the Decline: Mock Changes or Real Transformation?

In February 2009, with both the WPPS contracts lost and the firm's good standing gone, Blackwater Worldwide changed its name to "Xe Services"; moved its headquarters to Arlington, Virginia; and went into rebranding its corporate structure. The company announced the reorganization of its units, the institution of a corporate governance and ethics program, and the setting up of an independent outside committee to supervise its structures and activities.

With the coming of the Obama administration, Blackwater invested extensively in lobbying (e.g., in the first quarter of 2010, it spent more than \$500,000 for a well-connected Democratic lobbyist, Stuart Eizenstat). This paid off because despite all the controversies and investigations for a range of alleged violations and crimes, under the new administration, Xe was awarded a \$250 million contract to provide the Department of State and the CIA security services, particularly in Afghanistan. Thus, Blackwater/Xe

operatives continue to be involved in the most sensitive U.S. missions. In August 2011, Xe received a DOD contract valued at \$17.6 million to provide intelligence expertise for its Counter-Narcoterrorism Technology Program Office's activities in Afghanistan. Contracting out has become such an inherent and indispensable feature of the American way of war that, although the Obama administration has not been enthusiastic about continuing the cooperation with Blackwater/Xe, it turned out that the United States cannot do without it.

Erik Prince stepped down as the chief executive, and in late 2010, he sold the company and moved to the United Arab Emirates. In July 2011, Jack Quinn, the former White House counsel to President Bill Clinton and the former chief of staff to Vice President Al Gore, became an independent director of Xe. USTC Holdings, the investor consortium that acquired Xe Services, aims to recast the company as a military training firm and move its focus away from the business of private security for which it has earned a bad reputation. Xe wants to obtain contracts for training local forces in Iraq, Afghanistan, Yemen, and elsewhere. It remains to be seen, however, whether this return to the initial area of Blackwater's specialty and the intentions to enhance "governance, leadership, accountability and transparency" will be a true corporate transformation or merely a cosmetic exercise.

Conclusion

The success story of Blackwater is in some ways an exemplification of the American dream—over one decade a little and unknown firm operating a training facility established itself as the government's largest go-to private partner in its war on terror. The firm reached its peak as the most powerful PSC in the world in 2006, having some 2,300 employees disposed in 9 countries and a database with an additional 21,000 contractors ready for immediate deployment, the most sophisticated private military camp and two new facilities under construction ("Blackwater North" in Illinois, and in the Philippines, for jungle training), a vast stockpile of heavyweight weaponry, an armada of more than 20 aircraft (both simple carriers and gunships) and a ship, its own intelligence and surveillance division, and advanced R&D and manufacturing capabilities (unmanned aerial vehicles, armored carriers, and a surveillance blimp). In March 2006, at a conference in Jordan, Blackwater's vice chairman, Cofer Black,

announced that it was ready to provide a private brigade-size force for a conflict/crisis zone. He concluded that the company was prepared to shift from security services to a more "overt combat role," becoming an army for hire. Although the executives would later deny this claim, Black's often quoted declaration was the best evidence of Blackwater's might.

Although its standing is damaged, Blackwater/Xe accomplished the goal articulated by Erik Prince: It has done "for the national security apparatus what FedEx did to the postal service" (Scahill, 2011, p. 439). Overall, it has become iconic for the emergence of the outsourced corporate violence industry in the post-Cold War era, with all its pros and cons.

Łukasz Kamieński

See also Contractors, Private; Global War on Terrorism; Iraq Insurgency (2003–2011); Iraq War (2003); War in Afghanistan

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BLITZKRIEG WARFARE

Blitzkrieg, the doctrine of war employed by Nazi Germany in the opening years of World War II, was the result of years of strategic and operational thinking. Marked by the experience of World War I, Germany sought a doctrine that would enable domination of

Europe through mechanized warfare. Because of its high demand on resources, blitzkrieg proved unsustainable, and the Allies learned to counter the initially successful doctrine. This entry traces the history of the type of warfare called blitzkrieg, and discusses the debate among historians as to the efficacy and even the existence of blitzkrieg. Despite its renown, some revisionist historians argue that blitzkrieg is overrated or may never have existed at all.

Development and Implementation

As defined by traditionalist historians, *blitzkrieg*, German for lightning war, describes an operational doctrine involving the use of constant motion and motorized force concentration to break through lines and proceed to the enemy flank. Blitzkrieg involved the use of wide sweeps of motorized artillery to immobilize and trap enemy forces and dislocate enemy command and control. Designed for quick victory, blitzkrieg was meant to keep the enemy off balance by speed and surprise. In comparison to the long stalemates of World War I, blitzkrieg undertook to defeat entire armies in weeks instead of years. The war of movement, as opposed to position, was favored by the German leadership who wanted neither a long nor an expensive war.

Blitzkrieg doctrine emerged from the interwar period as a combination of new technology and German military tradition. The use of aircraft and tanks in concert complemented long-held traditions such as a flexible command doctrine, prejudice against intellectual one-sidedness, and a positive attitude toward operational planning. Influenced by the experiences of the Condor Legion during the Spanish Civil War, blitzkrieg was designed to use air power as a support to the army. The use of radio by the field army assisted in maintaining close cooperation in short, mobile wars. Tanks, infantry, artillery, and air power were used by the Germans to great effect in the early years of World War II.

From 1939 to 1941, blitzkrieg was used most effectively during the invasion of Poland and the Battle of France. The invasion of Poland began on September 1, 1939, and Warsaw fell on September 27. Deployed in Army Groups North and South, the German army encircled the Polish army advancing from Pomerania, Slovakia, and Silesia, and killed 65,000 Polish men. In the Battle of France, the German invasion of France and the Low Countries began on May 10, 1940. German armored forces

crossed the Ardennes, broke the Maginot Line, and occupied Paris on June 14. Outside Europe, German commander Erwin Rommel used blitzkrieg during desert campaigns in North Africa.

Allied Responses

Despite the initial utility of blitzkrieg in Poland and France, the Germans were not able to sustain their success. Larry Holbrook Addington posits that blitzkrieg, despite its innovation, rested on traditions of offensive posturing and capturing land and was not capable of victory against continental or insular powers such as Russia or Great Britain, respectively. Blitzkrieg became unsustainable because of its short range, resource consumption, and reliance on surprise. By 1943, the balance of fire and air power shifted to the Allies, though the Germans retained a qualitative advantage. The Allies responded by increasing mobility and mimicked blitzkrieg tactics. Most notably, U.S. general George Patton used blitzkrieg-style tactics in European operations of 1944.

Strategic miscalculations and planning failures on the part of the Germans greatly assisted the Allies. Overreach in North Africa was complicated by severe oil and gas shortages that made blitzkrieg impossible. Tank and tractor shortages were also made worse by Allied interdiction efforts in Europe to destroy rail networks. Ultimately, Germany was too small, with too few people, too small an industrial base, and too little materiel (military equipment, supplies, etc.).

The Soviets were most effectively able to counter blitzkrieg. The Germans did not possess antitank capability or doctrine and were unable to counter Soviet armor. Soviet encirclement and deep battle theory strove to inflict a decisive strategic defeat and render the defense of the front impossible. Soviet tactics forced the Germans to rely on fortification and linear defense, rendering the mobility required for blitzkrieg impossible. Ultimately, the combination of Russia's sheer size and Russian weather and manpower prevented the Germans from being able to encircle and contain enemy forces. Inadequate supplies and reinforcement shortages sapped German morale, and the German invasion of Russia failed.

The Blitzkrieg Controversy

Despite its fame and worldwide influence on modern combined arms warfare, revisionist historians disagree with regard to the efficacy of blitzkrieg, and

about whether blitzkrieg ever existed. Historians such as Matthew Cooper and Richard Overy argue that blitzkrieg is a poorly defined myth, originating from a 1939 *Time* article that erroneously assumed German attacks early in World War II to be part of a new theory of war. J. P. Harris argues that operational and strategic thinking in Germany had changed little in the interwar period, as the hectic rearmament period left little time for innovation. Instead, critics attribute rapid success in the opening years of World War II to higher levels of mobilization compared with the Allies. The term *blitzkrieg* was not used as part of the official German doctrine, and appears in few historical documents from Germany. Hitler had been looking to awe his enemies with quantitative superiority, not with qualitative improvements and revolutionary tactics. However, the myth of Hitler as the Nazi genius commander responsible for blitzkrieg was propagated following 1940 by the Nazis and the Allies alike. German generals undoubtedly employed tactics now associated with blitzkrieg, but it was by no means a top-down enforced doctrine.

Abbie Desloges

See also World War II

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BOEING

Founded in Seattle, Washington, in 1916 by William Edward Boeing, the Boeing Company is a world leader in commercial aircraft, as well as being a prominent builder of military aircraft and other defense systems. This entry traces the history of

Boeing military aircraft and missile systems and discusses current unmanned experimental aircraft.

History: Aircraft, Missiles, and Mergers

During the 1920s and early 1930s, Boeing's most important military program was the Model 100 fighter aircraft series, of which more than 550 were delivered to the U.S. Army as P-12 and the U.S. Navy as F4B. Prior to World War II, Boeing emerged as a world leader in four-engine commercial and military aircraft. Notable was the Model 299, which entered service in 1936 with the U.S. Army Air Corps (U.S. Army Air Forces, USAAF, after 1941) as the B-17 Flying Fortress. Through 1945, more than 12,000 B-17s were built. During World War II, they served with the USAAF in all theaters, especially in Europe, where they were a key weapon of the strategic bomber offensive that crippled the German war machine.

In 1943, Boeing began deliveries to the USAAF of the B-29 Superfortress (Model 345), the largest operational bomber of World War II. These were earmarked solely for operations against Japan, because the extremely long distances in the Pacific theater required a very long range bomber. During 1944 and 1945, the B-29s conducted a massive air campaign against industrial infrastructure targets in Japan. These operations culminated with two nuclear bomb strikes in August 1945, which hastened the end of World War II. More than 3,000 Superfortresses were built.

After World War II, the Boeing Company continued with large commercial and military aircraft, including the Model 707, the world's first successful commercial jetliner. The B-47 Stratojet (Model 450) was the first swept-wing strategic bomber delivered to the U.S. Air Force. More than 2,000 Stratojets were produced through 1956, more than any other American jet bomber type.

Boeing's huge B-52 Stratofortress (Model 464) bomber became the signature jet bomber of the U.S. Air Force Strategic Air Command during the Cold War. In 1957, B-52s demonstrated their range capability by flying around the world nonstop. Boeing built 744 B-52s through 1962, and Stratofortresses continue in frontline U.S. Air Force service in the 21st century. Having flown airborne alerts with the Strategic Air Command for more than three decades, B-52s have been used to deliver conventional ordnance in conflicts from Vietnam to Afghanistan.

Also, for the Strategic Air Command, Boeing developed the Minuteman intercontinental ballistic missile, which became fully operational in 1965 as part of the U.S. strategic deterrent force. At the beginning of the 21st century, more than 400 Minuteman intercontinental ballistic missiles were still deployed in silos (underground vertical structures that house missiles ready to launch) across the United States.

During the Cold War, the Boeing Company also built a number of important noncombat military aircraft. The Model 717, similar to the commercial 707, was adapted by the U.S. Air Force as the KC-135 Stratotanker refueling aircraft, which complemented the B-52 as a mainstay of the Strategic Air Command throughout the Cold War. Like the B-52, the KC-135 remains in frontline service in the 21st century. There were 820 Model 717 airframes built, 732 as KC-135s, and the remainder as C-135 transports, RC-135 strategic reconnaissance aircraft, and EC-135 airborne command post aircraft. In addition, 14 similar Model 739s became RC-135s.

The Model 707 airframe was also adapted for military uses, first as the VC-137 aircraft, the American presidential jet. Under the call sign "Air Force One," VC-137s served every American president from Dwight Eisenhower through George H. W. Bush. During the latter administration, they were superseded as Air Force One by Boeing Model 747 aircraft under the designation VC-25. Model 707 airframes were also adapted by the U.S. Air Force as Airborne Warning and Control System aircraft under the designation E-3, and by the U.S. Navy as airborne command posts as E-6. The 747 was adapted as a presidential command post under the designation E-4. The E-3, E-4, and E-6 remain in service in the 21st century.

In 1996–1997, the Boeing Company absorbed two other major manufacturers of military aircraft. Dating back to 1928, the North American Aviation component of Rockwell International had been responsible for aircraft such as the P-51 Mustang, the leading American fighter plane in World War II, and the F-86 Sabre, the leading American jet fighter of the Korean War. This entity was also responsible for the record-setting X-15 research aircraft and the Space Shuttle orbiting vehicle. Boeing also acquired McDonnell Douglas, itself formed by a 1967 merger of those two companies. Dating back to 1920, Douglas had built myriad military and commercial

aircraft types, notably its Douglas Commercial family of airliners. As such, Douglas had been Boeing's principal American competitor in the commercial market for many decades. The McDonnell component had become famous for building a successful series of Cold War-era jet fighters, especially the F-4 Phantom, and (after the merger with Douglas) the F-15 Eagle and F/A-18 Hornet. The C-17 Globemaster III heavy lift transport, which originated as a McDonnell Douglas program, evolved into one of Boeing's most important large military aircraft programs after the merger.

Also, through the merger with McDonnell Douglas, Boeing gained the helicopter company that had been Hughes Helicopters until 1984. The principal product of this division is the AH-64 Apache attack helicopter, which remains in production in the 21st century.

Since the mergers, Boeing has been active in a number of military programs. Among these was a competition with Lockheed Martin for the lucrative, multiservice Joint Strike Fighter program. The program called for a multirole combat aircraft, variants of which would be adopted by all the U.S. armed services, as well as by the United Kingdom and possibly others. The Boeing X-32 aircraft flew in competition with the Lockheed Martin X-35 during 2000–2001, but the latter was selected to enter production as the F-35. Boeing also developed the X-45 unmanned combat air vehicle, which first flew in 2002. Despite promising test flights, the program was cancelled in 2006.

Other 21st-century Boeing military programs include defensive missile systems and military variations on Boeing commercial airframes. Among these are an airborne laser adaptation of its 747 and an aerial tanker based on the 767, which is in service with the air forces of Italy and Japan under the designation KC-767 and has been ordered by the U.S. Air Force under the designation KC-46A. The 737 commercial airframe, meanwhile, has been adapted as the P-8 patrol aircraft and as the C-40 transport aircraft.

Recent developments on the commercial side include Boeing's Model 777 (aka "Triple Seven") jetliner, which entered service in 1995. With a range of nearly 11,000 miles, this large, twin-engine aircraft has proven popular with airlines operating on long-range intercontinental routes. The 777–200ER Worldliner variant established a world

nonstop distance record of 13,422 miles in 2005. In December 2009, Boeing marked the first flight of its Model 787 Dreamliner, a jetliner designed specifically to provide optimum fuel efficiency on intermediate routes.

Looking toward the future, Boeing is also a 21st-century world leader in high-speed unmanned experimental aircraft. These include the X-51 Waverider, which achieved a long-duration flight at Mach 5 in 2010, and the X-43A, which set a speed record of Mach 9.8 in 2004.

With the final flight of the Space Shuttle in 2011, Boeing is among the aerospace companies developing and testing reusable spacecraft for potential future operational missions. One example is the unmanned Boeing X-37 Orbital Test Vehicle, which spent nearly 8 months in orbit in 2010 before returning for a runway landing.

Bill Yenne

See also Airborne Warning and Control System (AWACS) Aircraft; Missiles, Nuclear

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BOMBS, CLUSTER

A cluster bomb is an unpowered and unguided air-dropped or ground-launched explosive weapon that ejects smaller munitions, called submunitions,

designed to kill enemy personnel, destroy vehicles, make runways unusable, or disperse chemical or biological agents or nonlethal items such as leaflets, over a target area. This entry discusses the types of cluster bombs and their submunitions.

General Description

A cluster bomb consists of the bomblets and a dispenser that holds the bomblets while in flight to the target area and then dispenses them over the target area. Some dispensers fall away from the aircraft and are stabilized in flight by fin assemblies. They use either mechanical timers or proximity fuzes that cause the submunitions to disperse at a predetermined height above the target. Multiple-piece dispensers open up and disperse the submunitions when the fuze detonates. Single-piece dispensers eject their submunitions out of ports or holes in the body when the fuze detonates. Attached dispensers stay with the aircraft and disperse their payload out the rear or from the bottom of the dispenser and can be reloaded and reused.

The submunitions include bomblets, grenades, and mines, which are filled with explosives, incendiary material, or chemical or biological agents. They may be antipersonnel, antimateriel, antitank, dual-purpose, incendiary, or chemical submunitions. The dispenser opens up while still in flight and “fires” the submunitions, which generally spread over a large area. Pressure, impact, movement, or disturbance causes the submunitions, depending on their intended use, to detonate. Some types of submunitions have an arming ribbon, parachute, or fin assembly to stabilize them in flight. Some submunitions contain a self-destruct fuze to destroy the submunition after the passage of a preset period of time in case it fails to detonate as intended.

The only cluster bomb with a “smart” capability is the CBU-97, Sensor Fuzed Weapon (SFW), produced by the United States in the 1990s. The SFW consists of a dispenser with 10 submunitions, each with 4 skeet-type warheads. After release, the dispenser disperses the parachute-stabilized submunitions. At a preset altitude, a rocket propels the submunition upward, which begins to spin as it climbs, dispensing the four skeet warheads randomly by centrifugal force. An infrared sensor in each warhead searches for a target and, on discovery, detonates over it, firing a kinetic fragment into

the top of the target. If the skeet does not find a target after a preset time period, a sensor detonates the warhead above ground to spray the battlefield with myriad lethal fragments. This weapon is effective against armor and soft-skinned targets over an area of 4,800 square yards. The United States has only used the SFW in the April 2003 invasion of Iraq.

Origins and Development

The Germans developed the first cluster bombs during World War II. They consisted of a container that held between 6 and 108 submunitions of different types and burst open after release from an aircraft. The most well-known submunition was the 2-kilogram “Splitterbombe SD-2,” or Butterfly Bomb, to attack both civilian and military targets. The Luftwaffe used them in Britain, North Africa, and the Soviet Union.

During the war, the United States, the Soviet Union, and Italy independently developed their own cluster bombs. The U.S. Army Air Forces deployed two cluster bombs, the 100-pound M28 with twenty-four 4-pound M83 submunitions, essentially a copy of the SD-2, and the 500-pound M29 with 90 M83 submunitions. After the war, the United States continued its use during the Korean War and the Vietnam War. The U.S. Army Air Forces also externally wired six 20-pound M41 antipersonnel fragmentation bombs to a pipe to form a “cluster bomb” for ground attacks.

From the 1970s to the 1990s, 34 countries developed cluster bombs in a wide variety of types that are dropped from aircraft or fired by artillery. Since their development, they have been used in at least 23 countries. Azerbaijan used hundreds in Nagorno Karabakh in 1992–1994, and much of the city of Stepanakert remains off limits because of unexploded cluster bombs. Russia used cluster bombs during various phases of the Chechen War and possibly in the 2008 fighting with Georgia in Ossetia, and both Serbian and North Atlantic Treaty Organization forces used cluster bombs during the fighting in the former Yugoslavia between 1994 and 1999.

The United States utilized cluster bombs in the 1991 Persian Gulf War, Operation Enduring Freedom in Afghanistan, and Operation Iraqi Freedom in Iraq. The nongovernmental organization Human Rights Watch claimed that the United States and Britain dropped at least 2 million bomblets in the

April 2003 invasion of Iraq. Israel used American-made cluster bombs extensively in Lebanon in 1978, 1982–2000, and 2006. The United Nations and human rights groups have claimed that Israel dropped as many as 4 million bomblets in Lebanon during the 2006 conflict. Hezbollah fired Chinese-made cluster bombs into northern Israel in 2006. Some reporters have reported that Libyan forces used cluster bombs in the early 2011 conflict against rebel forces trying to overthrow the government of Muammar Qaddafi.

Current Concerns on Use

At least 76 countries currently maintain stockpiles of cluster munitions, including those that produced them. Because cluster bombs release many small bomblets over a wide area, they pose a serious risk to civilians during and after attacks as they cannot discriminate between military and nonmilitary targets, especially in populated areas. Unexploded bomblets can kill or maim civilians long after the end of a conflict and are costly to locate and deactivate or remove. Children are especially at risk as they often mistake the often brightly colored bomblet for a toy or other harmless object.

As a result, the Cluster Munition Coalition, the International Committee of the Red Cross, the United Nations, other organizations, and many nations sponsored the Convention on Cluster Munitions, adopted in Dublin, Ireland, in May 2008. It became effective on August 1, 2010, with the ratification by 30 countries. The convention bans the stockpiling, use, and transfer of virtually all existing types of cluster bombs and provides for the clearing up of unexploded munitions. As of March 2011, 108 states have signed the convention, and 57 of those have ratified it. However, many of the world’s major military powers, including the United States, Russia, Israel, India, Pakistan, and China, did not participate in the convention’s negotiations and have not yet signed it.

Robert B. Kane

See also Air Force, U.S.; Persian Gulf War

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BOMBS, GRAVITY

A gravity bomb is an unpowered, unguided air-to-surface weapon that follows a simple ballistic trajectory determined by gravity, release altitude, speed and attitude of the aircraft, speed and direction of the wind, drag (friction of bomb against air), and other physical factors, from release to impact. Gravity bombs are also known as “dumb,” free-fall, iron, or unguided bombs. This entry traces the development and use of gravity bombs and discusses various types of gravity bombs from their first use in World War I to the present.

General Description

A typical gravity bomb has a metal casing with a filler, a fin assembly for flight stability, and a fuze to detonate the bomb. The filler can be conventional explosives, nuclear material, incendiary material, propaganda leaflets, or other inert material. Fuzes include a contact fuze that causes detonation on impact, a pressure fuze that uses an altimeter to detonate the bomb at a preset altitude, a time-delay fuze that detonates the bomb after the passage of a preset time period, and a proximity fuze that detonates the bomb when the distance to target becomes smaller than a predetermined value.

Origins and Use in World War I

The Austrians delivered the first aerial bombs from unmanned balloons during the 1849 siege of Venice. On November 1, 1911, Italian pilot Giulio Gavotti threw grenades into an Ottoman army camp in Libya in the first release of an explosive weapon from a powered aircraft. The following year, a Bulgarian pilot dropped bombs on an Ottoman military base during the Balkan Wars. By August 1914, the French, Germans, Russians, and Austro-Hungarians had developed aircraft specifically for aerial bombardment.

Soon after World War I started in August 1914, German zeppelins bombed Liege, Belgium, in the first air raid in history. During the war, tactical aircraft of all belligerents dropped smoke, incendiary, antipersonnel, and explosive bombs on troop concentrations, supply depots, and transportation junctions on or near the battlefield. The first bombs were originally modified grenades and artillery shells with fins attached for stability. By 1918, all countries had bombs, ranging in size from about 2 pounds to 2,205 pounds, with improved effectiveness, specifically designed for aerial bombardment.

Britain, Italy, Russia, and Germany conducted long-range (strategic) bombing with large, multie-engine aircraft that dropped the larger high-explosive bombs on rail yards, industrial plants, and urban areas beyond the battlefields. However, these aircraft achieved few significant results because of anti-aircraft defenses, lack of an adequate bombsight, and the bombers' limited range and bomb-carrying capacity.

Interwar Period and World War II

Between the two World Wars, air forces developed bombs with more streamlined casings, better fuzes, and more powerful explosives. By 1939, most air forces had developed their own series of standard bombs with variations in shape and type of casing, fuzes, and filling to attack various types of surface targets and for special uses. For example, bombs for use against warships had hardened and shaped casings and time-delayed fuzes that allowed the bomb to pierce a ship's armor plating and then explode below the main deck to maximize damage.

During World War II, the belligerents used aerial bombs, ranging in size from 4 to 22,000 pounds. Fighter-bombers and light bombers dropped the smaller bombs on “soft” targets, such as troop formations, vehicles, field fortifications, railroad yards, and freighters and small warships. Medium and heavy (strategic) bombers dropped 500- to 4,000-pound bombs on large urban areas, industrial complexes, and various concrete structures. Aircraft used 500- to 1,600-pound armor-piercing bombs against large warships and concrete and steel bridges. The very large 10,000- to 22,000-pound bombs were used on hardened targets, such as German submarine pens.

During the war, accurate bombing from high altitudes was still a problem. The U.S. Army Air Forces

used the highly secret Norden bombsight, essentially an analog computer that calculated a release point from the various factors affecting gravity bombs. The Royal Air Force used the Mark XIV bombsight and the Stabilizing Automatic Bomb Sight. Unfortunately, the average circular error probable during the strategic bombing of Germany and Japan was about 1,500 feet with a significant percentage of bombs falling well beyond that radius. To improve accuracy, the United States and Germany made limited progress in developing radio-controlled bombs.

Early Development of Nuclear Bombs

Between 1939 and June 1945, the Manhattan Project developed three atomic (fission) bombs. The project group exploded a test weapon on July 16, 1945, near Alamogordo, New Mexico. American B-29 bombers dropped the second weapon on Hiroshima, Japan, on August 6, 1945, and the third one was dropped, 3 days later, on Nagasaki, Japan.

After World War II ended, a nuclear arms race between the United States and the Soviet Union developed. In 1949, the Soviet Union exploded its first fission bomb. In 1953, the United States tested a thermonuclear (fusion or hydrogen) bomb, and the Soviet Union exploded its first thermonuclear bomb the following year. Initially, both superpowers used high-altitude jet bombers to deliver their nuclear

bombs. By 1959, both countries had intercontinental ballistic missiles that carried a nuclear warhead into low space where it separated from the missile and followed a ballistic trajectory to its target.

Post-1945 to the Present

Since 1945, air forces have used conventional bombs similar to their World War II predecessors. During the Korean and Vietnam Wars, the United States used designs like the M117 and M118. The United States began using the current Mark 80 series general purpose bombs, developed in the 1950s, during the Vietnam War (Table 1).

Like other countries, the United States modified its general purpose bombs for special purposes. For example, during the Vietnam War, the United States added metal or fabric-covered paddles (ballutes) to the rear of the Mark 82 500-pound bomb to produce the “Snake Eye” high-drag bomb. The paddles slowed the bomb’s descent after release, allowing the pilot to conduct high-speed, low-altitude attacks and escape the bomb’s fragmentation pattern without having to climb or perform other dangerous evasive maneuvers.

Since the late 1960s, the United States has used gravity bombs as warheads for its precision-guided munitions (PGMs), or “smart bombs,” to provide substantially greater accuracy than a gravity bomb

Table 1 Modern U.S. General Purpose Bombs: The Mark 80 Series

	<i>Nominal Weight</i>	<i>Practice (Nonexplosive) Designation</i>	<i>Laser-Guided Warhead</i>	<i>INS/GPS Guided Warhead (Joint Direct-Attack Munition)</i>	<i>Retarded Versions</i>
Mk 81	250 lb/113 kg				
Mk 82	500 lb/227 kg	BDU-50	GBU-12D Paveway II	GBU-38	Mk 82 Snake Eye with folded retarded petals; Mk 82 retarded with a ballute
Mk 83	1,000 lb/454 kg		GBU-16B Paveway II	GBU-32	Mk 83 retarded with a ballute
Mk 84	2,000 lb/908 kg	BDU-56	GBU-24B Paveway III	GBU-31	Mk 83 retarded with a ballute

Source: From Lennox, D., & Rees, A. (2010). *Jane's Air-Launched Weapons*. Alexandria, VA: Jane's Information Group.

and limit collateral damage to ground forces and civilian populations. The growing use of precision-guided munitions, which became known as smart bombs, since the 1991 Persian Gulf War produced the term *dumb bomb* for gravity bombs. This growing use of precision-guided munitions in combat operations in Iraq and Afghanistan has also meant a corresponding decrease in the percentage of gravity bombs of the total air-delivered weapons used.

Robert B. Kane

See also Air Force, U.S.; Aircraft, Bomber; Bombs, Cluster; Bombs, Nuclear; Bombs, Smart; Persian Gulf War; Strategic Air Command; Strategy, Air Power; Targeting Systems; Training, Air Force Pilots; Training, Naval Aviators; Weapons, Nuclear; World War I; World War II

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BOMBS, NUCLEAR

The first nuclear weapons were gravity bombs dropped from heavy bomber aircraft. Aerial bombs have continued to have a role in nuclear arsenals even after ballistic missiles were developed and assumed a more primary role in worldwide arsenals. Nuclear bombs are here differentiated from other nuclear weapons in that they are delivered by means of gravity bombs from aircraft, as opposed to missiles or artillery. Over the course of the Cold War, a wide variety of nuclear bombs were produced by all sides, in tandem with rapid developments in the bombers that would carry them. Variations in bomb design allowed for weapons of radically different explosive yields, sizes, and shapes, allowing for diverse strategic and tactical applications. This entry

examines U.S. and Soviet Cold War-era nuclear bombs and bombers and modern weapons systems.

U.S. Cold War-Era Nuclear Bombs and Bombers

The initial fission bombs developed by the United States during World War II were exceptionally unwieldy one-off devices. Owing to their rapid development process and their pathbreaking nature, their designs were fairly primitive by even immediate postwar standards, and the final configurations of their nuclear components were not fully determined until only weeks before their actual combat use. The “Little Boy” design bomb used on Hiroshima, Japan, on August 6, 1945, combined two subcritical amounts of highly enriched uranium in a “gun-type” arrangement that fired one mass of uranium into the other through a gun barrel. The “Fat Man” “implosion” design bomb dropped on Nagasaki 3 days later used an elaborate array of fast and slow chemical explosives to symmetrically compress (“implode”) a solid sphere of plutonium to high density, setting off a chain reaction. Both weapons were extremely large and heavy even by World War II standards and required the use of specially modified B-29 bombers to accommodate their large sizes. For maximum destructive power, both weapons were detonated around 550 meters above their targets, through the use of barometric switches and directional antennae. The Little Boy weapon had a yield equivalent to around 15 thousand tons (kilotons) of TNT (trinitrotoluene), and the Fat Man had a yield of 18 to 20 kilotons. Both weapons had their fissile cores inserted prior to takeoff, making them fairly dangerous by modern standards. The Little Boy weapon in particular, because it contained a full critical mass of uranium, separated only by empty space, would run the risk of turning into a small nuclear reactor if it had become submerged in water.

In the years immediately after World War II, the American military services struggled to incorporate the atomic bomb into their battle plans. The Strategic Air Command was created in March 1946 for the purpose of conducting long-range airborne bombing operations. But for the first years of the bomb's existence, American forces had little ability to use the bomb effectively. Until 1950, jurisdiction for assembling and using the bombs was spread out among multiple bureaucratic agencies, the number

of bombers and crews that could use atomic bombs was small, and all nuclear weapons were kept in civilian hands. Military access to even nonnuclear assemblies of atomic weapons would be limited until the Korean War, and access to the corresponding nuclear components (the pits) would be limited until 1951. Military planners were themselves generally unaware of the availability of weapons and assumed that the number of bombs would be low and their availability would be limited.

During this period, American weapons scientists sought to make the bombs safer, less idiosyncratic, and more conservative with regard to the use of fissile material. In the spring of 1948, new bomb designs tested as part of Operation Sandstone, at the Bikini Atoll, dramatically changed America's atomic capabilities. These new developments allowed for greater yield from existing fissionable material (double the explosive power of the bombs used during World War II) and, therefore, the use of substantially less fissionable material (increasing the total stockpile size). They also allowed the development of mass-produced bombs that required less substantial technical expertise to use or assemble than the World War II models. Specifically, at Sandstone, "composite" cores using both uranium and plutonium were developed for the first time, saving valuable plutonium (enriched uranium was more abundant at the time), and the concept of "levitation" was successfully tested. Levitation was an engineering idea that had been developed during the time of the Manhattan Project, the World War II atomic bomb project, and involved putting an air gap between the fissile core and the compressing tamper. The result was that the tamper would have time to accelerate before contacting the core, improving the compression. In addition, a new bomb assembly was tested that could allow for the pit to be inserted in flight, an important safety improvement.

Improvements in efficiency allow for either an increase in yield or a decrease in size. The latter development in particular allowed for the possibility of the use of nuclear bombs by a more varied set of bombers. The development of thermonuclear weapons in the early 1950s produced bomb designs of unprecedented size, weight, and yield, while at the same time the increased miniaturization of weapons design allowed for bombs to be carried by fighter aircraft in a variety of different combat scenarios. Additionally, over the course of the 1950s, a large

number of nuclear weapons would be transferred to military control and deployed both inside and outside of the continental United States. If at the beginning of the 1950s the military had access to only a handful of nuclear bombs, by the beginning of the 1960s, some 90% of the stockpile was physically within military custody.

Technically, the bomb designs developed by the United States during the Cold War were extremely varied. They ranged from immensely heavy strategic bombs like the Mk-41 bomb, which weighed some 4,800 kilograms and had a predicted yield of 25 million tons (megatons) of TNT, to smaller, tactical weapons like the Mk-57, which weighed around 225 kilograms and had an adjustable yield from 5 to 20 kilotons. Many American warhead designs were created to be paired with specific delivery systems: The W-7 warhead, for example, was used for air-to-surface missiles, surface-to-surface missiles, surface-to-air missiles, and the Betty Mk-90 antisubmarine depth bomb. Individual bomb designs could have many variants, including modified aerodynamic properties and modified yields, for use in a variety of tactical or strategic situations.

American bomber strategy was initially hampered by lack of bombers and lack of bombs. By 1952, however, the Strategic Air Command was capable of providing nuclear strikes at a moment's notice (though the number of actual bombs in its physical possession was very limited). This was accomplished both by the development of new, long-range, and refuelable strategic bombers—the B-36, the B-47, and finally the B-52—and by the aforementioned increase in stockpile size. Bombers remained the backbone of U.S. deterrent until the 1960s. Emphasis on the development of long-range missiles capable of delivering nuclear weapons did not begin in full until after the Soviet launch of the satellite *Sputnik* in 1957. The shift toward missiles was in part due to a perceived need for parity with the USSR and partly a means to address the possibility of antibomber defenses and the threat that bombers might be destroyed before takeoff. The development of a continuous airborne alert strategy in 1959, under which a number of bombers would be deployed in the air at all times, supported by refueling planes, and ready to attack whenever the order was given, further guarded against the concern that bombers might be destroyed on the ground.

U.S. bomber deployment peaked in 1958 with more than 1,600 planes. The decline in strategic bombers was directly related to the deployment of intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs), which were deployed by the hundreds beginning in the early and mid-1960s. The USSR, by contrast, deployed around 160 strategic bombers annually throughout the entire Cold War period, only beginning to deploy intercontinental ballistic missiles in great numbers in the mid-1960s, reaching a peak of 1,500 by the early 1970s.

From 1945 through 1998, the United States developed 12 different models of nuclear-capable bombers, and a total of 4,680 individual planes were purchased. In the United States, advanced bomb technology has been extraordinarily expensive. The B-2A Spirit cost nearly \$2.6 billion per plane, whereas the B-1B Lancer cost around \$300 million per plane. By comparison, the Minuteman III had an average unit cost of only \$37 million, and the LGM-118 Peacekeeper missile average cost is \$189 million. It is worth noting, however, that bombers can and have been used in conventional (nonnuclear) operations as well.

Soviet Cold War–Era Nuclear Bombs and Bombers

The USSR detonated its first implosion weapon in August 1949 (a virtual copy, or re-creation, of the Fat Man design) and began serial production of weapons based on the RDS-1 design immediately afterward, though they were limited to a small stockpile through the early 1950s. Further Soviet testing in 1951 and 1953 facilitated the production of more advanced designs—the RDS-2, an improved implosion bomb, and the RDS-6, a submegaton range thermonuclear device, in particular. In 1955, the USSR detonated its first two-stage thermonuclear design (RDS-37). In many respects, warhead development in the USSR appears to have followed a progression similar to that of the United States—not a surprising factor given the roughly symmetrical aspects of the nuclear arms race between the two superpowers.

Despite similarities in warhead designs, though, bomber aircraft development in the former USSR followed a different path, owing to technological, geographical, and bureaucratic factors. Unlike the

United States, which had use of bases in Europe and Asia and had developed long-range strategic bombing as part of its campaigns in World War II, the former USSR had no forward bases that would allow it to strike the mainland United States easily with World War II–era bomber technology. During World War II, Soviet air forces had been subordinate to Soviet ground forces as a rule and existed primarily to repel enemy air attacks; the former USSR did not develop strategic bombing to any considerable degree during the war years.

In the postwar period, the Soviet military put intense emphasis on developing intercontinental platforms for the delivery of strategic weapons to North America. After their first nuclear test in 1949, Soviet design bureaus were charged with developing bombers with a range of 12,000 kilometers and worked to use aerial refueling to extend the range of existing bombers. By 1956, the 3M (Bison) and Tu-95 (Bear) bombers had entered service, the former with a range of 11,850 kilometers and a payload of 5,000 kilograms, the latter with a range of 13,200 kilometers and a payload of 9,000 kilograms. In practice, the bombers had considerably shorter ranges with full payloads (Figure 1).

By 1957, however, developments in Soviet rocketry had convinced Soviet leadership that intercontinental ballistic missiles and submarine-launched ballistic missiles were more promising means for the Soviet Union to project a strategic force. In 1959, the Strategic Rocket Forces was made a separate division of the Soviet armed forces. Missiles became the primary focus of the Soviet long-range strategic forces and brought work on new intercontinental bombers to a near halt. Existing bombers were modified and augmented for use as platforms for air-launched cruise missiles. Bomber development began again in the 1970s, producing a number of new, modern bombers by the mid- to late 1980s, culminating in the deployment of the Tu-160 (Blackjack).

The breakup of the Soviet Union in 1991 left a number of bombers in post-Soviet republics. Kazakhstan agreed to move its former Soviet bombers to Russia; Ukraine, however, claimed 44 planes as its own. Further negotiations, however, resulted in the transfer of about a quarter of that number to Russia in 1999.

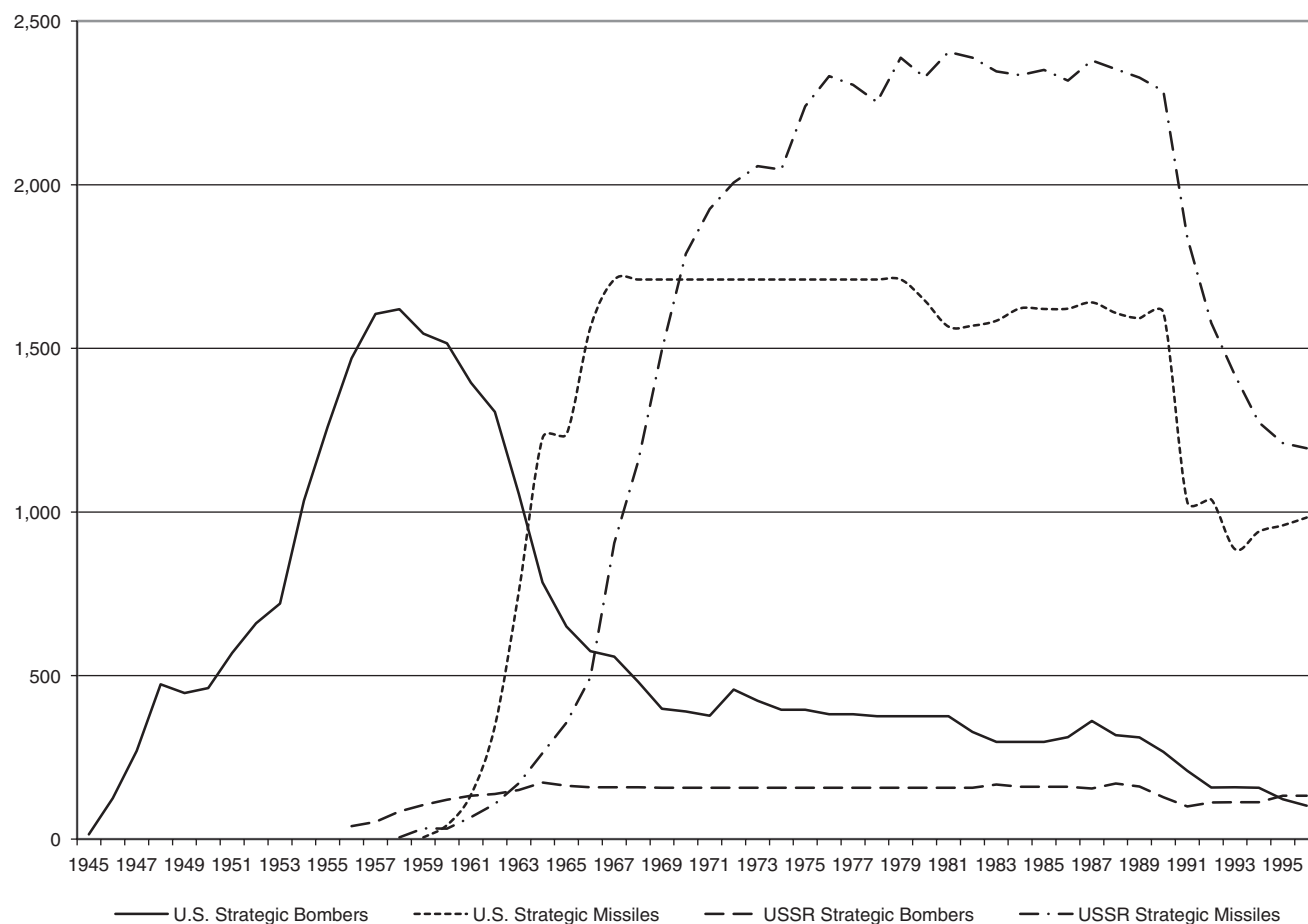


Figure 1 U.S. and Soviet Strategic (Nuclear) Bomber and Missile Delivery Vehicles, 1945–1996.

Source: Data from Norris and Cochran (1997).

Note: This graph does not indicate the number of warheads per delivery vehicle, which increased dramatically in the period from 1970 onward.

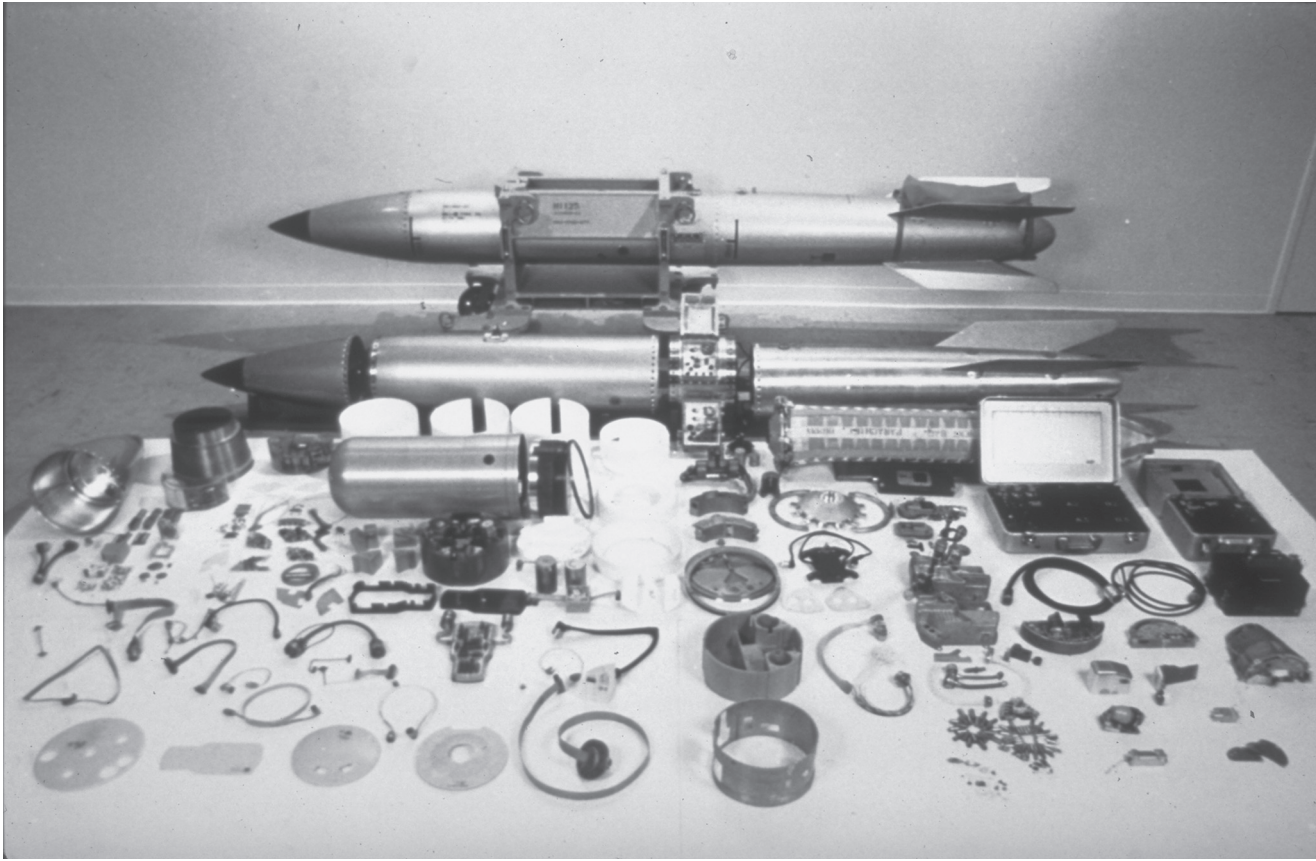
Modern Weapons Systems

As of this writing, the U.S. nuclear arsenal contains only two air-dropped nuclear bombs, the B-61 and the B-83. The B-61 is a family of bomb designs that allows for both tactical and strategic use. According to estimates by the Natural Resources Defense Council, the warheads have variable yield from the subkiloton range up to, in some modifications, around 340 kilotons. The B-61 is deployable on many different U.S. military aircraft, including long-range strategic bombers such as the B-1B Lancer, the B-2A Spirit, and the B-52. The B-61 Mod 11 is mentioned as a probable candidate for a “bunker-busting” nuclear bomb, meant to allow for the destruction of underground facilities. The B-83 is a

strategic bomb with a maximum yield of 1.2 megatons. Around 300 nuclear bombs are currently deployed by the United States as part of its strategic arsenal, and it is believed that some 200 bombs are deployed for tactical use.

Russia stopped producing new bombers at the end of the Cold War. As of this writing, the Natural Resources Defense Council has estimated that Russia has deployed around 80 strategic bombers and some 680 nonstrategic aerial platforms, and these have the capability of deploying some 844 strategic and 800 tactical weapons (these numbers lump bombs in with cruise missiles and air-to-surface missiles).

Both the United Kingdom and France initially deployed strategic aircraft for their nuclear forces,



A disassembled B-61 bomb, displaying some of its almost 6,000 parts. The nuclear warhead is the bullet-shaped cylinder in the middle-left of the photograph.

Source: Photo by Time Life Pictures/Department of Energy (DOE)/Time Life Pictures/Getty Images.

a feat made easier by their comparative proximity to the Soviet Union. The United Kingdom has since converted into an entirely missile-based arsenal, launching from submarine platforms. France has the majority of its forces in submarine-based missiles, as well as in cruise missiles deployed on Mirage aircraft, some of which may be kept on aircraft carriers. China's primary strategic bombing capability lies in its Hong-6 bombers, an antiquated strike force based on the Soviet Tu-16 (Badger). The majority of Chinese nuclear weapons are apparently ballistic missiles. The Natural Resources Defense Council estimates that only around 20 of China's warheads are deployed as bombs. The capabilities of Israel, Pakistan, and India are unknown, but these states are believed to have the technical means to use bombers to cover the distances to their potential enemies. The nuclear capabilities of North Korea remain mysterious.

The clear advantage of bomb delivery from aerial platforms for an aspiring or new nuclear power is that existing, conventional bombing systems can be made to deliver nuclear weapons short-to-moderate distances without imposing radically new technical requirements. Conventional missile systems, in contrast, require much more work to support the high weights of early generation nuclear weapons. The disadvantage of using bombs and bombers is the problem of range—most countries lack long-range strategic bombing capability, and it is not a trivial technology to develop—and the fact that bombers are more vulnerable to detection and interception than missiles. Bombers are also thought to be more vulnerable to a debilitating first-strike attack than missiles based on continuously mobile or hardened platforms.

Alex Wellerstein

See also Aircraft, Bomber; Bombs, Gravity; Military Science; Missiles, Nuclear; Nuclear Proliferation; Strategic Air Command; Strategy, Nuclear; Weapons, Nuclear

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BOMBS, SMART

Smart bombs are one example of precision-guided munitions (PGMs). They have traditional explosive components, but attached guidance systems—electro-optical, infrared, radio, laser, Global Positioning System (GPS), video—and movable aerodynamic devices, allowing the weapon to “fly” to its target. Smart bombs have been an increasingly heavily utilized form of air-dropped munition since their introduction in World War II. In recent conflicts, smart bombs have comprised more than two thirds of all air-dropped munitions. This entry discusses the history of smart bombs and the current technology.

History

A number of considerations promoted the development of smart bombs, including the desire to increase bombing accuracy and reduce risk to bomber crews. Additional considerations included the desire to reduce civilian casualties and collateral damage. The development of smart bombs evolved from research undertaken during World War I and World War II. Those projects included the work of Charles F. Kettering on the aerial torpedo and German researchers who developed the Fritz X and Hs 293. During World War II, researchers working for the U.S. Army developed the Azon-guided (azimuth only) and Razon-guided bombs.

The Azon bomb was the first radio-controlled bomb used operationally by the U.S. Army Air Corps. The Azon bomb, used until November 1944, attached a radio-command link-control tail kit to a standard bomb body. At the end of World War II, and again in the Korean War, the Army Air Corps deployed the Razon bomb that featured two control assemblies, based on a 1,000- or 2,000-pound standard bomb.

The development of atomic bombs at the close of World War II caused many to believe that conventional war was outdated. As a result, interest in PGMs all but vanished. However, during the 1950s and 1960s, it became apparent that nation-states were reluctant to use atomic weapons and continued to fight conventional wars using conventional weapons. As a result, research in PGMs found new life.

During the Vietnam War, research into smart bombs gained momentum. Ground commanders demanded a weapon that would allow them to destroy critical targets in or near population centers while causing little or no civilian casualties or collateral damage.

In part to meet that need, researchers at the U.S. Army Missile Command, Redstone Arsenal, Alabama, began experimenting with a laser guidance system for conventional bombs in 1962. All laser-guided bombs (LGBs) work in much the same way. The attacker illuminates the target with a laser, referred to as painting the target. The guidance package attached to the bomb allows it to fly to the target along the laser beam, thus increasing bombing accuracy. LGBs, however, have limitations. Cloud cover, fog, dust, or smoke disrupts the beam used to designate the target, restricting their use in all but fair weather.

The U.S. Air Force initially showed little interest in LGB research but adopted the project as its own by the late 1960s. Pilots assigned to the 8th Tactical Fighter Wing, Ubon, Thailand, dropped the first LGB during the Vietnam War, in May 1968. The weapon, a Bolt-117, was a 750-pound M117 equipped with a KMU-342B guidance kit.

The U.S. Navy smart bomb development program began in 1963 and relied on television guidance rather than laser guidance. Similar to television-guided weapons developed during World War II, the AGM-62 Walleye I, developed by the U.S. Navy, locked a television camera carried aboard the aircraft onto the ground target prior to weapons release. The pilot then watched the bombs trajectory on his television screen making adjustments as necessary. The first successful combat test occurred in 1967.

It was not until May 1972 that LGBs and television-guided bombs proved their practical value when their use contributed to the partial destruction of the Thanh Hoa Bridge in North Vietnam. While smart bombs were successfully tested and deployed during the Vietnam War, LGBs represented only 1% of the bombs dropped. Precision-guided bombs were not the primary weapons in the U.S. arsenal by the end of the Vietnam War, and they did not come into common use until the development of microchip technology.

Contemporary Smart Bombs

Following the Vietnam War, research and use of smart bombs continued. During the Yom Kippur

War in 1973, the Israeli Air Force successfully used Walleye Is against Egyptian targets. During the 1986 U.S. Operation El Dorado Canyon air attack on Libya, F-117 aircraft used LGBs to destroy targets located in or near civilian sites.

Smart bomb technology came of age during Operation Desert Storm. In the 1991 UN-authorized military action against Iraq, the coalition forces dropped approximately 88,500 tons of bombs. Smart bombs proved very effective during the campaign. Much of the gun camera video seen by television viewers around the world showed the destruction of Iraqi targets by smart bombs. However, smart bombs represented only approximately 8.5% of the total tonnage dropped.

Improvements in smart bomb technology continued after Operation Desert Storm with the addition of satellite-guided weapons such as the Joint Direct Attack Munition and the Joint Standoff Weapon. These weapons used the U.S. GPS for guidance, giving the weapons an all-weather capability.

Precision weapons also proved invaluable during the 1995 bombing campaign in Bosnia and the 1999 Operation Allied Force when almost all U.S. airstrikes involved the use of smart bombs during the North Atlantic Treaty Organization-led conflict in Kosovo.

By the turn of the 21st century, smart bomb technology had proven itself. During Operation Enduring Freedom, the 2001 U.S. war in Afghanistan, and Operation Iraqi Freedom, the 2003 multinational force invasions of Iraq led by the United States and Great Britain, the American public and the world court of opinion increasingly demanded that coalition forces increase the use of smart bombs against targets, especially in urban areas, in an effort to reduce civilian casualties and collateral damage. Approximately 70% of the bombs dropped by coalition forces during combat operations against Iraqi military forces during the 2003 air campaign were smart bombs.

Smart bomb technology allows commanders on the 21st-century battlefield to target enemy forces more effectively and efficiently. During World War I and World War II, it often took literally hundreds of aircraft flying dozens of sorties to destroy a single target. During Operation Enduring Freedom airstrikes over Afghanistan, each aircraft destroyed 4.07 targets per flight. The development of precision-guided weapons and smart bombs provided battlefield

commanders and political leaders the capability to destroy enemy targets without destroying nearby or collocated civilian population centers, thus bringing to fruition the concept of strategic bombing first envisioned by Air Corps Tactical School strategists in the 1930s.

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See also Aircraft, Bomber; Bombs, Cluster; Bombs, Gravity

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BORDER PATROL

The U.S. Border Patrol is a federal law enforcement agency in U.S. Customs and Border Protection, which operates under the Department of Homeland Security. Formerly a part of the Immigration and Naturalization Service (INS), which itself was part of the Department of Justice until Immigration and Naturalization Service was decommissioned in 2003, the Border Patrol is one of the three immigration enforcement agencies in the Department of Homeland Security (the other two being Immigration and Customs Enforcement and the U.S. Coast Guard, an armed service responsible for patrolling maritime borders). The acting commissioner of the U.S. Border Patrol is currently David V. Aguilar, and the current chief is Michael J. Fisher. This entry discusses the history of the Border Patrol and current issues.

History and Background

In the early republic, securing the border remained an important mission for the U.S. Army. During the War of 1812, U.S. military and naval forces would fail on several occasions to prevent invasions through

Canada and attacks on the high seas. The Rush-Bagot Agreement of 1817 between Great Britain and the United States demilitarized the Great Lakes, and this policy was extended in the 19th century to encompass the entire length of the Canadian-U.S. border.

In 1846, a border clash between the U.S. Army and Mexican forces in a territory claimed by both countries led President James K. Polk to seek a declaration of war against Mexico. The Mexican-American War led to the annexation of what is now Arizona, New Mexico, and California, greatly expanding the boundary between Mexico and the United States. Beginning in the late 1840s and continuing into the 20th century, U.S. Army units were regularly positioned at the Mexican border, along with state or local law enforcement agencies (e.g., the Texas Rangers). The 1848 Treaty of Guadalupe Hidalgo went so far as to initially include a provision by which the U.S. Army would protect the Mexican border from Indian attacks, but the provision was removed when the impossibility of enforcing it was realized. In the 20th century, a raid by forces of Francisco “Pancho” Villa on Columbus, New Mexico, in 1916 led President Woodrow Wilson to send an army expeditionary force into Mexico under the command of General John J. Pershing. Despite an excursion that took American forces deep into Mexico, Villa managed to escape.

Controlling the U.S. borders to keep out illegal immigrants is a relatively recent phenomenon, as for much of its history the United States had few restrictions on individuals entering the United States. The one significant exception was a ban on the importation of slaves from Africa. During the antebellum era, the U.S. Navy enforced the ban on slave importation. Not until the passage of the Chinese Exclusion Act of 1882 did the federal government actively patrol the Mexican and Canadian border with a small force of U.S. Immigration inspectors to exclude illegal crossing by Chinese and later other Asian immigrants. In 1921 and 1924, the United States implemented restrictions on immigration and established a quota system. This resulted in the creation of the modern border patrol in May 1924, under the U.S. Labor Appropriation Act. Besides seeking to control the border to prevent illegal immigrants from entering, the Border Patrol seized significant quantities of illegal alcohol imported into the United States in violation of the Volstead Act. Often, when the Border

Patrol intercepted smuggled liquor, illegal immigrants were found with the cargo, resulting in one of the first instances of widespread federal intervention in illegal immigration through the borders.

In 1952, the jurisdiction of the Border Patrol was expanded to encompass search and apprehension of illegal immigrants anywhere in the United States. In 1952, 52,000 illegal immigrants were airlifted back to Mexico, and another 50,000 were boat lifted from Texas to Vera Cruz in 1954. Although the federal government sought to restrict the flow of illegal immigrants into the United States by either halting them at the border or deporting them, undocumented workers, especially from Mexico, remained essential to agribusiness, especially in the Southwest. Moreover, penalties were seldom enforced or nonexistent. The Immigration and Reform Control Act of 1986 not only expanded funding for border enforcement but also required employers to verify the citizenship and immigration status of employees. Despite the stiffening of penalties for employing undocumented workers, a number of sectors of the economy, especially agriculture, construction, and food service, continue to depend on their labor. Throughout the 1980s and 1990s, the issue of illegal immigration into the United States, particularly through the Mexican border, moved to the forefront of national attention, with several new initiatives attempting to eliminate illegal immigration. The “Hold the Line” show-of-force strategy around El Paso, Texas, in 1993, with a follow-up operation known as “Operation Gatekeeper” around San Diego in 1994, focused on preventing illegal entry and cut back on immigration by as much as 75% in San Diego alone. A national expansion of this strategy was undertaken shortly afterward, and while illegal entries were better managed, the Border Patrol was able to focus more narrowly on antismuggling efforts throughout the 1990s.

After the September 11 attacks in 2001, national border security became one of the biggest issues of concern for the federal government. In 2003, President George W. Bush decommissioned the Immigration and Naturalization Service and delegated the responsibility of immigration enforcement to the new Department of Homeland Security that was created on March 1 of that year. The Department of Homeland Security would contain two specific immigration departments—Customs and Border Protection and Immigration and Customs Enforcement. This shift in responsibility

indicated that the primary concern of the U.S. government had moved away from illegal immigration as such and instead focused on border security as it related to the Global War on Terrorism.

Current Issues

The Posse Comitatus Act, passed in the aftermath of the Civil War, has prohibited the use of the U.S. military, except the U.S. Coast Guard, for enforcing civil law. But since the start of the War on Drugs and the expansion of the War on Terrorism, the role of the armed forces in securing the nation's borders has increased. The armed services have steadily increased the technical assistance provided to law enforcement agencies to combat the influx of illegal drugs and illegal immigrants. Escalating violence on the Mexican border has led to state governors and Presidents George W. Bush and Barack Obama to deploy the National Guard to portions of the Southwest.

The Border Patrol has grown exponentially during the past two decades. In Fiscal Year (FY) 1992, it had a force of 4,139 agents that expanded to 10,045 in FY 2002, and in FY 2011, it had more than doubled to 21,444. In FY 1992, the budget for the patrol was \$326,234,000, and by FY 2011, the budget has grown to more than 3.5 billion dollars. In FY 2011, the Border Patrol made more than 340,000 apprehensions of individuals entering the United States illegally, down from more than 1 million in 2006. In FY 2011, it seized more than 2 million pounds of marijuana, 9,000 pounds of cocaine, and 6,000 pounds of heroin, as well as more than 14 million dollars in currency. Despite these efforts, the efficacy of the Border Patrol has become a major political issue, particularly in states that share a border with Mexico. In 2012, the Border Patrol released a new national strategy to be utilized through 2016, featuring two overarching goals and a number of primary objectives. The first goal of the Border Patrol is to “secure America's borders,” with the objectives of preventing terrorism and terrorist weapons from entering the United States, managing risk, and disrupting transnational criminal organizations. The second goal is to “strengthen the Border Patrol,” with the objectives of investing in people, supporting Border Patrol employees, preserving organizational integrity, improving organizational structures and processes, and enhancing the overall efficiency of the Border Patrol.

Calls for securing the borders in the first decade of the 2000s led not only to the expansion of Border Patrol personnel but also to the construction of hundreds of miles of heavily fortified fences. Despite the massive investments, the flow of undocumented aliens continued, albeit in reduced numbers. Many illegal immigrants seeking entry either try to enter through more isolated portions of the borders or pay large sums to human smugglers.

A border that allows no undocumented immigrants to enter is virtually impossible in a free society that seeks the free movement of individuals and goods. Moreover, there is considerable debate whether it is even possible or desirable to try to deport the several million undocumented immigrants currently living in the United States. Questions of border security will likely continue to be a divisive and complicated issue for the foreseeable future.

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See also Coast Guard, U.S.; Homeland Security, Department of

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BOSNIA INTERVENTION

The Bosnian War started in April 1992 and ended with the signing of the General Framework for Peace in Bosnia and Herzegovina, more commonly known as the Dayton Peace Accords, in December 1995. According to data collected by the International

Criminal Tribunal for the former Yugoslavia, the civil war claimed the lives of an estimated 105,000 people, internally displaced more than 1 million individuals, and led more than 1 million people to flee the country. Fueled by ethno-nationalist sentiments, the fighting was vicious, frequently targeting civilians and involving serious human rights abuses. Although war crimes, including the ethnic cleansing of different towns and neighborhoods, were committed by all the factions, the majority of these were perpetrated by Bosnian Serb forces. The war also created a severe humanitarian crisis.

Historical Background

Bosnia was the former Yugoslavia's most diverse republic. According to a census conducted in March 1991, 44% of the population described itself as Muslim, 31% as Serbs, 17% as Croats, and 6% as Yugoslavs. In October 1991, after Slovenia and Croatia declared their independence, Bosnia's parliament, which broadly reflected the territory's ethnic makeup, met to consider whether the republic would remain part of a Serb-controlled Yugoslavia. As these discussions were taking place, Bosnian Serb leaders, fearing their minority status, established the Republika Srpska (RS) or the Serb Republic. Shortly thereafter, a group of Bosnian Croat politicians created the Croatian Republic of Herzeg-Bosnia.

At the end of January 1992, the Bosnian parliament passed a resolution to hold a referendum to determine the territory's status. This vote was held on February 29 and March 1. Although most Bosnian Serbs boycotted the referendum, 99% of people who participated supported the republic's independence, and the government declared the country's independence on March 3. Fearing the outbreak of a civil war, European negotiators met with leaders of Bosnia's main ethnic factions to negotiate a new federal constitution for Bosnia. The talks failed to ease the tensions. Deep disagreements over the size of each canton and the powers of the envisioned federal government heightened feelings of mistrust. Although small battles between these factions had taken place after the government's declaration of independence, the civil war formally started once the United States and the European Community (today's European Union, or EU) recognized Bosnia's sovereignty.

During the first 6 months of the war, most of the fighting took place between the Bosnian government's forces, the Army of the Republic of Bosnia and Herzegovina (ARBiH), the Army of the Republika Srpska, and multiple Serb militias. In the first months of the struggle, Bosnian Serb forces captured 70% of the country's territory. In an effort to balance Serb aggression, the Bosnian president Alija Izetbegovic and the Croatian president Franjo Tudjman signed a military alliance, allowing the Bosnian-based Croat Defense Council and the Croatian Army to work together against Serb forces in Bosnia and in Croatia. By January 1993, this alliance faltered and the civil war grew more complex as the Croat Defense Council started operations against the ARBiH in central and eastern Bosnia.

Militarily, the ARBiH faced three disadvantages. First, the UN Security Council's arms embargo against the former Yugoslavia, established by Resolution 713 in September 1991 and extended to all the Yugoslav successor states in January 1992 via the adoption of Resolution 727, hampered the Bosnian government's ability to arm itself and effectively reinforced its enemies' gains.

Second, the ARBiH lacked heavy weaponry. According to some estimates, Bosnian Serb forces possessed 77% of all tanks and 86% of all heavy artillery in Bosnia and Herzegovina. In comparison, Bosnian Muslim troops had 10% of tanks and 3% of heavy artillery, while Bosnian Croat forces controlled 13% of tanks and 11% artillery. Finally, while the arms embargo was in place, this did not stop Croatia and the Serb-controlled Yugoslavia from providing financial and materiel support to Bosnian Croat and Bosnian Serb forces.

The Failed Peace Plans of the International Conference on the Former Yugoslavia

Early during the conflict, the international community's diplomatic efforts were led by the International Conference on the Former Yugoslavia (ICFY), co-headed by the European Community and the United Nations. While the United States and Russia were happy to take a backseat in these proceedings, their interests shaped the international response to the crisis. Russians took a pro-Serb stance, making it clear that their representative would not support any proposal that called on the use of force against Bosnian Serb forces. While the U.S. stance was

pro-Bosnian Muslim, the newly elected Clinton administration wanted to spend more time on domestic concerns. The White House also made it clear that it was reluctant to deploy U.S. troops to enforce a potential peace agreement, though it welcomed other measures, such as the trade embargo placed on Yugoslavia by UN Security Resolution 757 in May 1992, to pressure the Bosnian Serbs and their Yugoslav allies to negotiate an end to the conflict.

The ICFY negotiated two peace agreements, both of which failed. The first was the Vance-Owen Peace Plan (VOPP), negotiated by Lord David Owen, the European Community negotiator, and Cyrus Vance in his capacity as the UN Special Envoy to Bosnia. The second was the HMS *Invincible* Plan, finalized on the British aircraft carrier and negotiated by Owen and Vance's successor, Thorvald Stoltenberg.

The VOPP proposed the cantonization of Bosnia into 10 units, with each faction controlling three cantons and the Sarajevo canton acting as an independent, multiethnic center. Many reasons explain the VOPP's failure, but two are the most important. First, to secure Bosnian Serb leadership's support, Owen and Vance told Slobodan Milosevic, the Serb president, that the United Nations would lift the economic embargo placed against Yugoslavia if a plan was signed. While Radovan Karadzic, the RS president, signed the agreement, Bosnian Serb legislators did not support it. Second, the Clinton administration argued that the plan did not advance Bosnian Muslims' interests but instead rewarded ethnic cleansing.

The HMS *Invincible* Plan was similar to the VOPP, but it proposed Bosnia's internal division into three cantons, each controlled by a separate faction. Many of the plan's details were proposed by Milosevic and Tudjman, demonstrating their interest in ending the fighting. Izetbegovic rejected the plan because it included a provision that would allow the cantons to secede 2 years after the signature of the agreement.

The failure of these plans affected the peace process in three ways. First, angered by Bosnian Serbs' unwillingness to end the fighting and because of the impact the economic sanctions were having on his country, Milosevic signaled that he would be willing to ignore Bosnian Serbs' interests if that supported his political ambitions. Second, European diplomats' influence over the peace process decreased, as many experts and officials questioned the ICFY's authority.

Last, the United States, concerned that the Bosnian war was affecting its relationship with its European allies and believing that a successful peacemaking approach had to promote Bosnian Muslim interests, started to play an active role in diplomatic efforts.

Coercive Diplomacy and the Road to Dayton

The Clinton administration made it clear that peace could not be achieved without changing Bosnia's balance of military power. One of Washington's most controversial proposals was dubbed "lift and strike." The idea was to lift the arms embargo to allow the Bosnian government to arm itself and use North Atlantic Treaty organization (NATO) air strikes to counter any offensive operations aimed against Bosnian Muslim positions. The European allies rejected this proposal for two reasons. First, they argued it would escalate the war and lead to more human suffering. Second, they felt that these actions would compromise the safety of their troops participating in the UN Protection Force (UNPROFOR), a peacekeeping force sent to Bosnia in March 1993 to secure humanitarian corridors and cities designated by the United Nations as safe areas.

Even though U.S. officials failed to sway their European counterparts, NATO policy toward Bosnia did evolve. For instance, in January 1994, NATO agreed to use air strikes in limited circumstances and in coordination with UNPROFOR commanders and the UN secretary general's prior approval. This "dual key" strategy was first tested by Bosnian Serbs' attack of a marketplace in Sarajevo, which claimed the lives of 68 people. The Clinton administration used the incident to convince NATO to issue an ultimatum that required Bosnian Serb forces to end the siege of Sarajevo and to withdraw their heavy weapons to a UN-monitored exclusion zone. While the RS leadership complied with NATO's demands, its air force violated the UN-mandated no-fly zone, forcing NATO warplanes to shoot down these fighter jets.

On March 18, 1994, the Clinton administration negotiated an end to the struggle between the Bosnian Croats and Bosnian Muslims. By signing the Washington Agreement, both factions agreed to establish the Muslim-Croat Federation, a political unit that would join the RS in a united Bosnia. Both sides also agreed to combine efforts to reverse

Bosnian Serb forces' military gains. The establishment of this new alliance allowed Croatia to supply armaments, financing, and other logistical support to the federation.

In April 1994, the United States, Russia, Britain, France, and Germany established the Contact Group, eclipsing the ICFY's mediation efforts. After weeks of deliberation, the Contact Group presented the factions a new peace plan with a new territorial formula. The plan envisioned a country divided in two halves. The RS was asked to surrender around 21% of the territory it controlled, leaving the Muslim-Croat Federation in control of 51% of the country. The federation supported the plan, while the RS did not, leading the international community to tighten economic sanctions against the RS.

The Contact Group was not able to ameliorate divisions among its members. Many unresolved issues complicated the search for peace. For instance, one important area of disagreement was the Clinton administration's unwillingness to send American forces to the region to monitor a peace agreement. Another controversial issue was Washington's insistence on backing diplomatic efforts with coercive measures. Although NATO had used force to enforce the UN Security Council's resolutions, the Clinton administration wanted to change the rules of engagement in order to further support the federation's interests. While these issues had compromised the Contact Group's resolve, diplomats still searched for ways to end the fighting.

On April 30, 1995, a cease-fire negotiated by the former U.S. president Jimmy Carter ended, and fighting between RS and federation forces resumed. The RS leadership approved a bold military campaign to defeat its enemies and bring the war to an end. Testing the international community's resolve, Bosnian Serb forces shelled Sarajevo. While the Clinton administration called for the United Nations and its allies to attack Bosnian Serb positions, the United Nations did not retaliate. This may have emboldened the RS leadership, which ordered its troops to attack several UN Safe Areas. Although the United Nations and NATO agreed to take action, NATO strikes were suspended shortly after Bosnian Serb forces took UN peacekeepers hostage. In the end, the RS freed the hostages, but the incident forced the Contact Group to reconsider UNPROFOR's effectiveness and the overall efficacy of the Contact Group's peacemaking efforts.

After UNPROFOR's humiliation, some European leaders wanted to end the peacekeeping mission. The Clinton administration strongly opposed these views. One problem was that NATO had agreed to assist in UNPROFOR's extraction. Although NATO's Operation Plan 40104 had not been approved by the North Atlantic Council, it required the deployment of as many as 25,000 U.S. forces. While Britain, France, and the Netherlands deployed a Rapid Reaction Force (RRF) to support UNPROFOR's mandate, they also suggested that if this strategy failed, they would end the UNPROFOR mission.

The RRF's deployment did not change the conflict's dynamics or settle divisions among the Contact Group. On July 6, 1995, Bosnian Serb forces, led by General Ratko Mladic, attacked the UN Safe Area of Srebrenica. After the United Nations turned down Dutch peacekeepers' request for air strikes, Mladic's forces took over the town and committed the worst human rights abuses in Europe since the Holocaust, executing an estimated 8,000 males of fighting age. The fall of Srebrenica encouraged Bosnian Serbs to target other UN Safe Areas.

The RS's military offensive forced the Contact Group to meet in London to consider extra steps to address the crisis. After much debate, it was agreed that NATO would play a bigger role in the implementation of the UN Security Council's resolutions. More important, the Contact Group's leadership agreed to terminate the dual-key strategy, giving commanders on the ground the power to ask NATO to strike Bosnian Serb targets. After the London Conference, NATO developed different war plans, while the Clinton administration started to review its own Bosnian policy and consider what Ivo Daalder dubbed the "endgame strategy."

This strategy was built on the Clinton administration's view that peace could not be achieved without changing Bosnia's balance of power. In August 1995, senior U.S. officials traveled to Europe to sell their strategy, which included the following points. First, they argued that coercive tactics could support the Contact Group's efforts to settle the crisis. Second, while the Contact Group plan's principles would be used as a basis for negotiations, the Clinton administration was willing to reconsider Bosnia's internal boundaries and its constitutional structures to secure an end to the conflict. Third, the U.S. officials argued that regional dynamics had fueled the fighting in Bosnia and that the participation of Croatia

and Yugoslavia in the peace process was necessary. But their participation would be contingent on their recognition of each other's sovereignty as well as acceptance of Bosnia as an independent country. In exchange for their participation, the Contact Group would resolve the crisis in Eastern Slavonia, the only part of Croatia controlled by Serb forces at the end of August 1995, while the Contact Group agreed to suspend the economic sanctions placed against Yugoslavia once an agreement had been signed. Fourth, the Contact Group would support postwar peacebuilding efforts, financing Bosnia's reconstruction and deploying a peacekeeping force that would include U.S. troops.

While European leaders and Russian diplomats welcomed this initiative, they also were wary about the use of coercive tactics. The Clinton administration's nomination of Richard Holbrooke, the assistant secretary of state for European affairs and a former U.S. ambassador to Germany, as the new envoy to Bosnia sent a signal that the United States was serious about settling the war. But it was Bosnian Serbs' decision to shell Sarajevo at the end of August that convinced the Contact Group to embrace the Clinton administration's strategy. After several days of NATO bombings and ground attacks from the RRF, the Bosnian Serb parliament agreed to enter U.S.-sponsored peace negotiations. While Western attacks paused, the RS's unwillingness to withdraw its forces from outside Sarajevo led NATO to resume its aerial strikes.

NATO's air campaign had the desired effect on the Bosnian Serb leadership, but it complicated the Contact Group's relations with the federation's leaders. The air strikes had helped the federation win a number of important battles. Holbrooke met with Izetbegovic and warned him that if he did not join a new round of peace talks, the United States would cut all assistance and support UNPROFOR's withdrawal. On October 5, 1995, the RS and federation agreed to a cease-fire and President Clinton invited leaders from the entities of Croatia, Yugoslavia, and Bosnia to join the Contact Group at the Wright-Patterson Air Force Base in Dayton, Ohio, on November 1, 1995, to negotiate an end to the war.

The Dayton Peace Talks and After

Before Clinton's invitation, Holbrooke held a series of meetings that helped secure the success of

the Dayton peace talks. The talks were based on the principles U.S. diplomats had presented to the Contact Group in August 1995. Learning from previous failed negotiations, Holbrooke also suggested that Milosevic, Tudjman, and Izetbegovic should lead the negotiations. In other words, Milosevic would represent Bosnian Serb interests, while Tudjman would represent the needs of the Bosnian Croat community. Technically speaking, Izetbegovic, as the Bosnian president, would represent his country's interests, but in all practicality, he represented Bosnian Muslims' interests. While Bosnian Croats embraced this proposal because they felt that Tudjman would protect their interests, Bosnian Serbs had initially rejected it. But NATO's air campaign and the federation's military victories forced them to accept this proposal.

Holbrooke and the Contact Group's representatives held summits in Geneva and New York before the start of the Dayton peace talks. These gatherings were used to establish the *Basic Agreed Principles*, a document that reflected the Clinton administration's main negotiation principles but that also included a number of confidence-building measures to reassure the participants that the talks would seriously consider their interests. For instance, the document recognized the RS as one of the entities of a united Bosnia, and it allowed the country's entities to set up special relationships with neighboring states. It also stressed that Bosnia's division should be based on the 49–51 principle found in the Contact Group plan of 1994 and that democratic elections would be organized to select the members of the national legislature and of the federal government's executive branch.

The Dayton peace talks lasted 21 days. While many issues complicated the negotiation sessions, Tudjman's and Milosevic's participation secured the acceptance of the plan by the Bosnian Croat and Bosnian Serb leaders. The Clinton administration also pressured Bosnian Muslim leaders to sign the peace agreement. Divisions among the Contact Group's members also complicated the negotiation process. Two issues proved to be extremely contentious with important consequences for the implementation of the peace plan.

First, European representatives wanted the Contact Group to use its resources to secure a new Bosnian constitution with a strong central government. Their argument was that a strong government

could carry out important reforms that would bring Bosnia in line with EU standards. American representatives believed that Bosnia's territorial divisions were going to be the most complicated aspect of the talks. Thus, they preferred to dedicate less time to constitutional issues and more attention to the map. While Holbrooke and his team did secure a compromise on the map in the last day of the talks, the Dayton constitution established what one European representative called the "world's most decentralized state."

Second, the Contact Group could not agree on the mandate and architecture of the postwar mission. While the European and American officials agreed that the United Nations would play a small role in peacebuilding efforts, the Europeans wanted to establish an international civilian body to help Bosnian leaders organize elections, establish the central government and judiciary, and jump-start the economy. This body would be assisted by a NATO peacekeeping force. The Clinton administration, fearing mission creep, wanted a U.S. commander to head the mission. The mission's goal was the separation of forces and the buildup of the federation's forces as a way of deterring the Bosnian Serbs from restarting the fighting. The American negotiators also favored a civilian component to be used to monitor the implementation of the agreement.

In the end, the Contact Group agreed that NATO would deploy a peacekeeping force and that its commander, an American admiral, would work with the Office of the High Representative (OHR)—the civilian body alluded to above—to secure the implementation of the peace agreement. NATO's mission was to provide security and to establish a balance of power between the forces, while the OHR would work with Bosnian leaders and other international bodies to organize elections, to support efforts to relocate refugees and internally displaced families, to jump-start the economy, and to establish the federal government. To secure the EU's willingness to finance most of Bosnia's reconstruction, the Contact Group agreed that a European diplomat would serve as the high representative. While the OHR had to regularly report to the UN Security Council, its work was overseen by an ad hoc international body known as the Peace International Council (PIC), which included the participation of Contact Group countries, donor countries, and international bodies, including the Organization of the Islamic Conference.

Although the Dayton Peace Accords successfully settled the fighting, they have not been able to promote a new national political culture to unify the three major factions. By and large, the same political parties that drove the country to war in the early 1990s are the ones that have dominated Bosnia's post-Dayton political system. Thus, nationalist leaders in each community have obstructed the implementation of the negotiated peace, forcing the OHR, with the EU's support, to administer the country. In 1997, the PIC and NATO's North Atlantic Council reviewed the pace of implementation, concluding that they needed to execute a more robust peace-building strategy.

The PIC gave the OHR the power to dismiss obstructionist politicians and to execute the necessary laws and reforms to advance the provisions of the peace agreement. Since 1998, the OHR, with the EU's assistance, has been trying to correct the faults in Bosnia's constitutional system, strengthening the federal institutions' powers at the expense of the entities' authority. (The Dayton Peace Accords establishes that Bosnia is divided into two territorial entities—the Federation and Republika Sprska. See previous paragraphs detailing pre-Dayton talks in Geneva and New York.)

While NATO ended its peacekeeping mission in December 2004, a smaller EU Force has remained in Bosnia since then. Both civilian administrators and peacekeepers have also pressured Bosnians to arrest war criminals and to extradite them to The Hague to face trial. As of 2012, the former Bosnian Serb leader Radovan Karadzic and the former Bosnian Serb military commander Ratko Mladic were both tried on charges of genocide and other war crimes. Although much has been done to secure Bosnia's long-term stability and to reverse the consequences of the war, many experts believe that interethnic squabbles could quickly descend into violence without the presence of the international community.

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See also Europe; Kosovo Intervention; North Atlantic Treaty Organization; Peacekeeping; United Nations

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BRAZIL

The United States and Brazil have maintained good political and military relations throughout their history. With a population of 201 million (fifth largest in the world), a land mass slightly smaller than the United States, and a gross domestic product per capita of \$8,240, Brazil is becoming a powerful nation. It belongs to the BRICS (Brazil, Russia, India, China, and South Africa) bloc. The United States and China are its two major markets for imports and exports. Recently, Brazil discovered oil reserves off its coast, estimated to be in the top 10 in the world. Brazil's increasingly influential global position has shifted its relations with the United States economically, politically, and militarily. U.S. president Barack Obama's March 2011 visit and an April 2010 military agreement suggest that the two countries are close. Nevertheless, Brazilians have a strong sense of history and long-term planning, which affects U.S.-Brazilian relations. This entry discusses Brazil's armed forces and the history of Brazil's relationship with the United States.

The Brazilian Armed Forces

The Brazilian armed forces (army, navy, and air force) have been under the umbrella of the Ministry of Defense since 1999. Prior to this, they were individual ministries. The president is the commander in chief over roughly 370,000 active military personnel.

The army is the largest and most influential of the three armed forces, with 190,000 military personnel as of 2010; during the military dictatorship, 1964–1985, each president was an army general along with the majority of the Cabinet. The army has a 9- to 12-month conscription, averaging 125,000 people.

There is also a large reserve force, which includes the military police and military firefighters.

There is constant competition between the air force and the navy. The navy is the oldest of the three forces with 59,000 troops. It has its own aviation force with 2,500 people and 15,000 marines. The air force was only established in 1941, but it has become the largest in Latin America with 69,480 members. It also controls the civilian air including traffic control and airport construction and maintenance.

In terms of weaponry, the armed forces have fighter planes, transport planes, surface-to-surface missiles, tanks, and armored vehicles. They have a strong arms industry, which is a leading exporter. In 2008, a National Defense Strategy was created to further build up its industry and international alliances. So there continue to be many purchases, upgrades, and improvements in equipment and training.

Early U.S.-Brazilian Relations

The United States was the first nation to establish a consulate in Brazil (1808) and to recognize Brazil's independence (from Portugal) in 1822. Friendly relations continued into the 20th century with occasional disagreements. In 1902, Brazil closed the Amazon River to international shipping, protesting recent U.S. action in the region. Then, as World War I broke out, the U.S. government rescinded a contract to provide arms for Brazil. Since that time, the Brazilian government has sought to develop its own arms and armed forces.

Good relations continued in the 1930s and throughout World War II. In November 1936, President Franklin D. Roosevelt, in a visit to Brazil, said that President Getulio Vargas of Brazil had helped him conceive the New Deal. During World War II, the U.S. military argued that northeast Brazil was vulnerable to attack, being a short flight from the African continent. The U.S. Navy's Fourth Fleet, based in Recife, patrolled the area. Brazilian officers trained in the United States, and the U.S. military trained Brazilians in schools and the bases in Brazil and provided the Brazilian army with equipment. Brazilian troops fought with the United States in Italy. And as plans for the new United Nations began, Roosevelt intimated that Brazil would be involved. Brazil hoped for a permanent seat on the Security Council. However, after Roosevelt's death, Brazil was excluded.

Post-World War II Relations

After World War II, Brazil aligned with the United States. Brazilian military officers taught at schools run by the U.S. military across South America. Brazil developed the National War School in 1950 with U.S. funding. There was strong U.S. doctrinal influence with an anticommunist attitude. Yet Brazil differed from the United States in its insistence that the real conflict to be resolved was not East versus West but between developed and developing countries. This has remained a guiding principle of Brazil's outlook, often misunderstood by the United States.

In the 1960s, President John F. Kennedy sought an Alliance for Progress to fight the USSR and develop Latin America. With the Cuban Revolution, the U.S. military plan in Latin America was to defeat local guerrilla movements, assuming they were communist. Many Brazilian officers trained in the United States and at the School of the Americas. Brazil's National Security Doctrine emerged from this teaching and that in Brazil's National War School.

However, U.S.-Brazilian relations were conflictual early in this decade. In 1961, Janio Quadros was elected Brazilian president, causing U.S. consternation. He continued to develop relations with Cuba and the USSR. When the United States tried to get Brazil's support for the Bay of Pigs invasion, Quadros refused three times. In 1962, Quadros resigned, and Vice President Joao Goulart rose to the presidency. The Brazilian military and the United States accused Goulart of being a Communist. Goulart repeatedly emphasized that Brazil would remain neutral in the East/West controversy because the real divide was between developed and developing nations. He allowed communists to participate in government. Furthermore, he stated that if Washington did not fulfill the contract to provide helicopters, he would purchase them from Poland.

When the Central Intelligence Agency found out about a coup planned by Brazilian military officers in 1963, they reported this to Washington, not Goulart. And in early 1964, when someone from the military asked U.S. Ambassador Lincoln Gordon how the United States would react to a potential change, he responded that the United States would provide help to the rebellion. The United States planned to make petroleum available, a U.S. naval force (including an aircraft carrier, destroyers, and missiles), arms, ammunition, and help in the event of a workers' strike.

The Brazilian Military Coup and Dictatorship (1964–1985)

By March 1964, the U.S. diplomatic mission in Brazil decided that Goulart was rapidly moving toward a communist totalitarian government. Gordon and the Brazilian army's chief of staff, General Humberto Castelo, agreed. Marshal Castelo Branco, who became Brazil's president following the coup, wrote and delivered a paper to U.S. military attaché Vernon Walters a week prior to the coup, justifying it. He and Walters had known each other since World War II, when Walters served as an interpreter.

During the coup of March 31 to April 2, U.S. warships remained on alert off the Brazilian coast. Gordon notified Washington immediately of the coup's beginning and President Lyndon B. Johnson's statement supported the new government's emergence "within the framework of constitutional democracy," even before Goulart officially stepped down, according to the historian Thomas Skidmore, who Jan Knippers Black (Human Rights Activist) quotes. Goulart left the country, asking his supporters not to fight.

This new military government promoted the National Security Doctrine. There were several hundred U.S. citizens in a variety of public positions, including advising the military and police. For example, the U.S. Office of Public Safety established Brazil's national police force, trained more than 100,000 police, and sent 523 to the United States for training. However, Brazil's trade with the USSR continued throughout the dictatorship and did not incur U.S. condemnation. For example, the USSR funded the building of several large hydroelectric plants.

Under Castelo Branco's reign, Brazil's congress was suspended for 2 years, and in his first month in power, 50,000 people were questioned and detained by police. The guerrilla movements were small and local, put down with arrests and torture. Nieto (2003) provides a Catholic Church report, which stated that "between 1964 and 1978, 488 priests and members of religious orders were imprisoned, 31 were tortured, 5 were murdered, 11 disappeared, and 28 were expelled from the country" (p. 172). In the 1970s, Brazil's government became more nationalist and regional and the repression slowly eased.

During the 1970s, Brazil also developed nuclear power, signing a nuclear cooperation agreement with West Germany and a uranium agreement with Israel. The West German agreement occurred after

the United States failed to provide the enriched uranium it had promised. U.S. vice president Walter Mondale later traveled to West Germany where he tried unsuccessfully to halt its nuclear cooperation with Brazil. From 1977 to 1985, Brazil also developed its arms export industry dramatically. It sold arms to Iraq, Syria, Iran, and Libya, often for oil.

Relations with the United States worsened. In 1977, under President Jimmy Carter, the Department of State produced a human rights' report for each country that received U.S. military assistance. Brazil was criticized for its repression. The day after Brazil saw this report, the U.S.-Brazilian military agreement (25 years old) was ended.

In 1985, the Brazilian government returned to democratic rule under President Joao Figueiredo and increased its role as a regional power. The more time that elapsed from World War II, the more Brazil developed and followed its own independent strategies. It did not follow the United States into either Korea or Vietnam. In 1971, Brazil and the United States both worked to accomplish a coup in Bolivia. However, by 1985, in the case of Nicaragua, Brazil was part of a group fighting for the Contadora Treaty in support of the Sandinistas, which President Ronald Reagan opposed.

Lessening Relations (1985–2005)

In the 1980s, the United States became less interested in Brazil, even ending the human rights' condition on aid that Carter had implemented. The two countries drifted apart on several issues, including the international debt crisis. By 1988, when Secretary of State George Shultz arrived in Brazil seeking support for U.S. policy in Central America, Brazil was completely disinterested.

During the 1990s, relations between the Brazilian president Fernando Cardoso and the U.S. president Bill Clinton were friendly. In 1995, the United States and Brazil signed an agreement to improve antidrug smuggling efforts along Brazil's western border. In 1997, the United States and Brazil renewed their agreement "Peaceful Uses of Nuclear Energy and Documentation," including technology and equipment transfers.

Relations were also friendly during the George W. Bush administration. Bush and the Brazilian president Luis Inacio Lula da Silva (known as Lula) visited each other a number of times, although they

held opposing political opinions on most issues. For the first time, in 2003, the Brazilian and American cabinets met together.

With the United States absorbed in antiterrorism after the attacks of September 11, 2001, Brazil was able to further increase its role as a leader in Latin America. Brazil criticized the U.S. attack on Iraq and did not join in. Furthermore, when Brazilians were among the groups that were required by the US-VISIT (United States Visitor and Immigrant Status Indicator Technology) program to be fingerprinted and photographed when entering the United States, Brazil responded by adding the same requirements for U.S. citizens entering Brazil.

Recent Events

In 2009, the Brazilian government announced it was forming a truth commission to investigate the alleged crimes committed by those in power during the military dictatorship. The BBC (British Broadcasting Corporation) reported that several military officials threatened to resign if the commission went forward, and it was initially delayed. Dilma Rousseff, the first woman president, was elected successor to Lula on October 31, 2010. She had been imprisoned and tortured during the dictatorship years and has revived plans for the truth commission.

Brazil and the United States have continued to clash over regional issues. Brazil disagreed with the U.S. decision to reactivate the U.S. Navy's Fourth Fleet in 2008 (disbanded in 1950). With the announcement coming shortly after Brazil discovered its new oil reserves, Lula questioned U.S. motives. Furthermore, in 2009, Brazil allowed the Honduran president Manuel Zelaya to take refuge in the Brazilian Embassy after he was ousted in a coup. The United States supported a new president and Brazil did not. And finally, Brazil's leading role in Haiti through the UN Stabilization Mission (2004 to the present) was upended after the 2010 earthquake in Haiti, with quick U.S. and European involvement.

The United States and Brazil also disagree over Iran's nuclear program. While Brazil argues it has a civil purpose, the United States wants sanctions. Brazil itself faced pressure when it became a nuclear state and points out that India and Israel faced no sanctions.

Yet the United States and Brazil also continue to work together. Brazil's defense budget has increased

significantly since 2006. In April 2010, Brazil and the United States signed the Defense Cooperation Agreement, the first since Brazil ended the previous agreement in 1977. Both sides agreed to increased cooperation. In addition to shared research and development, the agreement promotes combined military training and joint military exercises. Also in 2010, Embraer, a Brazilian aircraft manufacturer, began to offer training planes to the U.S. Air Force.

Civil-Military Relations

In conclusion, note the shifting purpose of the Brazilian military throughout its history. After Brazil's independence, the army and navy had two foci: (1) defense of Brazil's borders and (2) international action. Defense of the borders was the primary concern throughout the 1800s. International participation became a greater focus in World War I and World War II.

However, in the mid-1900s, in Brazil and in many other Latin American countries, the line between the military and political realms blurred. During the dictatorships, the military focused on internal security, encouraged by the United States. The threat was seen to be within its own borders, not external. With the return to democracy in 1985, the purpose of the military has once again transitioned.

The focus has moved back to defense of the national borders and international participation, cemented in the 2008 National Defense Strategy. Brazil has more than 10,000 miles of land borders and extensive seaways and ocean borders. Furthermore, the military was brought more firmly under the command of the executive sphere with the 1988 constitution and provides civilian services such as road construction.

The Brazilian military also plays a larger role externally, as a regional military power. It has a peacekeeping force in Haiti. Brazil aims to become a permanent member of the UN Security Council, is a leader of the G20 (a group of finance ministers and representatives from 19 countries plus the European Union), and was instrumental in stalling World Trade Organization negotiations in the Doha Round. Currently, Brazil can be viewed as either a military ally or competitor in the Western Hemisphere.

Thia Cooper

See also School of the Americas; South America

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BRIGADE

The brigade cannot be understood in its modern sense without reference to the permanent command hierarchy that lies above and below it. In essence, the term *brigade* was born of the expansion of armies and the geographic space over which these large forces operated. This necessitated the practical step of creating levels (or hierarchies) of command through which a commander could influence the course of a battle or campaign when he was no longer able to personally order or supervise each and every principal subunit. Contemporary brigades usually comprise three to six battalions and can include other supporting units. This entry discusses the history of brigades and their organization.

Origins

The brigade is, in its modern sense, a creation of the gunpowder era and the expansion of national armies in the 16th and 17th centuries, and particularly the reforms of Gustavus Adolphus (1594–1632). He established a permanent hierarchical system of command based on the size and capability of different units in a building block format from smallest to largest. Each battalion comprised four companies of more than 100 men each and four battalions comprised a permanent brigade. His brigade is the equivalent today of either a modern regiment or brigade. Today, the term *battalion* is the nearly universal term for this level of combat formation comprising 500 to 1,000 people.

Napoleonic Era

Above the brigade, the next levels of command to be established were the division and corps. France first established a permanent divisional organization that encompassed all three arms, infantry, artillery, and cavalry, in the 18th century prior to the establishment of the armies of the Revolution after 1789. Napoleon Bonaparte (1769–1821) established the first permanent corps in 1804. These terms and their general concepts of a division grouping multiple regiments or brigades consisting of several battalions each, and a corps level of command grouping several divisions, remain the basis for combat organization through the 19th, 20th, and into the 21st centuries for the largest nations' land armies.

As the armies of the 19th century grew larger, and as warfare became the business of the whole people of warfighting nations, these hierarchical structures remained remarkably stable. An American Civil War Union or Confederate Infantry brigade commanding officer, following the maxims laid down in Baron Antoine-Henri de Jomini's *The Art of War*, would find the organization listed here in Figure 1 entirely logical for the organization of an infantry brigade. The U.S. Army adopted Jomini's *Art of War* as a textbook at the Military Academy at West Point, New York, in 1859. At the beginning of the American Civil War, artillery batteries were assigned to the infantry brigades. This followed the Napoleonic organization, which followed the disastrous Russian campaign of 1812 and was intended by Napoleon to buttress the weakness of the new

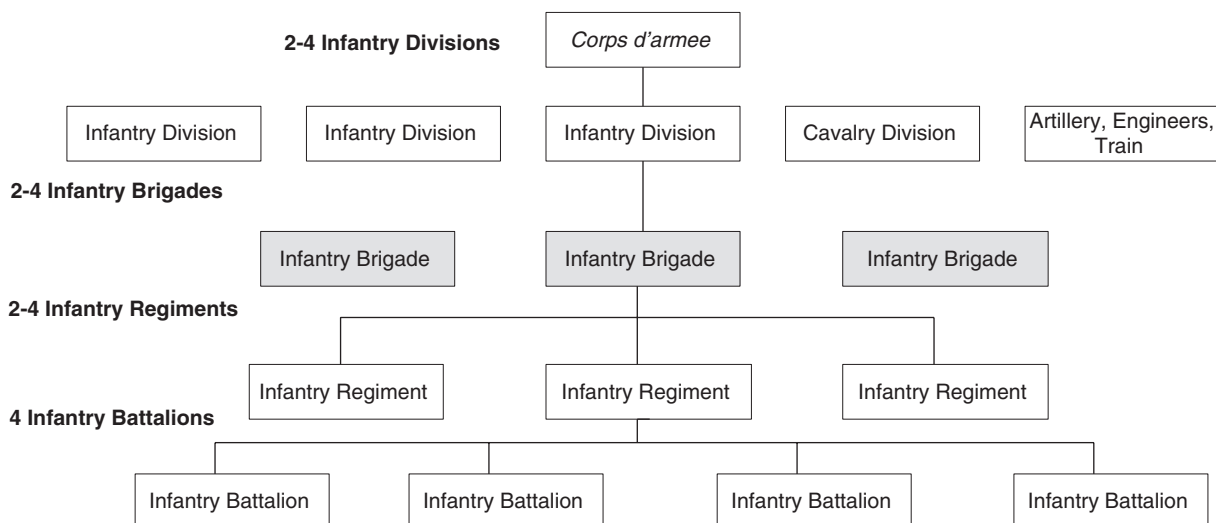


Figure 1 Position and Organization of the Brigade in the French Army of Napoleon ca. 1807

Source: Derived from Chandler (1966, p. 340).

infantry formations. This practice was abandoned by both sides very early in the American Civil War, and artillery was consolidated above the brigade level.

The First World War

As the First World War approached, the invention of the machine gun and quick firing artillery changed the organization and perspective of the principal national armies. The British Army and the U.S. Army each utilized the “square” division organization of two large infantry brigades with two regiments in each (Figure 2). This organization prevailed until the opening of the Second World War, while organizations above the corps became generalized in the term *army*, or *field army*, describing an echelon of command in which several divisions and the support necessary to sustain these divisions in the field became common.

The Second World War

Both the Anglo-American armies and the German army of the Second World War adopted a “triangular” organization within the Infantry Division with three brigade/regiment equivalents with three infantry battalions each (Figure 3). Only the British Army Infantry Division retained the term *brigade* for its three subunits, which were, in effect, regiments in the American and German sense, commanding a

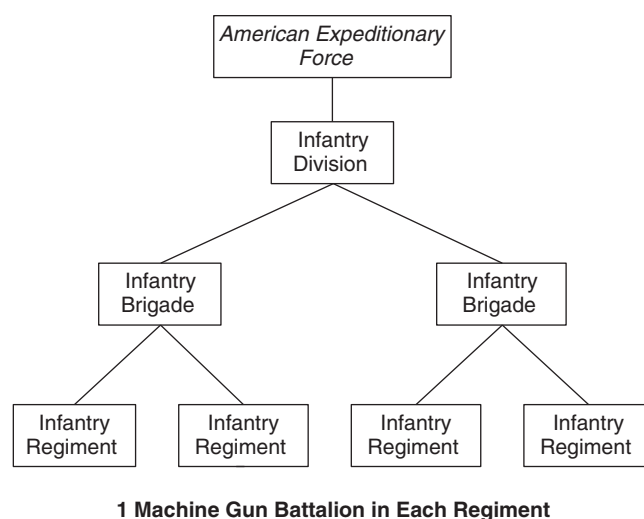


Figure 2 “Square” Division: Position of the Brigade in the U.S. Army Infantry Division of the First World War circa 1918

Source: Derived from Lejeune (1930, pp. 288–289).

Note: Only the infantry combat units are depicted; artillery and other support services are intentionally not listed.

normal complement of three or more infantry battalions. These triangular formations and the essentially synonymous terms *brigade* and *regiment* were subordinated within a hierarchy of command levels beginning with the army group. The term *army group* denoted a higher command echelon that

included the direction for multiple field armies and became commonplace in the Second World War for the American, British, and German armies, while the Soviet Union used the term *front* to describe this level of command. Below the army group, the terms such as *army*, *division*, *corps*, *brigade/regiment*, *battalion*, *company*, *platoon*, and *squad* became the norm for modern armies to define the hierarchy of organization and command from the largest to the smallest tactical formations. For armies of millions of people, with multiple theaters of operations across oceans and continents, this hierarchy made practical sense for warfare involving the resources of entire nations.

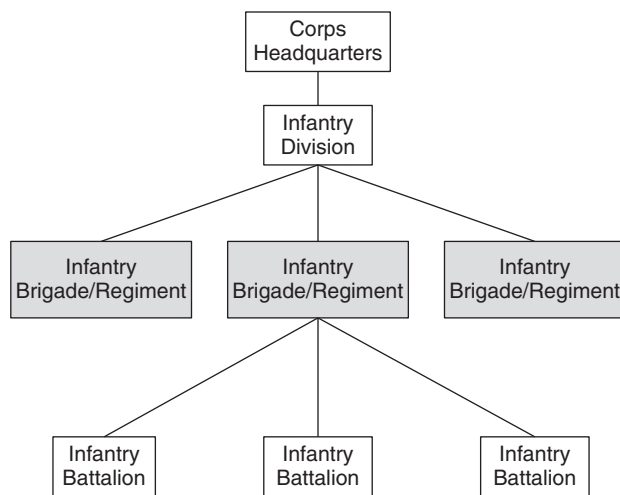


Figure 3 “Triangular” Division: Position of the Brigade/Regiment in the Anglo-American and German Armies of the Second World War circa 1944

Note: Only the infantry combat units are depicted; artillery and other support services are intentionally not listed.

Into the 21st Century

Since 1945, no major war has been fought on the scale and lethality of the Second World War. Armies tended to become smaller and more affordable, although throughout the Cold War, the Soviet Union and the United States maintained millions of men and women in uniform necessitating the continuation of the highest forms of military hierarchy. Following the end of the Cold War, with regional and irregular warfare the norm across the globe and military forces much smaller in general, the term *brigade* has come into a renaissance of usefulness. As the forces deployed to fight have become smaller than their Second World War peak, the brigade, as a task-organized combat unit, commanded by either a brigadier general or a colonel, has become the primary hierarchical designation for the command of multiple battalion-level forces of all types (Figure 4). These brigade and brigade-equivalent formations are the backbone of modern combat operations built on battalion areas of responsibility in combat against principally irregular foes. These brigade organizations are highly task organized and represent in themselves the full range of ground combat, combat logistic support, air support, as well as medical and hospital units.

The modern form of the infantry brigade has changed from a level of command comprising simply infantry battalions within a larger force to one of the principal combat formations of major combatant nations. Task organized with all essential elements of combat power and combat support and logistics, these self-contained forces deployed to Afghanistan bear little resemblance to that conceived by Gustavus Adolphus. Their mission, however, as an essential

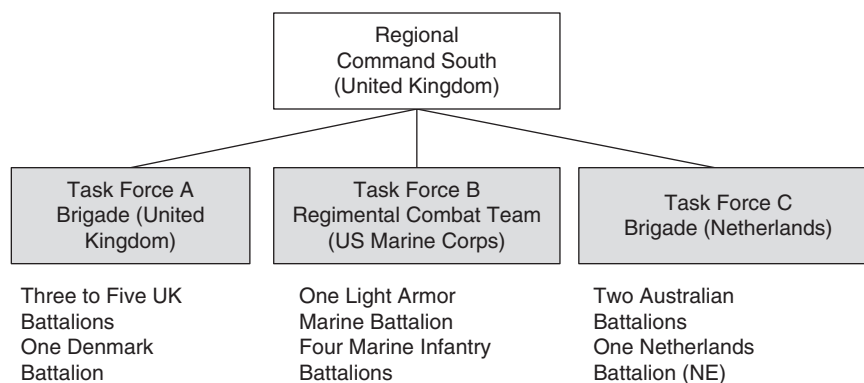


Figure 4 The 21st-Century Brigade/Regimental Combat Team: NATO Regional Organization—Afghanistan—ca. 2010

component of ground combat has not changed. The brigade, and its regimental combat team counterparts, remains one of the most powerful elements of modern warfare.

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See also Division; Infantry; Military Organization, Army; Regiment

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BUSH DOCTRINE

The Bush Doctrine is a series of concepts and policy ideas developed by the George W. Bush administration to address the threats of terrorism and nuclear weapons proliferation. This entry examines the development of the Bush Doctrine in response to the attacks of 9/11 and discusses al Qaeda as a new type of terrorist threat and the role of preemption in the Bush Doctrine.

President Bush's Response to Terrorism

The term first came into broad usage after the September 11, 2001, attacks on the United States, when Bush declared that the United States would use force against both terrorists and the states that harbor them. This concept justified military action against the al Qaeda terrorist network and against the Taliban government in Afghanistan since it had permitted terrorist bases in its territory and refused to turn over al Qaeda leadership after 9/11. Subsequently, Bush began to link terrorists and rogue states in pursuit of weapons of mass destruction, describing them as an Axis of Evil. Bush argued that these new threats required the United States to adopt new policies, including preemptive attacks. Many analysts came to refer to support of preemption as the Bush Doctrine, others used the term to include both the focus on new threats and the new tactics to be employed. The 2003 Iraq War moved consideration of Bush's ideas from the theoretical to the practical and placed them near the top of the world's agenda. Subsequent acceptance of the doctrine in the United States and globally thus depends in part on events in Afghanistan and Iraq, but since the ideas had a deeper history and logic, debate will continue well past the end of those wars.

Bush's policies against terrorism were new both in putting more focus on the use of force and in expanding the conflict to states that harbor terrorists. These tactics reflected not only Bush's personal style, which favored bold actions against clear enemies, but also came from widely held views that al Qaeda represented a new type of terrorist threat against which past antiterrorist actions were failing. In the past, terrorist groups usually had very narrow political goals and only a few poorly funded, poorly trained members. Al Qaeda reversed each of these traits. Its leader Osama bin Laden argued that Muslims across many countries had been oppressed by the West or the West's local allies. He was able to form an organization spanning many countries and thousands of individuals. Al Qaeda was also able to raise large amounts of money from sympathizers and other sources enabling it to buy much better equipment and establish training camps in Afghanistan. The newly powerful organization successfully attacked a number of locations across the globe in the 1990s. To combat al Qaeda's rise, most countries continued their strategies of treating

terrorism as a crime to be addressed through normal legal procedures. This strategy was judged ineffective as terrorism continued, so new policies were considered, including the use of force. In response to the 1998 bombings of two U.S. embassies in Africa, President Bill Clinton authorized investigations, but he also authorized missile strikes against targets in Sudan and Afghanistan.

Therefore, while Bush's response to terrorism differed in degree from past policies, it was not completely outside accepted views. There were some critics who felt that using force would lead to unjustifiably major loss of life on both sides, would not address the root causes of terrorism, and, in fact, could lead to further Muslim anger at the United States. Mainly, though, Bush's views and short-term actions were accepted both in the United States and abroad. To assess the longer term implications of the doctrine, one can compare Bush's antiterrorist doctrine to President Harry Truman's anticommunist doctrine. Both portrayed individual incidents as part of a global struggle against an evil ideology. Both rallied the public to support ongoing military actions, and both gave the United States a guiding foreign policy principle. Both also risked portraying a complex world in black-and-white terms, made the United States appear aggressive in some eyes, and centralized power in the hands of the executive branch.

Preemption

By the spring of 2002, Bush and his advisers were increasingly linking terrorists and rogue states. In June, at the United States Military Academy's graduation at West Point, Bush spoke about the need to address these new threats with new tactics. His views were more formally developed in the 2002 *National Security Strategy*. Bush argued that the Axis of Evil's mix of extremist views and modern military technology presented threats that could not be combated with Cold War ideas of containment and deterrence. The only way to defend the United States was to take the battle to the enemy by striking preemptively.

Preemption is an accepted strategy in international law, but Bush was using the term in a new way. International law and norms accept the idea that countries should have the right of self-defense. At times, though, waiting to be attacked gives the aggressor control of the timing and location of the

fighting. Therefore, if there is an imminent threat with enemy troops massing at their border, a country is allowed to preemptively strike first retaining the claim of self-defense. This is different from a preventive war in which a country attacks an enemy under the logic that it is better to fight a weak enemy now than risk dealing with a stronger aggressive enemy sometime in the future. Preventive war is generally not accepted in international law and norms. Bush's argument was that modern technology meant that there may not be troops massing at the border or any other clear sign of imminent attack, and therefore, the concept of preemption needed to be expanded to include more preventive actions. Administration officials often used the idea that, in the modern era, the smoking gun proof of threat might be a mushroom cloud.

Bush's ideas have been critiqued on a variety of points, but especially on the evidence necessary to justify preemption—Who should judge the evidence and take action? What precedents does the action set? Does preemption work effectively? If a preemptive attack is to be considered self-defense, there must be evidence of both capability and intent to attack. For example, International Atomic Energy Agency inspectors could find evidence that a country was pursuing nuclear weapons capability. Of course, the likelihood of finding definitive evidence is low since a country planning an attack might conceal its efforts by delaying inspections, building secret facilities, and so on. The difficulty in assessing capability was highlighted by the case of Iraq, which most analysts felt was pursuing nuclear and other weapons of mass destruction, but was then found to be much less further along than even conservative estimates had suggested. Even the presence of complete weapons, though, would not have proven threat, since Iraq may have intended to use the weapons only for deterrence or gaining international prestige. Evidence of offensive intent might include threatening statements from leaders or past violent actions, but again aggressive countries or groups may conceal their intentions.

Many international law scholars and other observers have argued that only the United Nations is allowed to weigh the evidence and authorize the preemptive use of force under current international law. The UN Charter recognizes that an attacked country may use force in self-defense in the short term without seeking UN approval, but even it

should later seek UN support. In all other cases, countries are encouraged to use other means to settle disputes or, in unusual circumstances, to show the need for collective UN action to restore international peace. In a strict reading of the UN Charter, any unapproved, unilateral use of force is thus in itself an act of aggression. This logic somewhat parallels the domestic idea that the police may use force to preempt a crime, but citizens doing so lack proper authority and become vigilantes who themselves could be punished. The Bush administration partially acknowledged these arguments by repeatedly bringing evidence to the United Nations and leading efforts to pass resolutions authorizing the use of force against Iraq, but they did not feel they needed a further resolution in the spring of 2003 to definitively authorize the war. Even without the UN system, one could make the argument that evidence justifying preemption should be weighed by a neutral panel, not a country already feeling threatened, but the Bush administration's counterargument would be that other countries or international bodies should not have a veto over actions a country judges are necessary for its self-defense. The Bush administration's strong support for unilateral actions in this and other cases has led some scholars to include "a willingness to act unilaterally" in their definition of the Bush Doctrine, although others would say that is more a tactical choice underneath the goals of the doctrine.

Some critics have argued that Bush's logic that modern weapons demand a looser standard of evidence in support of preemption, and that preemption can sometimes be unilateral action, may open a Pandora's box encouraging repeated wars. For example, if Israel judges Iran's nuclear program to be a threat, it could strike preemptively using the Bush Doctrine logic. Knowing this, Iran might judge Israel's possible actions as a threat and feel it should preemptively strike before Israel. Therefore, a major war could break out based on possibilities instead of definitive intentions. In theory, this same scenario could occur between the United States and Iran, although in reality, it is less likely that Iran would attack a major power. Therefore, the reality would be that existing powers would police the

world, preventing states they deem dangerous from attaining the weapons that the existing powers already have.

Effectiveness

A final major area of critique is whether the Bush Doctrine, in its focus either on terrorists and their supporters or on preemption, can ever be effective. Action in Afghanistan was first widely judged as successful in disrupting al Qaeda, and there has been no major attack on U.S. soil since 2001. However, despite 10 years of fighting and even bin Laden's death in May 2011, the Taliban has made a resurgence and al Qaeda terrorism has continued throughout the globe. In Iraq, the regime was toppled and any progress toward weapons of mass destruction halted, but there has been major loss of life and destruction, continued political instability, and much criticism of the United States for being overly aggressive. When preemption has been considered in other cases such as Iran, many have argued that minor military strikes would be only a temporary setback for a determined country, but major military action would create another Iraq. The concepts that the world faces new threats and that offense is the best way to address dangerous extremists remain popular though, so supporters would hold that the Bush Doctrine is a major step forward and that, if anything, the lessons of Afghanistan and Iraq are only about tactics, not goals.

John W. Dietrich

See also Global War on Terrorism; Iraq War (2003); War in Afghanistan

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CANADA

Canada covers nearly 4 million square miles and has almost 35 million inhabitants. It shares a long land border with the United States and a maritime border with Russia. Historically, besides its Native Americans Canada is composed of descendants of French and British immigrants, although an influx of immigrants from other parts of Europe, Asia, and Latin America since World War II has made the nation more ethnically diverse. Economically, Canada has a diversified industrial economy with significant wealth produced from petroleum exports, forest products, and wheat. Canada and the United States are major trading partners.

Canada has been a strong supporter of the United Nations and other multilateral institutions, including the World Bank, North Atlantic Treaty Organization (NATO), Organization of American States, and the British Commonwealth of Nations. In contrast to the United States, it has accepted jurisdiction of the International Criminal Court and the Convention to ban land mines. A hallmark of the Canadian military has been its participation in a number of peacekeeping missions since their inception in the 1950s.

Politics and Government

Canada is a parliamentary democracy, a federal system with significant powers granted to the provinces under the Canada Constitution Act of 1982. Elizabeth II of Great Britain is Queen of Canada and is represented by a governor general, who, since

1952, has been a Canadian. The House of Commons is popularly elected, and members of the Senate are appointed for lifelong terms by the governor general on the recommendation of the prime minister, serving until they reach the age of 75. Although the consent of the Senate is required to pass legislation, this unelected body generally influences the passage of laws through the amendment process. Under a parliamentary system, the prime minister is selected from the political party that commands the most support within Parliament. Elections must take place every 4 years, but they can be called earlier by the governor general—normally at the recommendation of the prime minister or if a government has lost the confidence of the House of Commons (i.e., failure of a budget bill or a vote of no confidence).

In contrast to the United States, Canada gained independence as a result of a long devolution of British power. Dominion status—control over internal affairs—came under the British North America Act of 1867. The Statute of Westminster (1931) granted Canada, Australia, and other self-governing dominions full sovereignty in the conduct of foreign policy, although until 1982 the assent of the British Parliament was required to amend the Canadian Constitution. A strong secessionist movement emerged in French-speaking Quebec in the 1970s.

Canada does not have a two-party system. Third parties play an influential role in Canadian politics, both nationally and locally. The Liberal Party has dominated Canada for much of the 20th and 21st centuries under strong prime ministers such as William Lyon MacKenzie King, Pierre Trudeau, and Jean Chrétien. In the election of 2011, the

Conservative Party of Canada under Prime Minister Stephen Harper won a commanding majority, and the New Democratic Party emerged as the Loyal Opposition with the Liberal Party falling to third place in the number of seats held in the Commons.

Canadian Military

Queen Elizabeth II and other members of the Royal Family maintain ties with many units of the Canadian military, often serving as colonels in chief. Constitutionally, the governor general serves as commander in chief of the military. Governor generals, as nonpartisan symbols of the nation, have often stressed during their terms in office the importance of honoring Canadian men and women for distinguished service or bravery, visiting troops in the field, and promoting public support of charities that aid servicemen and servicewomen. Several junior officers serve the governor general as military aides, and all military commissions are signed by the governor general.

Civilian control over the military resides with the Prime Minister and Cabinet through the Minister of Defence and the Department of National Defence and the Canadian Forces (CF). The Canadian Army, Royal Canadian Navy, and the Royal Canadian Air Force make up CF. There are two interservice operational commands: (1) Canadian Joint Forces Command and (2) Canadian Special Forces Command. The chief of defense staff is the senior-ranking commanding officer and is advised by the Armed Forces Council, which includes the chiefs of the naval, air, and land forces. Canada has traditionally relied on volunteers to fill the ranks of the armed forces, although during the two World Wars it did enact conscription that led to civil resistance in the province of Quebec.

Canada maintains small standing forces with an army that numbers 25,500 full-time soldiers organized into three infantry battalions, one armored regiment, one artillery regiment, and one combat regiment, along with other support troops. Army reservists number 16,000 and are dispersed in more than 100 communities.

The Royal Canadian Navy numbers 8,500 regular sailors and 5,100 reservists and has a fleet of 33 warships based in two commands in the Maritime Atlantic and Pacific. Frigates (*Halifax* class) with helicopter flight decks and destroyers (*Iroquois*

class) and four *Victoria*-class submariners make up the bulk of the fleet of the Royal Canadian Navy. During the Cold War, Canada's navy was tasked with responsibility for antisubmarine warfare in a possible conflict with the Soviet Union, but since 1989, the navy has been tasked to support a number of overseas operations, most notably during the Persian Gulf War.

The Royal Canadian Air Force has a fleet of 333 aircraft organized into 14 wings with 14,500 regulars and 2,600 reservists. The CF-18 Hornet serves as Canada's principal fighter aircraft, the CP-140 Aurora as Canada's maritime surveillance and anti-submarine aircraft, and the CH-146 Griffon as the principal tactical airlift helicopter.

Maintaining a military presence in the Arctic has been given added importance by successive governments as Canada has sought to assert its sovereignty in this region. Canada has not only sought to protect Canadian territory and honor commitments to NATO but also deployed troops around the world in peacekeeping missions. Critics have charged that too much is asked of a military in need of more advanced equipment, especially for ground troops. Although Prime Minister Stephen Harper has promised defense modernization and expansion, the costs are especially daunting for acquiring new combat aircraft and for maintaining an operational submarine fleet.

History

Canada and the United States remained fierce adversaries through much of their early histories. Though Canada was initially colonized by the French in the early 17th century, colonists of British North America fought alongside British regulars in a series of imperial wars against New France, leading to the eventual annexation of Canada into the British Empire under the Treaty of Paris (1763). During the American Revolution, the United States launched an unsuccessful invasion of Canada that, while succeeding at capturing Montreal, was turned back at Quebec. The American Revolution had a significant effect on Canada, as that British territory served as a place of exile for a large number of Loyalists fleeing the newly formed United States. In the War of 1812, the United States again tried to conquer Canada without success. Canadian militia played an important role in aiding British regulars in turning back American forces.

After the War of 1812, major territorial disputes continued into the 1840s. Great Britain maintained relatively few military forces in Canada after 1815, and the 1817 Rush-Bagot Agreement limited the number of warships on the Great Lakes and Lake Champlain. The prospect of war remained a possibility for American, British, and Canadian leaders into the 1920s. For instance, when running for President of the United States in 1844, James K. Polk threatened war if a territorial dispute regarding the Oregon Territory was not resolved in favor of the United States. British troops withdrew from Canada in 1871, excepting Halifax and Esquimalt, and Canada primarily relied on militia forces to defend the nation. Canadian troops did participate in the Boer War in South Africa (1899–1902).

Canada underwent a major mobilization during World War I. In 1914, the Canadian regular army numbered only 3,000; by the end of the conflict in 1918, this country of 8 million managed to raise armed forces numbering 625,000. Canadian land forces distinguished themselves throughout the war, most notably during the battles of the Somme and Vimy Ridge in France. A total of 67,000 Canadians were killed in action compared with the number of Americans killed in the war (approximately 53,500). Although Canada entered World War I as a loyal member of the Empire, the conflict played a decisive role in strengthening Canadian nationalism and altered Canada's relationship with Great Britain. During the interwar years, Canada increasingly carved out an independent foreign policy. In 1927, Canada sent a minister to its newly established Legation in the United States and no longer relied on the British Embassy in Washington, D.C.; the American government reciprocated by sending a representative to Ottawa.

The growing threat of Nazi Germany led President Franklin D. Roosevelt to strengthen ties with Canada, aided by his close personal relationship with Prime Minister King. When King George VI stayed at Roosevelt's personal residence at Hyde Park, New York, he was accompanied by King. In contrast to 1914, when Canada went to war as part of the British Empire, the Canadian Parliament issued a separate Declaration of War 1 week after the invasion of Poland in September 1939. In 1940, King and Roosevelt created a Permanent Joint Board on Defense and began joint planning for the defense of North America. Prior to Pearl Harbor, the

United States allowed American citizens to join the Canadian military without losing their citizenship. Once the United States entered the war, a substantial number of American forces were stationed in Canada, and the U.S. army built a major highway to Alaska through Canadian territory.

The bulk of the Canadian war effort centered on the war against Nazi Germany, although a contingent of forces participated in the unsuccessful defense of the British Crown Colony of Hong Kong in 1941. The Royal Canadian Navy played an instrumental role in the Battle of the Atlantic, expanding to a force of 900 vessels with more than 106,500 service members during the war. Canada created a land army of nearly 700,000 men and women who saw significant action in the campaigns in Sicily, Italy, the Normandy invasion, and the battles for France and the liberation of the Netherlands.

During the early years of the Cold War, the United States and Canada established an early warning radar system that stretched across Western Canada and the United States. In 1958, the two nations created the North American Aerospace Defense Command for defense of North American air space. Canada participated in the Korean War, contributing army units to the British Commonwealth Brigade and later Division. Canada was an original member of the NATO alliance and maintained ground groups in Germany from 1951 until the late 1980s to counter a possible Soviet invasion of Western Europe. During the Cold War, Canadian policies diverged from those of the United States in several crucial areas. Canada did not join the American war effort in Vietnam and allowed more than 50,000 American draft resisters to take up residence in the country. When Fidel Castro came to power in Cuba in 1959, Canada did not end diplomatic relations with this Communist nation. Canada participated in the first war against Iraq in 1990 but refused to support the second war to topple Saddam Hussein in 2003.

Afghanistan

The war against al Qaeda and the Taliban in Afghanistan is Canada's longest conflict, lasting more than a decade to date. More than 160 Canadians have died thus far, including soldiers, a diplomat, civilian aid workers, and a journalist. Only the United States and the United Kingdom have experienced higher losses. On a per capita basis, Canada

has lost more men than the United States. Polls indicate that most Canadians support the war—except in Quebec where a clear majority always opposed participation—and respect the sacrifices made by CF personnel. Yet most Canadians also back their government's choice to remove combat forces from Afghanistan in 2014. Many Canadians are also concerned about the possibility that war costs could exceed \$11 billion and that poor equipment could have led to the deaths of Canadian soldiers early in the war. There are also concerns about the war's less savory aspects, including allegations that detainees handed over by Canadians were tortured by Afghan authorities, mounting civilian casualties inflicted by Allied forces, friendly fire losses, endemic corruption in Afghanistan, and Pakistan's destabilization.

The initial rationale for Canadian participation in Afghanistan appeared simple. Al Qaeda's 9/11 attacks on the World Trade Center and the Pentagon constituted an assault on Canada's most important ally, an assault that killed more than 20 Canadians. So when U.S. forces began attacking Afghan targets on October 7, 2001, Canadian officers on exchange with U.S. armed forces were instructed by Prime Minister Jean Chrétien's government to take part. Within days, the Canadian government announced Operation Apollo, a plan to send naval forces, Joint Task Force 2 (Canada's Special Forces), and some ground troops to Afghanistan for a 2-year commitment.

Canadian participation in the conflict, however, aroused significant debate in Canadian policy circles as time went on. After the horrifying wars in Yugoslavia, Somalia, and Rwanda in the 1990s, many Canadian policymakers believed that Canada's traditional peacekeeping model was obsolete. Instead, a more robust "peacemaking" model, as exemplified by NATO's war against Serbia in 1999—a war Canada had joined—had gained sway in Ottawa before 9/11. This opinion about the efficacy of force was replicated in the United States, under Presidents Bill Clinton and George W. Bush, and in Great Britain under Tony Blair. Supporters of participation also benefited from the fact that U.S. and Afghan forces toppled the Taliban regime by December 2001, giving the appearance that Canada's role in Afghanistan would be "early in and early out." Canadian soldiers saw combat in early 2002 and did well; in particular, their sniper teams

won American plaudits. But in April 2002, four Canadian troops died when a U.S. plane bombed them during a nighttime training exercise, an incident that rankled as the pilot refused to accept blame.

With the "hot" war apparently over and the Taliban and al Qaeda forces on the run, in winter 2002–2003 Canada's troops, 2,000 strong, shifted to a peacekeeping-like role in the UN-mandated and NATO-led International Security Assistance Force (ISAF) that secured the capital of Kabul. While Canada's government supported the ISAF, the CF chafed. Eventually, three factors shifted Canada away from support for the ISAF. First, Prime Minister Chrétien's refusal to join the U.S.-led attack on Iraq unless it was mandated by the United Nations soured relations with the Bush administration. There was thus a perceived need in Ottawa to act more assertively in Afghanistan in support of U.S. goals. Second, Paul Martin, who replaced Chrétien in late 2003, sought a more robust role for the CF in Afghanistan, in part to address his public rejection of any Canadian part in the George W. Bush administration's plan for a continental ballistic missile defense. Seeking to carry out Martin's view of a 3-D approach—an emphasis on defense (security), democracy (governance), and development (reconstruction)—and with the United States preoccupied with Iraq, Canadian officials saw an opportunity to innovate in Afghanistan. They established a Provincial Reconstruction Team, a group of civilian and military advisers capable of providing aid and security in a designated area. After some searching, Canada settled on the vital province of Kandahar, the heartland of the Taliban movement, on the advice of General Rick Hillier.

Hillier's role in the switch was vital. A straight talking and personally engaging career soldier, an unusual personality as Canadian generals have tended to be quiet in public since the military failed to stop military unification in the 1960s, Hillier, having served and trained with the U.S. forces, wholeheartedly adopted the Marine Corps' notion of the "three-block war": that peace operations, humanitarian assistance, and combat would be comingled in most post-Cold War operations. Moreover, Hillier, who led the ISAF in 2004, believed that the CF, long starved of resources, could use the war in Afghanistan to effect a dramatic transformation into a robust and publicly supported military capable

of projecting power internationally alongside its U.S. and British allies. Hillier's ascension to the post of Chief of the Defence Staff in 2005 solidified the choice of Kandahar. Having rejected other quieter regions, Hillier and the CF saw Kandahar as the "linchpin" of Afghanistan, especially as the large U.S. air base near Kandahar City would add to Canadian capabilities while minimizing financial burdens. So after Canada's role in the ISAF ended in December 2005, a Canadian combat team of 2,500 troops arrived in Kandahar in 2006, and Canada's new minority Conservative government, led by Prime Minister Stephen Harper, extended Canada's mission in the country, slated to end in 2006, to 2008.

The Kandahar mission proved far "hotter" than anticipated due to the resurgence of the Taliban after the United States became mired in Iraq. Aided by allies in Pakistan, the Pashtun-dominated Afghan Taliban returned in force to the battlefield in 2006, and allied casualties mounted, notably in Helmand Province where British forces were situated and in Kandahar. Given the vast disparity in firepower, the Taliban's preferred weapon was the improvised explosive device. Prior to 2006, the CF had lost just eight men (including the four killed in the friendly fire incident noted above). Thirty-eight Canadian soldiers, however, were killed in 2006 alone, many more were wounded, and Canada's senior diplomat assigned to the Provincial Reconstruction Team was also killed by an improvised explosive device. Canadian losses were far higher than most other allied contingents because of inadequately protected vehicles, a shortage of helicopters that required vulnerable ground-based convoys to supply outlying military posts, and a Canadian tactical practice, borrowed from peacekeeping operations, of moving deliberately and visibly among the local populace to build trust and enhance cooperation.

As Canadian participation continued, mounting losses plus increasing concern about the war's nature and the ineffectiveness of President Hamid Karzai's Afghan regime ensured that the conflict became more controversial in Canada. Opposition grew as the death toll rose, except in the province of Alberta, where support for the war was much stronger than the rest of Canada, and in Quebec, where opposition had always been strong. In 2006, the head of the left-of-center New Democratic Party, Jack Layton, averred that Canada should abandon its combat

role and use the savings to fund social programs and health care. Others, forgetting that Liberal governments under Chrétien and Martin had incrementally committed Canada to Afghanistan, attacked Prime Minister Harper's support for the war as proof that he, like Blair in Britain, was George Bush's "poodle." Seeking to assuage these concerns and to tie the opposition Liberals more firmly to his own government's Afghan policy, in late 2007, Prime Minister Harper appointed the former Liberal foreign minister, John Manley, to head a bipartisan panel to investigate Canadian policies in Afghanistan and to recommend any changes.

The Manley Report, released in January 2008, criticized Liberal and Conservative governments for failing to manage the war effectively and for not telling Canadians why the war was being fought. While CF efforts were lauded, the panelists argued that the government, not the CF, had to set policy. They recommended that Canada's military role, slated to end in 2009, should be renewed if another ally committed at least one more battle group to the fight for Kandahar. They also emphasized that Afghan security forces should be trained to take up more of the combat burden. Canada's International Development Agency drew particular criticism for subsuming its efforts in multilateral initiatives that did little to publicize Canadian efforts and for a security policy that meant that its personnel rarely left Canadian encampments. Manley argued that Canada's International Development Agency should focus on a small number of high-value development projects such as the reconstruction of dams.

The report prompted changes. A new Afghanistan Task Force, situated in the powerful Privy Council Office, was created to coordinate the efforts of all government departments, though this led to allegations of micromanagement. A civilian representative—the Representative of Canada in Kandahar—was sent to Kandahar to lead the non-military effort on the ground and to better coordinate the civilian and military efforts in theater. Though there was some resentment from CF officers, the new arrangement worked well. The military's Strategic Advisory Team–Afghanistan, formed by Hillier in 2005 to advise the Karzai government about streamlining procedures, was also dismantled in 2008. Canada's Department of Foreign Affairs and International Trade had never been a fan of

Strategic Advisory Team–Afghanistan. The body was terminated when leaked documents suggested that Strategic Advisory Team–Afghanistan could be accused of drafting policy for the Karzai regime, not merely advising it.

A key aspect of the Manley Report, the need to set a withdrawal deadline if no allied combat aid was forthcoming, was taken up by Prime Minister Harper, who announced in late January 2008 that CF combat troops would be removed in 2011 if help did not come. A promise of U.S. aid came; however, after a Parliamentary debate in March 2008, the New Democratic Party and the separatist Bloc Québécois voted against maintaining a Canadian combat force in the country until December 2011. The Liberals supported a Conservative motion in favor of maintaining Canadian combat in the country until then.

Canada withdrew its combat task force at the end of 2011, but it continued to participate in NATO Training Missions aimed at improving the military effectiveness of the Afghan forces. As of 2012, 950 Canadian troops served in this mission. Plans call for a full withdrawal of these forces by 2014.

Canadian public support for the Karzai government also had declined in recent years. After 2 years of rumors, Richard Colvin, a Department of Foreign Affairs and International Trade official who served in Afghanistan in 2006–2007, reported to a Parliamentary committee that the CF knew that the detainees it was handing over to the Afghan authorities had been tortured, but both Hillier (now retired) and the government denied these claims. Canada's minority government nearly fell when it refused to release relevant documents concerning this issue in an unedited form. Only a compromise that allowed select Parliamentarians to examine the material eased political tensions. The questionable reelection of President Karzai in late 2009 and Karzai's subsequent assertion that he would join the Taliban if foreign interference in governance did not end alienated many in Canada and the West generally. The "surge" by U.S. forces, announced by President Barack Obama in late 2009, intensified the war and resulted in more casualties for the allies, the Taliban, and the Afghan civilian populace. Although the surge did meet with some success against Taliban forces, it is uncertain whether it dealt a decisive blow to the insurgency and whether the Karzai government can survive the withdrawal of all Western force. Some fear that the conflict in Afghanistan, like

the U.S. departure from Vietnam in the mid-1970s, could come to form Canada's first military defeat.

Galen Roger Perras

See also American Revolution; Colonial Wars (1607–1774); Korean War (1950–1953); North American Aerospace Defense Command (NORAD); Persian Gulf War; War in Afghanistan; War of 1812; World War I; World War II

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Website

National Defence and the Canadian Forces: www.forces.gc.ca

CARIBBEAN

The Caribbean archipelago is made up of around 7,000 islands and stretches more than 2,500 miles from the Bahamas to Trinidad. Terrain is varied and ranges from high volcanic mountains such as Jamaica's Blue Mountains to limestone hills and plateaus and flat lowland areas often resulting from coral deposition. The tropical climate is moderated by prevailing winds and has distinct rainy (May–November for much of the region) and dry seasons. Hurricanes can occur between June and November. Levels of rainfall vary geographically with windward mountain slopes receiving significantly more precipitation than leeward areas, which can exhibit semiarid conditions. Islands with lower elevation can also receive less rainfall on average.

The cultural landscape of the Caribbean is varied as well. Reflecting the colonial influence of a range

of European powers, the Caribbean is a tapestry of Dutch, English, French, and Spanish language and culture. Depending on the location, most areas of the Caribbean have predominantly African-derived populations, largely a reflection of the Diaspora. Post-Diaspora immigration from other world regions also brought immigrants from other areas such as South Asia to specific areas (e.g., Trinidad). Due to the rapid decimation of their numbers on contact with Europeans, Native Americans have had limited impact demographically and culturally on most parts of the Caribbean. This entry discusses the politics and history of the Caribbean, with a focus on U.S. military involvement in countering drug trafficking and money laundering in the region, and U.S. humanitarian aid to Caribbean countries.

Political Landscape

A range of political systems exists in the Caribbean, with democratic governments in all countries except Cuba. Two-party systems exist mostly in the former British colonies such as the Bahamas, Barbados, Jamaica, and Trinidad. In some of these systems, such as Trinidad, one party has traditionally been dominant; but more commonly, as is the case in the United States and Britain, control of the government tends to be cyclical, with power rotating between the two largest parties. Multiparty democracy can also be evidenced in the Caribbean in which legislative seats are awarded according to the number of votes each party receives, allowing even small parties to often have representation. Haiti is an example of the latter with more than two dozen active parties. In the smaller Caribbean microstates, single-party democracies have long been the norm as many of the nations lack the population and political/social diversity to sustain multiple, vibrant political parties with distinct agendas. Authoritarian (often euphemistically and erroneously described as “one-party”) systems have also existed in the Caribbean, wherein dissenting views/parties have been deemed illegal, with Cuba and the short-lived (1979–1983) Marxist regime of Grenada serving as examples.

Contemporary History

As historical remnants of the colonial era, four foreign powers retain possessions in the Caribbean: Britain, France, the Netherlands, and the United States. British possessions include the British Virgin

Islands, Anguilla, the Cayman Islands, Montserrat, and the Turks and Caicos. Islands under French control include Guadeloupe and Martinique, which are regarded as French Departments and send democratically elected representatives to the National Assembly, as well as St. Barthelemy and a portion of St. Martin, which are classified as Collectivities rather than Departments. Areas under Dutch control include the Netherlands Antilles—Aruba, Bonaire, and Curaçao—and also St. Martin, control of which is divided with France.

The United States has long had a formal presence in the Caribbean, acquiring Cuba and Puerto Rico in the Spanish-American War of 1898 and purchasing its Virgin Islands Territory from Denmark in 1917. Both Puerto Rico and the U.S. Virgin Islands maintain a tradition of limited local control while remaining territorially part of the United States. Since the mid-20th century, Puerto Rico has had the right to elect its own governor and draft its own constitution. It is not autonomous, though it is self-governing in local affairs, with the United States retaining full control of foreign relations and defense. A movement advocating full independence was active in previous decades. However, at present, the majority of Puerto Rico's electorate is divided on the issue of either becoming a U.S. state or remaining a Commonwealth and continuing to enjoy the economic advantages offered by this status such as the absence of federal income tax. The U.S. Virgin Islands have had limited control of local affairs since 1968, and at the polls, its inhabitants have repeatedly rejected both closer association with the United States as well as increased autonomy.

U.S.-Caribbean Involvement Since the Cold War

The collapse of the Soviet Union and communism facilitated a number of significant changes in the nature of U.S. relations with many world regions including the Caribbean. Previous U.S. foreign policy was driven by politicized foreign policy initiatives reflecting support for noncommunist regimes and for containment of socialist, anti-U.S. agendas in the region. Following the Cold War, U.S. policy in the Caribbean, which as a region has been described by the White House as America's “third border,” was in many respects reoriented to reflect shifting national interests, primarily toward efforts aimed

at supporting democratization and also combating crime, corruption, and international terrorism.

Recent economic decline in the agriculture, tourism, and other sectors and associated rising unemployment rates have contributed to increased prevalence of economically motivated crime in some parts of the Caribbean. The incidence and nature of crime, including violent crime, varies widely among countries, and local residents are in general more likely to be victimized than tourists. However, crime poses a significant security issue for many areas of the Caribbean. As a whole, the region's murder rate is several times higher than that of the United States and Canada. As of 2005, Jamaica had the highest murder rate in the world, with 60 murders per 100,000 people in the population. High and increasing levels of violent crime have also been characteristic of Trinidad and Tobago, Haiti, and even some of the smaller countries such as St. Lucia. Much of the violence is perpetrated by gangs involved in narcotics trafficking, kidnapping, and extortion. However, it should be stressed that not all areas of the Caribbean have experienced high rates of crime, and many areas such as Bonaire, the British Virgin Islands, the Cayman Islands, and Montserrat are considered very safe.

Drug Trafficking and Money Laundering

The principal areas of U.S. interest relative to security and criminal activity in the Caribbean are the illicit drug trade and the prospect of international terrorist groups using the region as a transit point or base of operations. Geographical proximity to the United States makes areas of the Caribbean suitable for smuggling various drugs including cocaine, heroin, and marijuana. Most Caribbean islands are merely transit points for narco-traffickers, but two countries, Jamaica and St. Vincent and the Grenadines, produce and export large quantities of marijuana. In 2006, the U.S. government designated 4 of the 16 nations of the Caribbean as major drug-producing or drug-transiting countries relative to the U.S. market: (1) the Bahamas, (2) the Dominican Republic, (3) Haiti, and (4) Jamaica.

Since the 1990s, U.S. military and law enforcement agencies have had an increased presence in the region, working to investigate and also interdict the flow of narcotics or unauthorized persons into the United States via, among other methods, patrolling air and sea transit corridors. In this expanded role, the

U.S. military has also provided significant materiel and logistical support and training to Caribbean military and law enforcement agencies in the arena of drug interdiction as well as post-9/11 antiterrorist efforts. The Bahamas and the Dominican Republic both cooperate closely with U.S. authorities on interdiction and other counterdrug measures. Concern exists that as the sugar and banana industries continue to decline in much of the Caribbean, it will be increasingly difficult to prevent cultivation of marijuana. Of broader concern is the potentially destabilizing effect drug-related and other criminal activity may pose for many nations, especially the microstates of the eastern Caribbean.

Closely tied to narco-trafficking and other criminal activity in the region is the presence of money laundering. The involvement of many Caribbean financial institutions in money laundering first received the attention of the U.S. government in relation to anti-drug-trafficking efforts. However, efforts to combat money laundering have also become an issue of national security as a key element in the war on international terrorism. The U.S. Department of State has identified five Caribbean island nations (and also the Cayman Islands, a British dependency) as significant sources of money laundering: (1) Antigua and Barbuda, (2) the Bahamas, (3) the Dominican Republic, (4) Haiti, and (5) St. Kitts and Nevis. Many of these nations such as the Bahamas have been proactive in addressing the problem of money laundering in recent years, due in part to U.S. pressure to safeguard against financing terrorism internationally. Governmental and business leaders in some Caribbean nations have complained that new financial regulations aimed at curtailing money laundering have undermined and complicated the financial activities of legitimate businesses and investors and have had unintended negative effects on the banking sector.

U.S. Aid

Although narcotics interdiction and antiterrorist efforts are relatively new roles for the military in the Caribbean, not all aspects of U.S. policy toward the Caribbean or military involvement in the region have changed since the conclusion of the Cold War. U.S. Southern Command headquartered in Miami and under its authority the Fourth Fleet of the U.S. Navy holds responsibility for military operations in the region. Both entities continue a long-standing

U.S. tradition of goodwill operations, humanitarian assistance, and military exercises, including joint training initiatives in the region. Examples of U.S. goodwill missions can be seen in Haiti, wherein U.S. forces safeguarded democratically elected governments in 1994 and again 10 years later and helped provide a security presence and logistical support for the Haitian government in the wake of the devastating 2010 earthquake.

As one of the world's largest providers of food, medical, and other humanitarian aid and developmental assistance, the United States has long played a significant role in helping safeguard the well-being of the people of the Caribbean. Often, U.S. humanitarian and developmental support is provided via military resources and logistical capabilities, as in the case of natural disasters such as hurricanes. Levels of U.S. aid to the Caribbean have generally been increasing since the 1990s, reflecting increased support for AIDS/HIV programs, disaster and reconstruction aid in the aftermath of hurricanes and other natural disasters, and increased funding for peacekeeping and democratization support. In 2005, U.S. aid to the Caribbean totaled around \$370 million, roughly one fifth of the U.S. aid budget to the hemisphere. Historically, Haiti has received the largest share (approximately 47% in 2000–2005) of U.S. aid to the Caribbean, followed by the Dominican Republic and Jamaica.

Trade Patterns

Interesting patterns of trade relations exist between the Caribbean and the United States. Since the 1980s, the United States has offered duty-free or reduced tariff arrangements on certain products imported from many Caribbean countries. In 2000, the Caribbean Basin Trade Partnership Act expanded U.S. preferential trade policies to include certain textile products. The Dominican Republic and Trinidad and Tobago have been the primary beneficiaries of such trade agreements, and both have significantly increased their exports to the United States. However, other nations have not been as successful, and over the same period, their export levels to the United States have remained flat or even declined. U.S. exports to the Caribbean have increased in recent years, rising from \$8.9 billion in 2001 to \$12.3 just 4 years later. Most U.S. exports to the Caribbean go to just four nations: (1) the Bahamas, (2) the Dominican Republic, (3) Jamaica, and (4) Trinidad and Tobago.

Historically, the United States has maintained a positive balance of trade with most Caribbean nations, the one exception being Trinidad, which exports fossil fuels to the United States. In short, the United States is more important as a market for Caribbean exports than the region is important to the United States as a customer base for its products. Progress has been made in promotion of regional and intra-regional free trade, and most Caribbean nations are participating in talks concerning the Free Trade Area of the Americas.

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See also Border Patrol; Cuba; Drug Interdiction; Haiti; Haiti, U.S. Intervention in

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CEMETERIES, MILITARY

The 19th century witnessed the establishment of military cemeteries. The horror of modern, industrialized warfare and the ability of bureaucratic nation-states to field vast armies necessitated the creation of public spaces specifically dedicated to honoring the fallen. Military (or national) cemeteries often occupy picturesque locations (like the bluffs overlooking Omaha Beach in Normandy, France) and are usually designed with the object of creating a contemplative or reverent atmosphere. The grave markers themselves—often unremarkable and uniform white

marble stones or religious symbols—project an egalitarian image of war dead that serves to highlight the sacrifices of common soldiers and obscure differences in rank. Modern military cemeteries are also significant cultural artifacts that have been used to forge a sense of national unity. Out of common sacrifice, it is thought, comes common purpose. Military cemeteries, particularly in the latter half of the 20th century, have also featured design elements—both religious and neo-Classical—that are designed to remind the living of the human cost of war and the nobility of sacrifice in service to the body politic. This entry discusses the history of military cemeteries, with a focus on U.S. military cemeteries from the Civil War to the present.

Origins of the Military Cemetery

Archaeological evidence suggests that the earliest humans placed a special significance on those who had died in battle or by otherwise violent means. Researchers have uncovered skeletal remains exhibiting signs of combat that have been carefully prepared for interment and buried with grave goods such as weapons and religious objects, presumably to be used in the afterlife.

Ancient literature is littered with anecdotal examples where war dead have been recovered from distant battlefields and buried with elaborate and public funeral rites. The ancient Greeks commonly eulogized their war dead and carefully recorded the identities of the fallen if the remains were not always recovered and identified. The Spartans are credited with instructing their warriors to return home brandishing one's shield or lying prostrate on it. Warfare during this period was often characterized by close-order combat, and the grisly aftermath of battle frequently left fields with small mounds of bodies where men had often been crushed and suffocated. The bodies, exposed to the elements and animals, were often stripped off armor and weapons and placed in graves near where they died.

The fallen in ancient Rome were also accorded respect, and many were honored with proper burials, including stone grave markers and monuments, often carved with the name, unit, and exploits of the deceased. War dead were also honored with public feasts. Grave sites carried a religious significance and were visited by one's relatives. There is also evidence that Roman legions cremated their fallen

comrades and sent the ashes home to the families. Expediency dominated battlefield funerary practices during the Medieval period. The depravation of siege warfare and the increasing lethality of weapons technology—along with concerns about disease and the smell of death—may explain why most of the fallen were summarily relieved of their armor and buried in mass graves on the battlefield. To be sure, the remains of nobles and soldiers from the elite were often escorted back to their home countries—sometimes at great expense—and afforded burial in churchyards whenever possible. This stratification—even for the military dead—continued well into the modern era. Until the late 19th and early 20th centuries, even prosperous states failed to adequately inter and memorialize the remains of common soldiers who fell in service to their country. Most of the remains of those who died in battle, until very recently, were hastily buried in mass graves or trenches without markers or ceremony. Soldiers, as subjects of the state who were often pressed into service, seldom merited proper burials, according to military and political elites.

The democratically inspired upheavals in late 18th and early 19th centuries—particularly the French Revolution and the Napoleonic Wars—ushered in a transformation in the way Western societies conceived of and honored their war dead. Modern, ostensibly democratic nation-states could no longer neglect the sacrifices of the common soldier. European governments erected monuments to the fallen, and respect for a country's war dead steadily grew among ordinary citizens into a phenomenon that many commentators and historians have described in pseudoreligious terms.

There is evidence that communities in Europe and the New World honored their war dead by burying them in a particular part of a municipal or churchyard cemetery, often marked with distinctive headstones and segregated from other plots by a physical barrier, such as a fence or a hedgerow. However, the first military cemeteries worthy of the name were conceived of and constructed in the United States during the Civil War. The already-breathtaking carnage of the American Civil War demonstrated, in bloody detail, that the prior ad hoc and largely privatized approach to dealing with war dead required a national and comprehensive approach. Waves of soldiers dying in the name of defending the Union and the democratic ideals embodied therein

required an appropriate response. Prior to the war, military dead were largely interred in small, hastily constructed cemeteries within the perimeter of a frontier military post or on a remote battlefield. Record-keeping and the identification of remains were often shoddy or nonexistent. Isolated burial sites in the field were often poorly marked, their location unrecorded. In September 1861, the War Department issued General Order No. 75, which stipulated that the U.S. Quartermaster General was required to provide for the burial of deceased soldiers and to keep records and erect wooden markers at grave sites.

Precedents Established by the Civil War and the World Wars

In 1862, the U.S. Congress went further and authorized the creation of a national system of military cemeteries to accommodate the mounting combat casualties and death from disease. The legislation, signed by President Abraham Lincoln in July 1862, established 12 national cemeteries, predominantly at the sites of military posts and hospitals. By the end of the war, more than 70 military cemeteries were established, including Arlington National Cemetery. This cemetery was initially created to provide burial plots for the dead who expired in army hospitals located in Washington, D.C. The selected parcel of land had been seized by the U.S. government; it formerly belonged to Mary Custis Lee, the wife of Confederate general Robert E. Lee. As many as 12,000 Union dead lay buried on the grounds of the former plantation immediately following the war. Confederate dead in northern soil often went unmarked and unacknowledged unless private citizens organized to locate and reinter the remains to southern states. In 1901, however, federal officials arranged for as many as 264 Confederate soldiers to be buried at Arlington, complete with distinctive headstones. Other national cemeteries soon followed suit and erected markers for Confederate dead in a gesture of national unity. The cemeteries at Antietam and Gettysburg among several other battlefield cemeteries, originally established by private organizations and their respective state governments, were passed to federal control as the system of national cemeteries grew throughout the 20th century.

The treaty that formalized the end of the Franco-Prussian War, signed in 1871, stipulated that both

sides would dedicate cemeteries to the remains of the war dead in their respective territories, regardless of the nationality of the deceased; however, it was not until the outbreak of the First World War that the great European powers established national systems of military cemeteries. The horrendous nature of the fighting, 19th-century infantry tactics running headlong into 20th-century weapons like gas and machine guns, produced appalling casualties—some 13 million dead—that, coupled with the dubious causes of the conflict, demanded a response from belligerent governments. By the end of the war, all of the major combatants had formalized their intent to disinter the remains of their fellow countrymen from temporary field cemeteries into permanent installations that could appropriately commemorate their sacrifice and, in some cases, to serve as sites to promote a particular brand of militaristic nationalism.

Two of the former combatants, Britain and Germany, created organizations to maintain these new national monuments. The British Commonwealth War Graves Commission and the *Volksbund Deutsche Kriegsgräberfürsorge* became the caretakers of dozens of cemeteries in Europe and elsewhere. The Commonwealth War Graves Commission, conceived as the Imperial War Graves Commission, was founded by Royal Charter in 1917, and today it consists of a board comprising representatives from several Commonwealth nations. While the casual observer can detect distinctive design elements when comparing the cemeteries of different countries, most hewed closely to the prevailing sentiments of modern cemetery architecture while often imparting ideologically informed messages about the meaning of wartime sacrifice. British cemeteries, for example, attempted to recreate an atmosphere evocative of rural English churchyards, complete with religious imagery, while the German *Totenburgen*, ominous and enclosed fortress-like structures, subsumed individual identity in the name of national unity and purpose. During the interwar period, these cemeteries became pilgrimage sites, and the wooden crosses that often adorned temporary field cemeteries became revered objects.

The U.S. government responded similarly to the sacrifices of U.S. service members during the Great War. The U.S. government contacted the next of kin to determine if they would prefer to have their loved ones repatriated to the United States or buried in a cemetery overseas (a majority chose to have the

remains returned stateside). The American Battle Monuments Commission (ABMC) was created in 1923 and charged with overseeing and maintaining the cemeteries located overseas and reserved for fallen American soldiers, sailors, and marines. ABMC officials designed aesthetically pleasing, park-like preserves complete with sculptures and chapels dedicated to honoring the memory of the fallen. Much like their European counterparts, American cemetery planners regarded the war dead with a reverence that was reflected in the design of the cemeteries. Many of the ABMC cemeteries were located on or near the sites of some of the largest and bloodiest engagements in which Americans fought. ABMC cemeteries contain not only a large number of the unknown dead but also the Tablets of the Missing, which list the names of servicemen whose remains were never recovered or identified. For the missing and presumed dead, these tablets are usually the only tangible monuments to their sacrifice.

As Europe and Asia descended into the global conflagration known as the Second World War, belligerent governments once again were forced to confront the problem of how to properly accommodate the millions of war dead on both sides. To be sure, the victorious Allies were able to bring more resources, both logistical and financial, to bear. Both the British and the American governments simply continued and refined many of the policies and practices from the First World War and added to the number of cemeteries they administered in western Europe. Both countries also established overseas cemeteries in all corners of the globe, including mainland Asia and the South Pacific.

The U.S. government, in particular, embarked on an ambitious program to recover and identify as many of their fallen military as possible. Teams of military investigators, mostly under the umbrella of the American Graves Registration Service, fanned out to all parts of the globe in search for war dead. American Graves Registration Service teams meticulously searched fields, forests, beaches, jungles, and remote mountain ridges in an attempt to recover unburied remains and exhume those found in isolated graves. Remains were usually then concentrated into regional, temporary cemeteries before they were eventually exhumed and formally identified. Here, new precedents were established as scores of forensic anthropologists and technicians were employed to do the painstaking work of identifying remains

often rendered unrecognizable by the horrors of combat. Identified remains were then transported to either the United States for final burial (in a national or private cemetery) or one of the newly established ABMC cemeteries in western Europe or the Pacific (along with the unknowns), according to the wishes of the next of kin. In the case of the United States, the work of recovering, identifying, and burying remains extended well into the 1950s. In Europe, the themes emphasized in post-World War II cemeteries changed markedly compared with those of the First World War. Whereas cemeteries created after the Great War extolled the ideologically tinged virtues of sacrifice on behalf of God and country, cemeteries built after the fall of Nazi Germany and the horrors that that regime inflicted on innocents, emphasized mourning those lost—often in a religious context.

Cemetery System Today

Today, the National Cemetery Administration of the U.S. Department of Veterans Affairs (VA) maintains 131 national cemeteries in 39 states as well as the District of Columbia and Puerto Rico. The U.S. Department of the Interior oversees 14 national cemeteries, many of which were established at the sites of historic battles, including Gettysburg National Military Park and Little Big Horn Battlefield National Monument. The Department of the Army is responsible for Arlington National Cemetery in Virginia and the U.S. Soldiers' and Airmen's National Home Cemetery in Washington, D.C. The ABMC maintains 24 overseas cemeteries for the war dead of the Mexican-American War, World War I, and World War II. Several states also maintain burial grounds for the remains of deceased service members and veterans.

Nevertheless, the VA operates the bulk of the resting places for deceased soldiers, sailors, airmen, marines, and veterans. Eligible persons are provided with below-ground burial or the interment of their ashes in a columbarium. Active-duty service members and veterans are buried at no cost to the family of the deceased. The VA furnishes grave markers that conform to existing memorials at the pertinent cemetery. The VA also provides U.S. flags that are draped over caskets and urns and presented to the next of kin. Military honors are arranged through and provided by the Department of Defense and include the folding and presentation of the burial flag

by uniformed personnel and the playing of “Taps” by a bugler. VA personnel and veterans organizations may also assist in such funerals. In 2007, military personnel and grieving family members buried as many as 101,200 veterans in national cemeteries, the bulk of whom served during World War II.

Interment in a national cemetery is restricted to those who died while on active duty, honorably discharged veterans, spouses and dependents meeting certain criteria, and those who served other governments allied with United States during a time of war and who died as a result of that service. Exceptions are also made for Merchant Mariners and members of the Philippine Armed Forces. The current budget (Fiscal Year 2013) projects an allotment of \$258 million for the operation and maintenance of the national cemeteries. The amount for the upkeep of the cemeteries represents a fraction of 1% of the VA budget, according to the most recent budget proposal.

Military cemeteries continue to serve as stark, often overwhelming, reminders of the sacrifices made during conflict. They also remain important cultural touchstones as they indicate how different societies view and honor their war dead and those who have served in the military with honor.

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See also American Battle Monuments Commission; Arlington National Cemetery; Veterans Affairs, Department of; War Dead, Disposition of; World War I; World War II

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CENSORSHIP

The power of censorship is, according to *Webster's*, “to delete from letters, dispatches, [and other means of communication] any secret or forbidden information.” In warfare, the prevention of the loss of tactical or operational information that may have an impact on military operations giving the enemy an advantage has been of paramount importance. With the advent of modern warfare, the prevention of the decay of public morale supporting war aims has made “the war of words and ideas . . . part of total war.” Communication and the instruments disseminating information have become part of the psychological war zone for the hearts and minds of populations. This entry discusses types of censorship, self-censorship and the use of censorship by the U.S. military, and the role of cable news, the Internet, and WikiLeaks.

Censorship exists with propaganda as the primary tools in psychological warfare. Whereas the three major types of propaganda—(1) strategic propaganda aimed at the enemy’s home front or enemy-occupied lands, (2) tactical propaganda directed against enemy troops in the field, and (3) occupational propaganda carried on in territories wrested from enemy control—are offensive in nature, censorship acts as the defensive countermeasure to the said propaganda. Strategically, the use of censorship is aimed at preventing the loss of morale at home by limiting “bad” news and enemy propaganda. Tactically, censorship is focused on both preventing the loss of operational information to the enemy and preventing enemy propaganda from reaching one’s own troops. Occupational censorship attempts to limit or eliminate alternative information sources in those territories wrested from enemy control.

The idea of censorship runs counter to the ideals of the American Republic. The First Amendment to the U.S. Constitution states, “Congress shall make no law . . . abridging the freedom of speech, or of

the press.” Censorship by its nature runs counter to these freedoms as enshrined by the U.S. Constitution. For the United States, the military’s need for censorship during wartime and constitutional rights of freedom of speech and the press have created an ever-evolving relationship between the U.S. military and the press.

Committee on Public Information and World War I

On the home front, U.S. entry into World War I saw the creation of the Committee on Public Information (CPI) under the direction of George Creel to promote the American war effort. Creel actively sought to have the American press and people use self-censorship in order to avoid a First Amendment conflict. From Creel’s perspective, the use of censorship laws held the danger of “slipping over into the field of opinion.” The CPI had no legal authority to censor, nor did it ever request such power; however, the CPI could, and did, provide enormous amounts of publications, including their *Official Bulletin*, which newspapers had free use to republish. Creel and the CPI created an effective quid pro quo with the American press, providing publishers copious amounts of free copy while those publishers fell in line with the overall viewpoint of the U.S. government regarding the war effort. The few publications that did not embrace the CPI’s concept of self-censorship and that were openly critical of the war effort, like *The Masses*, found themselves banned from the mails by the Postmaster General. Technically, such periodicals could still publish, but their banishment from the U.S. Postal System effectively closed them down as businesses.

The self-censorship system was embraced by the public with such furor that symphonies avoided works by Mozart and Beethoven, *The Katzenjammer Kids* became the *Shennanigan Kids*, and sauerkraut was renamed victory cabbage. The public’s embrace of self-censorship allowed the U.S. Congress to pass a series of laws expanding the scope of the government’s ability to censor beyond the limits of the 1917 Espionage Act. This act was used to stifle the most ardent domestic critics of the war and sent socialist Eugene V. Debs and labor leader “Big Bill” Hayward to prison, reflecting the hard censorship used by the U.S. military at the European Front.

The military censored U.S. soldiers’ letters home. The U.S. military also accredited reporters on the front. Unlike the Spanish-American War where writers, such as Richard Harding Davis, had the freedom to roam and report what they wanted, reporters now had to be accredited by the U.S. military to have access to the troops and the front. Frederick Palmer, formerly of the *New York Herald*, oversaw the censorship of the U.S. press, including photography. The accreditation process proved a useful means of controlling the stories and images sent back to the United States. One area of press-military tension was of press criticisms of the Allies that were initially passed by U.S. censors but later received official complaints and revocation of press accreditation for the reporters.

Office of War Information and World War II

The U.S. involvement in World War II saw a variation of the implementation of the system used during World War I. President Franklin D. Roosevelt’s administration divided the control of war information into three basic components: (1) the Office of War Information providing government propaganda both at home and abroad, (2) a voluntary system of domestic news censorship overseen by civilian authorities, and (3) the mandatory military censorship operations for combat zones. Like the CPI, the Office of War Information provided massive amounts of free copy for American publishers, films for theaters, radio broadcasts for the airwaves and every other conceivable media outlet, producing an effective means of filling the marketplace with the official government view of the war. As in World War I, the Postmaster General could suspend the mail permit of any publication sent via the U.S. Postal System. Out of some 17,000 publications examined, only six permits were revoked during the entire war period. The voluntary system of self-censorship worked. The press followed the Office of Censorship’s published codes so well that General Dwight D. Eisenhower viewed reporters as “quasi-officers.” Press in the field dressed like G.I.’s, traveled with the troops, and shared many of the same dangers as the troops.

The system of self-censorship developed through the two World Wars did not function as well into the Cold War era. The Korean War proved to be

problematic for both the press and the U.S. military. Disagreements with the official U.S. military version of the war, the competitive nature of reporters trying to outcoop each other, and a lack of a clear code of what was publishable and what wasn't led General Douglas MacArthur to impose a formal system of censorship that lasted until his firing by President Harry Truman.

The Vietnam War

The problems between the press and U.S. military exposed by the Korean War grew with the long involvement of the United States in Vietnam. One problem from the view of the press was the ever-widening credibility gap between how the press viewed the war and the official U.S. government narrative that focused on "good news." Adding to the tensions was the dual system of accreditation in which reporters were accredited by both the United States and the Republic of South Vietnam. The loss of accreditation by either would lead to a reporter's expulsion from South Vietnam. Many American reporters were critical of the South Vietnamese military and did not agree with the official U.S. military narrative espousing the effort of the government that American troops were trying to defend against the Communist North. This skepticism grew greater over time.

On the home front, there was no longer a unified agreement among the American media for self-censorship. Books, like Arthur Schlesinger Jr.'s *Bitter Heritage*, critical of U.S. involvement in the war, appeared in print. Publishers and other media outlets did not limit criticism of the war to the extent they had during World Wars I and II. On February 27, 1968, in the aftermath of the Tet Offensive, the CBS anchor Walter Cronkite broadcast a commentary predicting "stalemate" rather than victory. Most media historians have analyzed Cronkite's grim assessment of the American position in Vietnam as following the existing public opinion regarding the war rather than leading it. For President Lyndon B. Johnson and many in the American government, the Cronkite commentary on the war effort had a grave psychological impact on the public. To President Johnson, the loss of Cronkite meant the loss of "Middle America." The battle for the morale of the home front had turned. The self-censorship

of World Wars I and II imposed on the press by itself no longer applied.

The release and publication of *The Pentagon Papers*, a large collection of archived, classified Department of Defense documents related to the Vietnam War, in June 1971, shattered the official system of censorship that allowed the U.S. government to define and protect what it considered government secrets when the U.S. Supreme Court refused the Nixon administration's appeal to stop the *New York Times* from publishing them. Many considered Daniel Ellsberg, the official who leaked *The Pentagon Papers*, a hero. The Supreme Court's decision effectively limited the government's response to attempting to punish the leaker of the information rather than trying to reassert control of the information, as is the case with the 2010–2011 WikiLeaks document dump on the Internet. The aftermath of the Vietnam experience forced the U.S. military to reexamine its relationship with the press during wartime.

The invasion of Grenada in 1983 provided the U.S. military a solution to the problems of controlling the press. The U.S. Navy simply excluded the press during combat operations. Given the short operational timeframe of the mission, the complete exclusion of the press worked. For the press, Grenada created an impetus to work within military guidelines in order to have access to the battlefield. The invasion of Panama in 1989 provided the first major opportunity for a new less adversarial relationship to develop between the U.S. military and the press.

The U.S. military imposed news pools as the condition for the press to have access to the battlefield. Japan had used the modern press pools to control the flow of information during the Russo-Japanese War of 1905. In Panama, as in Manchuria decades earlier, the use of news pools restricted press access to any area until after the area was secured and allowed for the military to manage the flow of information from the front back to the States. The press complaints of the news pool system related to the delay in reaching the best stories. As in the case of Grenada, the limited time of operations gave the U.S. military near carte blanche in limiting press access to the battlefield and little time for a counter-narrative of official information to develop on the home front.

The Rise of Cable News Network and Cable News

The months-long buildup to the Persian Gulf War (1991) created a new problem for the allied coalition built by the George H. W. Bush administration with regard to the press. Though the U.S. military asserted that all reporters were to be “escorted” at all times and limited the number of reporters with access to the front lines by “embedding” them with American or allied troops, it could not control Cable News Network (CNN) inside Iraq. Those news organizations that wanted access to the battlefield via the limited number of embedded reporters had to agree to rules proscribed by the U.S. military regarding what could or could not be reported. Reporters who were embedded with American troops became dependent on the same troops for their survival and part of the same “team” similar to the relationship between the press, or “quasi-officers,” and U.S. military in World War II. CNN however was operating inside Iraq and broadcasting via satellite to the world outside of the operational control of the allies creating an unprecedented situation of a major American network broadcasting from the battlefield and enemy territory to the home front without any censorship constraints imposed by the U.S. military or government but with the blessing of the state the United States was actively engaged in warfare with.

The rise of 24-hour cable news has created a unique anomaly in the history of warfare regarding the control of information and a paradox for Western democracies with a free press like the United States. The ability of multinational media corporations to gain access to foreign territories, often at the cost of editorial autonomy, and the strong historical aversion to imposing overt censorship on the press in the United States, makes the American policy theoretically vulnerable to the “CNN Effect” where foreign policy (and by extension war policy) could be altered or even managed by the type of images the public and policymakers are exposed to. Thus, while physical access to the war zone and American troops has become more restricted in the 21st century than it was in the 20th, the ability of the government to control or censor information on the home front has decreased.

Thus, the information reported at the home front may radically differ from the perceptions of those at the front or in occupied territory subject to

U.S. military control and may be an extension of the military censorship. So while the U.S. military and civilian leadership in Iraq after the fall of Saddam Hussein during the Iraq War could control the Iraqi Media Network they created to provide pro-coalition news for the newly occupied Iraq, no such control could be extended to CNN or Al-Jazeera’s broadcasts as they beamed into the United States via satellite.

Al-Jazeera

Al-Jazeera, modeled after Western news services, was created in 1996 with the purchase of the British Broadcasting Corporation’s Arabic television division by the Emir of Qatar. The network’s mission was defined to provide an alternative perspective and to be an “authentic Arab news source for Arabs.” Given Al-Jazeera’s mandate and its links to the Qatar government from which it receives operational expenses, the network has been described as having a “Pan-Arab” or “Pan-Islamist” point of view by Western media analysts, while many Al-Jazeera reporters view themselves as “anti-imperialist.” The combination of Al-Jazeera’s anti-imperialist viewpoint with the network’s access to al Qaeda and Taliban leadership has created a series of policy dilemmas for the United States and its allies with regard to censorship of Al-Jazeera.

Though the U.S. military bombed Al-Jazeera facilities in combat zones, whether accidentally or not, during both the Afghan and Iraq conflicts during the War on Terrorism, during the administration of George W. Bush, such measures were only temporary in effect and had limited tactical benefit. Given the popularity of Al-Jazeera in the Arabic world and its moderate stance regarding the United States compared with other Arabic media outlets, the United States has taken a policy of engagement of having prominent administration officials appear on Al-Jazeera to actively “engage” the Arabic media and the Arabic world. Barack Obama gave one of his first interviews as president of the United States to Al-Jazeera.

This policy of engagement has not extended to the home front. Al-Jazeera is largely unavailable on American cable systems. The cause is twofold. In a crowded marketplace of cable news filled by CNN, MSNBC, FoxNews, the BBC, and financial news channels, many cable providers look at Al-Jazeera

and think that “if it looks like the BBC, why should we add it.” Additionally, the fear of an economic backlash from their customers over the addition of Al-Jazeera to the local cable lineup has made cable providers reluctant to add the network as one of their offerings. These two elements, a glut of CNNs and fear of customer backlash, have effectively led the cable industry to keep Al-Jazeera off American cable television, replicating the system of self-censorship that has existed in the American media since World War I.

Abu Ghraib and the Internet

Though Al-Jazeera can be kept off cable systems and its reporters can be denied accreditation to the New York Stock Exchange, the Internet and social media have provided a means of communication nearly uncontrollable. The use of cell phone and digital photo technology easily uploadable to the Internet means that war images can appear simultaneously across the globe. This technological advancement has created major problems for militaries in controlling images from war zones, especially for the United States. In May 2004, the television program *60 Minutes II* revealed the existence of photographs detailing the abuse of prisoners held at Abu Ghraib prison by the U.S. military. The photographs taken by U.S. military personnel quickly spread across the globe to worldwide criticism of the American military and its failure to adhere to Geneva Convention protocols. Abu Ghraib illustrated the problem in the rise of the Internet and social media and the ability of military leadership to maintain censorship regimens among military personnel. Unlike previous wars where communication between troops and their families back home was primarily limited to mail service and later radio and phone technologies that could be fairly easily controlled by military censors, 21st-century troops can be connected to the home front in an instant via cell phones and the Internet in a second and often wirelessly. Additionally, the self-censorship position taken by the Western press has only worked when it has been nearly universally adhered to. The publication of information on the Internet breaks down the universality of self-censorship, making reliance on a voluntary system of censorship, as envisioned by George Creel, no longer applicable to the Internet age. The Abu Ghraib photos have been followed by photographs of U.S.

soldiers burning defiled Korans in Afghanistan and U.S. troops posing with enemy dead. Each case has complicated the military and diplomatic position of the United States and its allies and has given their enemies strategic, tactical, and occupational propaganda points to exploit.

WikiLeaks

The emergence of a “socially networked world” has created serious problems of controlling information from the front lines. It has also created serious problems in terms of maintaining secrets pertaining to national security. WikiLeaks, a website founded by Julian Assange, released Afghanistan war logs of the United States and U.S. diplomatic cables in a series of massive document dumps. While U.S. legal precedent allowed the Obama administration to bring charges against Bradley Manning, the U.S. Army soldier who provided the documents to WikiLeaks, WikiLeaks itself, like the *New York Times* in the *Pentagon Papers* case, is not criminally liable for the release of national security materials. However, unlike the *New York Times*, WikiLeaks did not have the ability to properly editorially vet the documents. Though WikiLeaks was subject to denial of service and cyber attacks after it released classified information, the damage of the release had already been done; *The Guardian*, *New York Times*, and *Der Spiegel* all published excerpts of the documents. Short of resorting to the “nuclear option” of shutting down the entire Internet, which is a practical improbability given the damage such an option would do, there seems little that can be done once information becomes available in any electronic form on the Web. The WikiLeaks case along with the release of photographs in the Abu Ghraib case illustrate the new dilemma created by the Internet, social media, and social networking with regard to the control and censorship of information during wartime.

Thus, an anomaly of a strong system of tactical censorship based on limited access to the front and “embedding” along with the creation of pro-occupational news entities like Iraqi Media Network exists with essentially nearly nonexistent strategic censorship for the home front with the rise of 24-hour multinational news media organizations operating outside the control or influence of the U.S. military though possibly under the influence of any

nondemocratic state in return for access and social media that exists with literally no editorial controls. For military operations of a short duration, the advantages of the tactical censorship are obvious. However, for any prolonged military engagement or military occupation, the lack of strategic censorship can create the conditions for loss of morale on the home front.

Francis Rexford Cooley

See also Abu Ghraib; Journalists, Embedded; Media Relations, Military; Propaganda

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CENTRAL AMERICA

Because of its location, Central America has played a key role in determining the political, economic, and military security of the Western Hemisphere. Throughout the 20th century, Central America held tactical and economic interests for many nations, including the United States, because of its strategic setting near the Caribbean Sea, the southern coast of the United States, and the Panama Canal. Historically, the extreme poverty of Central America was one of the key factors that supplanted economic stability and political freedom in the region. During the Cold War, left-wing insurgency guerrilla groups and right-wing military dictatorships both vied for control of countries in Central America, which in turn increased the importance of the region for the United States, Britain, and other countries. Near the end of the 20th century, Central American countries attempted to shift away from military regimes and move toward civilian-run democracies. However, by the first decade of the 21st century, Central America continued to endure the economic and political difficulties that accompany the transition from military dictatorships to viable democratic governments. This entry examines the history of Central American countries, with a focus on the relationship between guerrilla forces and government/military forces.

Background

The Central American isthmus has historically included all the territory between the northern border of Colombia and the southern border of Mexico—an area of roughly 200,000 square miles. Central America encompasses the five modern countries of Guatemala, El Salvador, Honduras, Nicaragua, and Costa Rica, and holds a population of roughly 40 million people. Other countries or regions share, or border on, the geographic area of Central America but have only occasionally been considered part of the Central American region, such as Belize (which was a colony of Britain until



Map of Central America.

Source: Central Intelligence Agency, Washington, D.C., 1990.

1981), Chiapas (a Mexican state on the Guatemalan border), and Panama (which was part of Colombia until 1903 when it declared its independence from Colombia with U.S. assistance).

The first historical records related to Central America originated in the 1500s when the isthmus was governed by the Spanish monarchy via the viceroy of Mexico. During these colonial years (1535–1821), Central America was frequently referred to as the Kingdom of Guatemala and encompassed the entire isthmus from Chiapas to the border between Costa Rica and Panama. In 1821, Mexico declared its independence from Spain, and in 1822, Central America gained *de facto* independence from Spain as well when the newly formed Mexican nation annexed all of the Central American territory to the

Costa Rica–Panama border. Nevertheless, Central America did not remain under Mexico's political control for long. In 1823, it seceded from Mexico and proclaimed itself a free nation named the United Provinces of Central America (UPCA). The UPCA was composed of the five principal Central American nations and did not include Panama. However, the UPCA did not maintain political unity for much more than a decade because fears of Guatemala's hegemonic intentions caused the other smaller states to remain belligerent and isolated from federalized control. In 1838, in the midst of both civil and inter-regional wars, Nicaragua seceded from the UPCA, followed by Honduras and Costa Rica. When El Salvador declared its independence as well in 1841, the UPCA ceased to exist.

Over the next century, from the 1840s to the end of World War II in 1945, Central America floundered economically and politically. The countries of the region were too small to become very economically stable, and thus they became increasingly reliant on larger powers such as Britain and the United States for economic aid and support. In addition to economic problems, the region lagged behind other nations politically; while other countries in Latin America attempted democratic governmental reforms, Central America continued to struggle under dictatorial regimes and extreme poverty.

Modern Central America Since World War II

The Cold War between the United States and the Soviet Union (1945–1991) caused tensions in Central America regarding the proliferation of communism in the Western Hemisphere. Following the Cuban Revolution and Fidel Castro's rise to power in 1959, some American policymakers believed that their obligation to quash the spread of communism was even more critical. Following the collapse of the Soviet Union in 1991, Central America made some modest progress related to democratic freedoms, economic progress, and fewer incidents of ethnic repression and human rights violations. But these changes were hesitant, and during the first decade of the 21st century, the region continued to combat extreme poverty, immigration, and endemic violence.

To 1989

Nicaragua and El Salvador both struggled with warfare, corruption, and violence throughout the 20th century. The Somoza family ruled Nicaragua in a dynastic fashion from 1936 to 1979, and because of the Somozas' willingness to work with U.S. interests in the region, many American presidents supported the Somoza family despite its record of human rights violations and corruption. Because of violence, vice, and the vast wealth disparity in Nicaragua, left-wing organizations increasingly appealed to the poor, who lived under the worst conditions in the country. One such group, the Frente Sandinista de Liberación Nacional (FSLN; Sandinista National Liberation Front) was organized in 1961 and took its name from Augusto César Sandino, the Nicaraguan revolutionary who opposed the presence of U.S. troops in Nicaragua in the 1920s and 1930s. Sandino was assassinated in 1934, but his name became a rallying

point for the rural, poor, and left-wing groups who demanded better conditions and less governmental dishonesty.

Following the 1978 assassination of Pedro Joaquín Chamorro, a popular Nicaraguan newspaper editor and proponent of the insurgency movement, the FSLN rallied and toppled the Somoza family from power in 1979. However, the left-wing nature of the FSLN (and its influence on Nicaraguan political figures such as Daniel Ortega, who became president of Nicaragua in 1984) made policymakers in the Reagan administration nervous, so much so that, in 1985, the United States ratified a trade embargo against Nicaragua and funneled weapons and money to the Contras, the primary opposition force against the FSLN government. However, when the Iran-Contra scandal (arms sold to Iran despite an embargo) came to light in 1986, the U.S. government was no longer able or willing to send more aid to the Contras.

El Salvador, the smallest of the Central American countries, also had a multitude of systemic problems throughout the 20th century ranging from overpopulation and violence to economic immaturity and racial intolerance. In the 1930s, the Salvadoran military government seized land holdings belonging to indigenous populations to increase coffee production. When the Indian communities disputed the government's actions, the military slaughtered thousands of Indian peasants in campaigns that included the 1932 La Matanza massacre that involved the deaths of more than 30,000 people from El Salvador's indigenous and poor communities. These atrocities unavoidably led to more violence and instability throughout the mid-20th century, which eventually culminated in the massive 12-year Civil War (1980–1992) that devastated El Salvador, resulting in the deaths of more than 70,000 people. As was the case in Nicaragua, Salvadoran violence was waged between insurgency groups and government/military forces. The predominant guerrilla force in El Salvador during the war, the Frente Farabundo Martí para la Liberación Nacional (FMLN; Farabundo Martí National Liberation Front) took its name from a Salvadoran peasant leader named Farabundo Martí, who fought against government repression in the 1930s. Like Sandino in Nicaragua, Martí was also a martyr for the cause of the peasants and indigenous populations, and like Sandino, Martí's name was co-opted by the guerrilla

insurgency. In the early 1980s, 18 Catholic priests were murdered by the military for their support of the insurgency. One of these priests was Archbishop Oscar Romero whose story was soon told throughout Latin America. In 1985, the government of El Salvador returned to civilian control, but the government's tacit relationship with the military was still easily recognizable.

By 1987, the violence in both Nicaragua and El Salvador was mitigated by the Central American Peace Accord (also known as the Esquipulas II agreements), which eventually helped end much of the violence in Central America and promised the possibility of greater economic and political stability in the isthmus. The Peace Accord was brokered by the Costa Rican president Oscar Arias, who earned Central American support for the initiative. And even though the Peace Accord had fewer immediate effects in El Salvador than in Nicaragua, by the end of the 1980s, the endemic violence spread by the FMLN and the Salvadoran military began to decrease. The Peace Accord represented an important event in Central American history because it demonstrated Central America's ability to deal with its own problems without outside interference from the United States and other international organizations.

However, the Central American Peace Accord had less influence in Guatemala and Honduras. One of the most significant differences between Guatemala and other Central American countries is the fact that it has the largest indigenous population in the entire region. More than 40% of the population of Guatemala are indigenous Maya who speak a variety of different Mayan dialects. This lack of demographic homogeneity led Guatemalan policymakers to enact vagrancy laws, debt peonage, and indigenous integration efforts to a higher degree than in other Central American countries.

In terms of political development, Guatemala attempted the transition from military dictatorship to civilian government earlier than other countries in the region; in 1944, a university professor named Juan José Arévalo was elected president of Guatemala, ushering in the first wave of political freedom and democratic reform in Guatemala's history. In 1950, Jacobo Arbenz, a colonel in the Guatemalan military, succeeded Arévalo as Guatemalan president. Arbenz was not a typical military politician; he displayed open ties to the Guatemalan Communist Party, which alarmed

both the U.S. government and Guatemala's largest economic producer, the New Orleans-based banana exporter named United Fruit Company. In 1953, Arbenz issued Decree 900, which nationalized less than 250,000 square acres of fallow United Fruit Company land and redistributed it to nearly 100,000 Guatemalan peasants. This event prompted the subsequent Central Intelligence Agency coup d'état in 1954, which ousted Arbenz from power and replaced him with Colonel Carlos Castillo Armas, who ruled as a military dictator and ushered in a new era of repression and violence. Within a few years, the brutal Guatemalan Civil War erupted (1960–1996); it is the longest civil war in the history of the Western Hemisphere.

In the early 1980s, many of the Guatemalan insurgents identified with or joined an umbrella organization called the Guatemalan National Revolutionary Unity (URNG). As a guerrilla movement, the URNG attempted to break the resolve of the Guatemalan military regime by resorting to terrorism and brutal violence. By the end of the Guatemalan Civil War, more than 200,000 people had died, the large majority of whom were indigenous Maya.

Throughout the 20th century, Honduras remained somewhat unique from the other countries in Central America. Like Nicaragua and El Salvador, Honduras dealt with incredibly high poverty rates. But like Costa Rica, Honduras endured less violence and revolutionary activity than the other Central American countries. Military dictators controlled the Honduran government almost continually between the 1950s and the 1980s; these military leaders were sympathetic to the desires of the United States and provided some aid to U.S. forces that fought against left-wing insurgency groups elsewhere on the isthmus. In 1982, the civilian Roberto Suazo was elected Honduran president, and he began to rule Honduras with the cooperation of the military and the United States. But Honduran civilian government was still tenuous.

Since 1989

During the 1990s and into the 21st century, Nicaragua, El Salvador, and Guatemala all combated corruption and violence in their governments. But progress remained sluggish. Between 1990 and 1997, Violeta Chamorro—the widow of the journalist whose 1978 murder sparked the FLSN rise

to power—governed as president of Nicaragua. Chamorro privatized industries, lowered government expenses, and hesitantly presided over the military's transfer to civilian control. In due course, her policies broke down the military's partisan ties to government and initiated its transformation toward a professional military organization. In 2006, the former Nicaraguan president and FSLN leader Daniel Ortega ran for and won the presidency of Nicaragua for a second term. After he took office in 2007, his relationships with Fidel Castro's Cuba and Hugo Chávez's Venezuela made some U.S. policymakers hesitant. Between 2008 and 2010, Ortega reached out to the governments of Russia, China, and Iran in ostensible attempts at diplomacy, solidarity, and mutual cooperation.

After 1990, things improved modestly in El Salvador as well. The civil war ended in 1992 when government and guerrilla forces contracted a peace agreement that ended the hostilities and violence. In 1994, the country held the first democratic election in Salvadoran history. The FMLN transformed from a guerrilla movement into a legitimate political party and ran candidates in every presidential election since 1994. In 2008, the FMLN candidate Mauricio Funes won the presidential election and became the first FMLN president of El Salvador. And while this peaceful, systematic transfer of power demonstrated the development of greater political maturity in El Salvador, the country still struggled with human rights violations, economic growth, and prevalent violence.

But the most important change near the turn of the century was the end of the Guatemalan Civil War. During the early 1990s, the war appeared to be declining. But the end of the war was postponed by the presidency of Jorge Serrano, who became Guatemala's 29th president in 1991. In 1992, the Serrano government was embarrassed by the Guatemalan indigenous activist Rigoberta Menchú, who was awarded the Nobel Peace Prize for her graphic testimonial regarding the violence of the civil war, which brought global attention to Guatemala. Under increasing international pressure, Serrano quickly grew frustrated at his inability to control the military, the guerrillas, the government, and ultimately to end the civil war. In May 1993, Serrano dissolved the Guatemalan Congress and Supreme Court, suspended the constitution, and attempted to initiate a dictatorship. However, within

a week of his attempt to seize dictatorial power, Serrano resigned and fled to Panama in the wake of a unified front against him comprising the military, the Supreme Court, and the government and also intense international pressure.

In 1996, Alvaro Arzú became the president of Guatemala and fulfilled his campaign promise to end the four-decade-long civil war. After a series of concentrated negotiations, the Guatemalan government and the URNG signed a cease-fire in the spring of 1996, followed by governmental recognition of the URNG as a legal Guatemalan political party. However, following the end of the war, Guatemala continued to flounder economically and politically. In 2007, Rigoberta Menchú ran for president of Guatemala but was unable to gain sufficient support.

Throughout much of the Central American violence and confusion at the turn of the century, Costa Rica remained somewhat independent from the other nations on the isthmus. It enjoyed more economic growth than any other Central American nation, and this growth was mostly attributed to cash crop exports, foreign manufactures, and vibrant tourism. While serving his second presidential term, Oscar Arias continued to fight for Central American peace. In October 2007, Costa Rica agreed to participate in the Dominican Republic–Central American Free Trade Agreement, becoming the final Central American country to join the trade organization. This agreement went into effect on January 1, 2009, and was anticipated to significantly increase trade revenues in Central America.

While Nicaragua, El Salvador, and Guatemala were attempting to end violence within their borders, Honduras initially appeared, like Costa Rica, to be more democratic and less violent. On January 27, 2006, Manuel Zelaya took office as the president of Honduras. But his attempts at positive economic reform were quickly negated by the global recession that struck during the first decade of the 21st century. Financial instability led to tensions between the government, the military, and the population, and Zelaya's control continued to unravel as accusations of censorship, corruption, and nepotism continued.

In an attempt to regain control, in March 2009, Zelaya set in motion a referendum designed to modify or rewrite the Honduran Constitution. However, the Honduran Congress and Supreme Court both contended that Zelaya's executive order for a referendum was unconstitutional and illegal. When

the Honduran military refused to carry out Zelaya's order to organize the referendum, Zelaya discharged the head of the Honduran military, prompting a wave of further resignations by high-ranking military officials. On June 27, 2009, the Honduran Congress began impeachment proceedings against Zelaya, but the next day, on June 28, Zelaya was taken from his residence at gunpoint by the Honduran military and expatriated to Costa Rica. He remained in Costa Rica for nearly 3 months before secretly returning to Honduras and claiming asylum in the Brazilian embassy in Tegucigalpa. Presidential elections were soon held, and Porfirio López was elected president of Honduras, although many countries and international organizations refused to recognize the López government. On January 27, 2010, Zelaya went into exile in the Dominican Republic, while on the same day, Porfirio López was sworn in as the Honduran president. Honduras's democratic rupture indicated to many that while things appeared to be improving in Honduras and Central America, in fact Central American democratic progress and economic stability remained uncertain and fragile.

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See also Colombia; Guerrilla Warfare; Human Rights; Iran-Contra Scandal; Mexico; Nicaragua Intervention (1920s); Panama; South America

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CENTRAL ASIA

The Central Asian states of Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan faced both crisis and opportunity in their paths to independence. The Russian Empire, succeeded by the Union of Soviet Socialist Republics (USSR) dominated Central

Asia from the 19th to the late 20th century. In 1989, the Soviet Union cut military funding and completed the withdrawal of troops from Afghanistan. That same year, tensions released by policies of openness and restructuring, especially in Europe, combined with nationalist aspirations and economic strain, continued to undermine the viability of the USSR as a whole. The Soviets confronted widespread demonstrations and strikes and dealt with ethnic violence in Central Asia. In 1991, Central Asian leaders reluctantly declared independence. Subsequently, major world powers such as Russia, China, and the United States and its allies in the North Atlantic Treaty Organization (NATO) redefined their ties with the region. In response to these dynamics, Central Asian states have joined several international structures and established new bilateral and multilateral understandings. Several elements—proximity to Afghanistan, separatist movements, Islamic groups, the lasting impact of the Soviet military, economic potential, and the presence of oil, natural gas, and other resources—contribute to the global relevance of this multiethnic region. In the midst of potent social, geographic, and religious forces and faced with the enduring Soviet legacy, the transition to independence has presented each of these states with its own political, military, and economic challenges.

The independent course adopted by each republic, shaped not only by inherited conditions and resources but also by policy decisions, has produced unique developments in individual states. In brief, Kazakhstan controls massive oil reserves, enjoyed rapid economic growth in the mid-2000s, and has sought closer ties to the West than neighboring states. Uzbekistan inherited more military assets than some of its neighbors and has experienced periods of tension alternatively with the United States and Russia. With its political reform plans, Kyrgyzstan showed early promise for the development of democratic civil society, but economic crises and the expansion of presidential authority stifled its potential. Tajikistan has endured civil war, and many of its people live in poverty. A “president for life” ruled Turkmenistan for many years. The country holds large natural gas deposits and leans toward international neutrality.

Despite these differences, an examination of the recent history of Central Asia yields regional trends. The relationships among the Central Asian states and other world powers have also influenced

the region. This entry investigates events at state, regional, and global levels to provide perspective on the importance of society and geography, religion, politics, military, economics, and future prospects for Central Asia.

Society and Geography

Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan share a common history as Soviet republics in Asia. Russian, Persian, and Arab influences have shaped the region. Although each state bears the name of its largest ethnic group, they all include a mix of other populations, such as Russian or Uighur. All countries enjoy high literacy rates. Uzbekistan holds the largest population, but Kazakhstan covers the most area. Overall, the region spans slightly more than one third as much territory as the United States. The terrain includes steppe and desert. Major features include the Fergana Valley and several mountain ranges, including the Pamir, Tien Shan, Alay, and Altai. Areas in Tajikistan, Uzbekistan, and Kazakhstan experience earthquakes. Although landlocked, the region includes the Caspian Sea and the remnants of the Aral Sea. Rising soil salinity and water rights pose challenges for the region. Central Asian states share borders with each as well as China, Afghanistan, Iran, and Russia.

Religion

While a minority of Slavic descent adhere to Orthodox Christianity, those of most Central Asia follow Islam. A small community of Ismaili Muslims spans Tajikistan, China, Pakistan, and Afghanistan. Similar to Turkey and Pakistan, however, the majority of Muslims in Central Asia are Sunni. Turkey shares religious and, with the exception of Tajikistan, ethnic ties with Central Asia. Turkey moved quickly to exert influence after Central Asian independence by providing aid, signing treaties, and establishing trade agreements. Pakistan, which shares an Islamic heritage with Central Asia, has not risen to dominance in the area. In keeping with Soviet tradition, the Central Asian states remained secular republics, despite the cultural importance of religion in the region.

In a political context, many Muslims identify with moderate beliefs, though several groups have called for dramatic political change. The main program of Hizb ut-Tahrir officially concentrates

on the peaceful establishment of a state governed by Islamic law. Organizations like the Islamic Movement of Uzbekistan (IMU), however, established links with al Qaeda. The IMU drew support from contacts in Pakistan and other nearby countries. Juma Namangani, a Soviet veteran from the War in Afghanistan, helped found the IMU, which has advocated violence to achieve Islamic rule.

Politics

Sudden independence forced Central Asian states to develop new constitutional frameworks with little preparation. Each republic grants universal suffrage, and the popular vote determines at least some of the representation in one of the chambers of parliament. Generally, presidents exercise considerable authority in judiciary appointments. All constitutions ostensibly support democracy and popular sovereignty. In reality, presidents have displayed authoritarian tendencies. The role of the chiefs of state underscores the limitations of democratic reform so far.

Under the USSR, the Communist Party exercised authority over the Central Asian republics. Communist officials, either republic first party secretaries or other prominent members, became chiefs of state in the new countries. Transition of executive authority has proven problematic. Civil war erupted in Tajikistan from 1992 to 1997, though President Emomali Rahmon has retained power since 1994. Demonstrations ousted multiple heads of state in Kyrgyzstan in the 2000s. Specifically, protests against perceived election fraud and corruption culminated in the March 2005 Tulip Revolution. President Askar Akayev, who had ruled since 1990, fled the capital. Kurmanbek Bakiyev replaced Akayev. Roza Otunbaeva succeeded Bakiyev following more riots in 2010. In 2011, Almazbek Atambaev won election to the presidency. Presidents Nursultan A. Nazarbayev of Kazakhstan and Islam Karimov of Uzbekistan rose to power before independence and continue to rule 20 years later. They have extended their tenure in part by suppressing opposition leaders. Saparmurat Niyazov, formerly chairman of the Turkmenistan Supreme Soviet's Presidium, became president after independence. In 1999, he acquired the status of president for life. After his death in 2006, the deputy chairman of the People's Council, Gurbanguly Berdimukhammedov, became president and head of the government.

Political developments in the republics have elicited different responses from major world powers, including Russia, the United States, and China. Central Asian states quickly joined the Russian-led Commonwealth of Independent States on its formation in December 1991. From its inception, the Commonwealth of Independent States demonstrated limited effectiveness in coordinating political, economic, and military matters. Some members therefore formed other security partnerships. The United States also established new links with the independent republics. It has provided financial assistance to and sought military cooperation with Central Asia but has expressed objections over human rights abuses and the lack of progress in political reform, especially in Uzbekistan. China opened dialogue with the Central Asian states shortly after they declared independence. Its agenda includes stability in the Xinjiang Autonomous Region, an area that remains part of China but whose ethnic Turkic population, called Uighurs, has separatist tendencies. By working with its neighbors, who also have Uighur populations, China hopes to prevent the Uighurs from forming their own unified, ethnic state. China has also sought to promote cooperation and gain influence in other ways through its regional structures. In 1996, China, Russia, Kazakhstan, Kyrgyzstan, and Tajikistan established the Shanghai Five. Members addressed concerns over not only border disputes but also the presence of Islamist movements in Afghanistan and Central Asia. With the addition of Uzbekistan in 2001, the group reformed as the Shanghai Cooperation Organization (SCO). The SCO has played a role politically and is fostering military cooperation but exerts most of its influence through economic dealings.

The Military

The Soviet war in Afghanistan lasted from 1979 to 1988. The USSR conscripted soldiers, including men from Central Asia, to support the war effort against mujahideen resistance forces. As casualties mounted from the protracted conflict, popular support waned. The continuing cost of the war burdened the Soviet Union. Soviets finally began their withdrawal in 1988, completing the process in 1989. Many scholars point to the war as a contributing factor to the collapse of the Soviet Union.

The Soviet legacy continues to mold civil-military relations. Some of these consequences have been highlighted in the scholarship of Erica Marat. Tens of thousands of Central Asian soldiers have joined the Afghan Veteran Union since the 1980s. Members of the Afghan Veteran Union provide financial assistance for veterans in need (veterans lost support when the USSR collapsed), promote national patriotism, and, as a component of civil society, continue to affect politics and education. Furthermore, Central Asian republics inherited a tradition of subordination of the military to political authority. Even so, defense ministers generally have come from military, rather than civil, sectors. Authoritarian tactics of the republic presidents have also undermined civil-military dialogue.

The end of the Soviet Union also left an impact on Central Asia in other ways. Prior to 1991, a central command in Moscow coordinated military resources. After the fall of the Soviet Union, states struggled to form independent, national militaries. They faced this challenge concurrently with economic disruption caused by the USSR's disintegration. Armed forces in the region have worked to raise nonconscripted, professional armies and to update administrative frameworks. Equipping militaries with modern equipment and redesigning units for the realities of combat in the post-September 11 environment are goals that have proven especially difficult. This stems in part from budgetary limitations.

Although no longer part of the Soviet Union, Russia continued to exert influence over military policy in the region. Following the Soviet collapse, the military equipment and personnel that Russia did not recall to its own territory remained unevenly distributed throughout the region. Kazakhstan and Uzbekistan inherited more significant assets than their counterparts. For example, stockpiles of tactical and strategic nuclear weapons, relinquished by 1995, fell under Kazakhstan's jurisdiction. With high inflation and declines in economic output, the republics faced budgetary restrictions in their efforts to reform the military. Early conflicts illustrated military weaknesses, most notably in Kyrgyzstan during a 1999 clash in Batken. Kyrgyzstani and Uzbekistani armed forces demonstrated limited ability to combat insurgents from the IMU. After inflicting significant casualties, IMU forces fled and evaded capture. As noted by Roger McDermott, lack of proper

equipment, intelligence, and training complicated efforts of the armed forces.

In the early 2000s, the remaining partners of the 1992 Collective Security Treaty (CST)—Russia, Belarus, Armenia, Kazakhstan, Kyrgyzstan, and Tajikistan—began reorganizing into a new military alliance, the Collective Security Treaty Organization (CSTO). Uzbekistan later made efforts to join. Although established as a multilateral organization in that it promoted agreements and cooperation among multiple countries, the CSTO has especially served as a vehicle for Russia to promote bilateral arrangements between individual members and itself. Similar to NATO, the CSTO declared that members would consider aggression against one as an act against all. The CSTO has made efforts to form a collective peacekeeping force and conducts joint military exercises. In response to groups like the Islamist group Hizb ut-Tahrir, the IMU, and others, the CSTO has promoted antiterrorism efforts. The CSTO expanded influence over economic matters by merging with the Commonwealth of Independent States' Eurasian Economic Community (EurAsEC). The CSTO has a rotating presidency among member states, though Russia provides the bulk of the funding. Russia extends its influence in the region through the CSTO, but China also helps shape Central Asian policies through its leadership in the SCO.

Although the organization emphasizes economic cooperation, the SCO promotes antiterrorism efforts. It established an antiterrorism center in Tashkent, Uzbekistan, and has formed the Regional Anti-Terrorist Structure (RATS). It also conducts annual military exercises. Generally, these are not conducted with the CSTO. The SCO meets annually and the chairmanship rotates. Most of the funding for the SCO comes from China and Russia.

Central Asian states have also cooperated with the West. Kazakhstan, in particular, has pursued a foreign policy divided among Russia, China, and the West. All the five republics, with Tajikistan being the last to agree in 2002, joined NATO's Partnership for Peace. The United States and its allies encouraged the republics to participate in the peacekeeping Central Asian Battalion (CentrAsBat). Like the CSTO and the SCO, NATO has promoted antiterrorism efforts.

After September 11, 2001, all Central Asian states cooperated in some fashion with the

United States and its allies. The United States and other coalition members maintained stations in Tajikistan and at Manas National Airport in Kyrgyzstan. Kazakhstan offered use of its airfields. Turkmenistan agreed to support humanitarian missions. Uzbekistan offered the use of the Karshi-Khanabad airport, also known as "K2."

Relations between the United States and Uzbekistan soured following the events of May 2005, which are frequently referred to as the "Andijan Massacre." The government deployed armed forces during a protest in the city of Andijan, Uzbekistan. Soldiers clashed with civilians, resulting in many deaths. Uzbekistan insisted that they fired on bandits and terrorists. The United States condemned the event and called for a full investigation but met with resistance from the SCO. As tensions rose between the countries, Uzbekistan asked the United States to leave K2 in 2005, and American forces withdrew later that year.

During the conflict in Afghanistan, the United States and the Central Asian states demonstrated some ability to cooperate militarily. Kazakhstan later provided additional support for actions in Iraq. The country formed a peacekeeping battalion known as KazBat. Hostilities in Afghanistan, however, also generated negative consequences for the region. Following military action in Afghanistan, drug trafficking increased in Central Asia, especially in Tajikistan.

Economics

Central Asia holds rich deposits of natural resources. It possesses significant reserves of oil, natural gas, gold, mercury, rare earth metals, and uranium, among other assets, though these are distributed unevenly among the republics. The region ranks among the world's top producers of cotton.

Soviet policy encouraged republics to develop specialized economies. Key products included grain and oil from Kazakhstan and cotton from Uzbekistan and Tajikistan. A long history of intensive cotton production and other farming practices have strained the water resources in the region. Despite efforts to coordinate water usage, discussions about water rights remain especially contentious. Central Asian states have faced other challenges. After the disintegration of the USSR, countries initially sought to establish the Russian ruble as a common regional

currency but rejected this project in favor of national currencies. All countries experienced high inflation and a significant contraction in gross domestic product. Recovery began only around the turn of the century. Kazakhstan enjoyed additional prosperity in the mid-2000s. Economic crisis in the 2000s further worsened the situation in Kyrgyzstan.

Although the republics are no longer as closely integrated with Russian economic policy as during the Soviet period, Russia remains an important trading partner. Additionally, Russia has financial arrangements with individual states. For example, Russia continues to lease the Baykonur Cosmodrome, once important to the Soviet space program, from Kazakhstan.

Other powers have gained a foothold in the region. The United States has established some trade relations. Like Afghanistan, the United States imports goods from Turkmenistan. The U.S. and Western institutions such as the International Monetary Fund have also provided economic assistance and encouraged market reforms and privatization.

China, in particular, has also sought economic relations with Central Asia and access to energy. It has promoted these goals through the SCO. China has become an important trading partner with the region. China has grown to be a major importer from each state, and a major exporter to Uzbekistan, Tajikistan, Kazakhstan, and Kyrgyzstan. China has invested heavily in Kazakhstan. In the 1990s, it established air and rail connections between the capitals of Kazakhstan and Xinjiang Province.

Summary and Future Prospects

Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan share a legacy of Soviet influence, but regional cohesion remains weak. Post-Soviet elites have mobilized nationalist rhetoric in their state-building projects, and ethnic identities that defy national boundaries—ethnic riots emerged even before the end of the USSR—remain a potential force of conflict and change in the region.

In the wake of the Soviet Union's collapse, the countries faced stiff challenges building new political, military, and economic structures. High inflation and decline in gross domestic product complicated these efforts. The region also has endured civil war, riots, and movements calling for the establishment of Islamic states. In general, protracted and difficult

transition marked the path of independent statehood in Central Asia.

Although states have remained secular, political, military, and economic reforms in the region, with the possible exception of Kazakhstan, have achieved limited success. Presidential authoritarianism remains common. In particular, Western hopes for the rise of Kyrgyzstan as a model of liberal democracy faded as economic crises, corruption, and expanding presidential power tainted the country's policies.

Russia continues to exert influence in the region and has shown unease with the presence of American military forces within neighboring states. In recent years, powers such as China have increased in prominence. The CSTO, the SCO, and NATO have all conducted exercises with military forces in the region and have expressed goals of combating terrorism.

Despite continued challenges in the region, including debt and corruption, numerous opportunities exist for cooperation among Central Asian states and other powers. Though the United States and China may vie for influence over the region's vast natural resources and energy reserves, mutual interest in combating drug trafficking and Islamist insurgency represent common goals. Central Asia will remain globally significant in the years ahead.

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See also Afghanistan; Asia; China, People's Republic of; Pakistan; Russia; Turkey

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CENTRAL INTELLIGENCE AGENCY

The Central Intelligence Agency (CIA) is an independent U.S. government agency responsible for providing national security intelligence to policymakers and the president. The CIA has provided intelligence since its inception in 1947 and undertakes international covert operations. Because the CIA is restricted from acting domestically, it has an inherent international intelligence focus and is one of the most recognized intelligence agencies in the world. This entry describes the background and creation of the CIA as well as providing an outline of operations in which the agency has been involved. The entry also looks at the CIA's current strategic operations.

Background and Creation of CIA

In 1947, President Harry S. Truman announced the creation of the CIA under the National Security Act, which legally enabled the agency to collect and analyze intelligence. The importance of intelligence gathering was illustrated during and immediately after World War II, and the creation of the CIA ensured that such capabilities could continue in a postwar landscape. Previously, intelligence gathering and reporting fell to the National Intelligence Authority and the Central Intelligence Group. The passing of the National Security Act was strategic in that besides effectively reorganizing, increasing, and strengthening the intelligence capabilities of the United States, it also created the post of director of central intelligence, whose position became principal adviser to replace the National Intelligence Authority and Central Intelligence Group and signaled a new era of intelligence capability.

Because the CIA's function was to gather intelligence integral to the safeguarding of the nation, it was created, after much congressional scrutiny, as an independent agency under the auspices of the National Security Council (NSC). This meant that the CIA would provide the NSC with the intelligence the latter group required to make assessments about policy and external relationship management. Congress sought strict assurances that the CIA would be restricted to only clandestine intelligence-gathering activities and intelligence analysis and that it would not be involved in any policy or lawmaking—the latter activities perceived to be the domain of the NSC. The CIA thus became an independent intelligence-gathering agency with a specified focus on the analysis of national security concerns and clandestine activities. Both Congress and the president have oversight of CIA activities.

Directorates or Services Within the CIA

Like most large organizations, the CIA is broken up into smaller directorates or offices that allow each section to specialize and also allow for some degree of autonomy in their activities. There are four directorates: National Clandestine Service, Directorate of Intelligence, Directorate of Science and Technology, and Directorate of Support.

The National Clandestine Service came into being in 2005 after previous incarnations as the Directorate of Plans (1951–1973) and most recently

as the Directorate of Operations (1973–2005). This directorate is responsible for the collection of human intelligence (HUMINT) and for planning and executing covert operations. The Directorate of Intelligence is responsible for intelligence dissemination related to U.S. policy concerns worldwide and publishes the *President's Daily Brief* and the *World Intelligence Review*. The directorate publishes highly classified material for the upper echelons of policy and security officials, including the president and the cabinet. The Directorate of Science and Technology is a highly technical directorate that often collaborates with the wider intelligence community on matters as diverse as science research to electronic surveillance. The Directorate of Support is responsible for the provision of key services that allow the aforementioned directorates to function, ranging from telecommunication to medical services.

Until 2001, the CIA also included the Directorate of Administration. The Directorate of Administration's essential functions are funneled into and through specific offices, including Human Resources, Public Affairs, the Office of General Counsel, Office of Equal Opportunity, Office of Congressional Affairs, Office of the Inspector General, and the Office of Military Affairs. Together these directorates and offices provide the framework and means for intelligence gathering, analysis, and dissemination.

The CIA typically employs the use of clandestine services to gather intelligence. This means that intelligence is gathered through the use of covert operations—usually human intelligence. That's not to say that the CIA doesn't use other forms of intelligence gathering. Imagery and signals intelligence (SIGINT) are also used; the CIA regularly incorporates foreign instrumentation signals intelligence (FISINT), communications intelligence (COMINT), and electronic intelligence (ELINT) into assessments. It is important to note that the majority of signals intelligence used by the CIA comes from partnership with the National Security Agency.

CIA Operations: Cold War

During the Cold War with the USSR, the CIA was able to test its intelligence-gathering skills with covert operations designed to destabilize the Soviet government and those countries within the Eastern

Bloc believed to be supporting the USSR. A special Soviet Operating Division existed within the CIA Office of Special Operations that devoted itself to covert intelligence-gathering activities on Russian soil. Intelligence was fed back to the United States and Western European agencies on Soviet movements and plans—especially threats to West German sovereignty. For example, the “Berlin Blockade,” instigated by Joseph Stalin from June 24, 1948, to May 12, 1949, saw the CIA releasing weekly intelligence summaries—a testament to the efficient use of clandestine services and its ability to covertly access sensitive information. The CIA also undertook counterintelligence activities in response to the activities of East Germany's *Ministerium für Staatssicherheit* (Stasi; secret police) and the Soviet Union's KGB (*Komitet gosudarstvennoy bezopasnosti*; secret police/national security agency) within the Eastern Bloc.

Cuba: Bay of Pigs Invasion 1961

The CIA also recruits and trains intelligence operatives where it may further and safeguard national security interests. The failed April 1961 “Bay of Pigs” invasion saw the CIA recruiting and training exiled Cubans in an attempt to overthrow the Cuban government. A major problem with the operation was that it was believed that Cuba had received counterintelligence from the KGB and others as to the attack and was ready with reinforcements. Many observers agree that CIA operatives and intelligence analysts should have been aware of the Cubans having such knowledge, and the resulting sociopolitical fallout was so extreme that President John F. Kennedy announced publicly the failures of the CIA with their intelligence analysis and questioned its ongoing usefulness to the government.

CIA Involvement in Southeast Asia

The CIA was heavily involved in intelligence-gathering activities in Southeast Asia, notably during the Vietnam War era. The period from 1950 to 1974 saw heavy CIA involvement in Vietnam, Laos, and Cambodia. American strategists relied heavily on covert intelligence in the fight against the North Vietnamese. U.S. attempts to counter the so-called domino effect of communism saw covert operations spread across the region in an attempt to stave off a Southeast Asian communist bloc.

The CIA provided training and finances to troops in Vietnam, Cambodia, and Laos. In what was commonly referred to as “The Secret War,” the CIA trained thousands of Hmong soldiers to fight the communist Vietnamese–partnered Pathet Lao who wanted to overthrow the Royal government, finally succeeding in 1975.

CIA Operations in Central and South America

The CIA also undertook many operations in South American countries during the Cold War. The CIA played a key role in overthrowing Guatemala’s Arbenz regime in the 1950s and engaged in an ongoing effort to overthrow Fidel Castro in Cuba. The CIA was actively involved in a propaganda campaign against the Brazilian President Joao Goulart from 1961 to 1964, and in 1961, the CIA was involved in a covert operation to assassinate Generalissimo Rafael Trujillo of the Dominican Republic. It is widely believed that the CIA was also involved in Bolivia in the coup that deposed Victor Paz Estenssoro, as well as in antisocialist campaigns in the country from 1964 to 1975.

Post–Cold War CIA Operations

In keeping with their intelligence-gathering capabilities abroad, the CIA was notable for its ability to provide timely intelligence during the Gulf War and Operation Desert Storm. The CIA provided expert intelligence and analysis on the Saddam Hussein regime—in fact, the organization had been active in Iraq from the early 1960s, providing analysis on terrorist activities, military technology, internal policies, and the sociopolitical situation. Sources suggest CIA involvement in planning coups, financing campaigns against Saddam, and funding internal intelligence agencies that could assist the CIA in its ongoing operations against the dictator.

CIA—and other intelligence organizations’—reports of Saddam Hussein’s ongoing efforts to produce weapons of mass destruction played a key role in justifying the U.S. invasion of Iraq in 2003 (though it became clear after the invasion that these weapons did not, in fact, exist). During the conflict, the CIA continued to play an important role, providing intelligence to U.S. and coalition forces and alerting the administration to human rights issues, such as the availability of drinking water, health care, and so on.

CIA involvement has been notable during the ongoing War on Terrorism, particularly with regard to activities such as extraordinary rendition, assassinations, and torture. Most recently, the CIA has come under scrutiny for its use of drones in relation to targeted killings of civilians in other countries. The CIA has increased its use of unmanned aerial vehicles in international sovereign airspace in an effort to assassinate individuals deemed a threat to U.S. security. The CIA’s use of unmanned aerial vehicles has resulted in significant controversy, and debate has ensued as to whether these actions conform to international law.

The CIA and 9/11

The September 11, 2001, attacks on American soil changed the psyche of the American people forever and shook their trust in the capabilities of government agencies’ ability to adequately protect them. These events raised serious questions regarding the CIA’s ability to provide and act on intelligence and therefore protect the United States. In response to the attacks, a special 9/11 Commission was set up in November 2002 to analyze the response to the attacks and also to provide an analysis of the intelligence communities’ role in the attacks—most notably, the capabilities of the CIA and the Federal Bureau of Investigation.

The commission’s report placed blame on both the CIA and the Federal Bureau of Investigation’s intelligence-gathering operations and use of intelligence and called for intelligence reform to ensure the safeguarding of the United States and its interests. The 2004 Intelligence Reform and Terrorism Prevention Act effectively reformed the CIA by creating the Office of the Director of National Intelligence. This office oversees the management and leadership of the intelligence community, whereas earlier the CIA was responsible solely for its own actions and had no mandate to coordinate with other intelligence-gathering agencies.

CIA Strategic Developments

A major strategic development for the CIA is the increased use of technology for intelligence capability—both collection and dissemination. In 2010, the CIA announced that investing in technological infrastructure was critical and, in line with the creation of U.S. Cyber Command (USCYBERCOM), would

allow for increased intelligence capability. U.S. Cyber Command represents the centralization of existing cyber-focused military service commands, like the army, navy, and air force. As a result, the CIA is increasingly moving toward merging human covert intelligence and signals intelligence, which allows for increased use of artificial and electronic intelligence.

There has also been more movement toward expanding intelligence capability in the Australasian/Oceania region. Specifically, CIA efforts have focused on utilizing Australia as a launching pad to intelligence activities in Southeast Asia and East Asia due to CIA's close relationship with the Australian Secret Intelligence Service (ASIS), Australian Secret Intelligence Organization (ASIO), and the Australian Federal Police (AFP). This push comes from a strategic partnership that has been in existence since the late 1960s, notably at Pine Gap, which is believed to be the largest CIA facility outside the United States.

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See also Defense, Department of; Defense Intelligence Agency; Intelligence Organizations, Military

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CHAPLAINS

Chaplain have been a part of American military units since the colonial era. Chaplains were appointed to George Washington's Continental Army and, since the 1790s, have served with the U.S. Army and the U.S. Navy. Historically, their role has ensured that servicemen and servicewomen are able to follow the tenets of their faith while in uniform. Although there have been legal challenges asserting that the chaplaincy violates the First Amendment establishment clause, federal courts have rejected claims that providing military chaplains is unconstitutional. In the view of the courts, maintaining a chaplaincy allows those in the armed services the Constitutional right to freely exercise their religious beliefs.

Chaplain serve with the army, navy, and air force as commissioned officers. Chaplains assigned by the U.S. Navy serve the U.S. Marine Corps and the U.S. Coast Guard. Although chaplains are non-combatants by international law and custom, historically, they have often put themselves in harm's way to minister to servicemen and servicewomen. More than 400 chaplains have died while in the line of duty, and eight have earned the Medal of Honor.

Chaplain's principal responsibilities are to lead religious services and to serve the pastoral needs of those in the service, such as visiting the sick and the wounded. This role takes on added importance for troops engaged in combat, and one of the most somber duties for chaplains is to lead memorial and funeral services. Pastoral counseling, a role embraced by many chaplains, is viewed as beneficial in promoting good morale, especially for those in the enlisted ranks. Both stateside and on foreign bases, chaplains also care for the spiritual needs of the families of servicemen and servicewomen.

Chaplain have often played a crucial role in promoting humanitarian relief to civilians caught in war zones. In World War II, Jewish chaplains played a critical role in providing relief to Holocaust survivors. In Korea and in Vietnam, chaplains oversaw relief efforts aimed at orphans and displaced civilians. At the same time, chaplains have come under criticism for failure to challenge military policies that violate the ethical imperatives of their faith. During the Vietnam War, a soldier who had witnessed a massacre at the village of My Lai informed a chaplain serving with the Americal Division; the chaplain

subsequently failed to take effective action to ensure that the military chain of command properly investigated this reported incident.

History

Chaplains have always been volunteers, even when the United States relied on conscription during the two World Wars and early Cold War. Until the 20th century, chaplains in the army and navy received their appointment with few formal qualifications, and neither the army nor the navy had a chief of chaplains. Proportionally, the number of chaplains in the service was small until the 20th Century. For instance, the first federal Congress in 1791 authorized only one chaplain for the army. During the War of 1812, small numbers of regular chaplains assigned on the brigade level were supplemented with militia chaplains. Although each naval ship was authorized to have a chaplain, an 1842 law limited their number to 24, and this provision remained in effect through the Civil War even though the navy had more than 600 ships in service.

The Civil War witnessed a vast expansion of the chaplaincy to meet the influx of the huge citizen armies formed by the U.S. government and the Confederacy. Religion played an important role in sustaining soldiers on both sides. This conflict also witnessed the appointment of the first African American chaplains within the U.S. Army, as well as the first rabbis.

The late 19th and early 20th centuries witnessed a sustained effort to professionalize the chaplaincy and to ensure they had adequate religious training and experience. As part of this process, the army and navy mandated those seeking an appointment as chaplain receive an ecclesiastical endorsement from a recognized religious body. As a result of these efforts, chaplains are among the few members of the American military whose commissioning appointment depends on an official sanction from an organization outside the armed forces. Clergy seeking an appointment as chaplain must still receive the endorsement of a religious denomination and/or interdenominational organization, such as the National Association of Evangelicals or National Jewish Welfare Board. Clergy must possess a college education and should have attended a theological school even if their faith does not mandate it. For instance, Christian Scientists do not have an ordained clergy, but to accommodate the military, they send prospective chaplains to theological school

in order to qualify to meet the educational qualifications for the military chaplaincy.

Prior to World War I, chaplains received no formal training from either the army or the navy regarding their duties and responsibilities. During World War I, both services established training schools for chaplains that sought to educate chaplains on military regulations and laws, provide some rudimentary military training, and consider the unique religious environment chaplains would encounter. Training schools played a significant role in creating an ethos among chaplains, especially in the army, that stressed the need for chaplains to meet the needs of all servicemen/women irrespective of their faith. At the minimum, this entailed finding chaplains of other faiths to lead services for non-Christians and making special provisions for holidays (i.e., securing matzos for Jews during Passover). Currently, chaplains schools for the army, navy, and air force are all based at Fort Jackson, South Carolina.

The National Defense Act of 1920 created a Chief of Chaplains in both the army and the navy, and this contributed to further professionalization of the chaplaincy in both services. It ensured that chaplains in the field had a high-level advocate in the War and Navy Departments able to promote their interests. In World War II, the Chief of Chaplains was granted general officer rank in both the services. In 1948, the air force established its own chaplaincy, and a Chief of Chaplains was appointed.

World War II marked a watershed for the chaplaincy and religious life within the American military. President Franklin D. Roosevelt and senior military leaders promoted policies that ensure the free exercise of religion for American general infantries serving within the military. Congress appropriated funds to build hundreds of ecumenical chapels at military bases. The chaplaincy expanded dramatically, but strong efforts were made to have it reflect the religious affiliation of American GIs, requiring an unprecedented expansion of Roman Catholic priests and rabbis within the service.

Despite having more than 10,000 clergy in uniform, the army and the navy strained to meet the needs of more than 15 million men in service during World War II. To ensure that chaplains served as many GIs as possible, Protestant ministers were required to lead a nondenominational service for GIs, although they could hold a separate service following the rites of their own religion. At the behest of the military, the Jewish Welfare Board created a

common prayer book for worship by Conservative, Orthodox, and Reform Jews. Recognizing the limited number of chaplains, many clergy went to great lengths to accommodate soldiers' religious needs. To stay close to the front lines, many stationed themselves at medical aid stations to assist with the incoming wounded and to offer spiritual comfort.

During the Cold War, American leaders stressed religion as one of the essential differences between Communism and the American way of life. To bolster morale, chaplains were assigned the task of character education by the U.S. Army, seeking to encourage enlisted men in understanding the ideological nature of the conflict with the Soviet Union. The military continued the practice of mandating Protestant chaplains perform a general Protestant service and even created a uniform Sunday school curriculum for use at army bases. During this period, resistance started to emerge among evangelical chaplains over these interdenominational practices; they argued that the focus on interdenominational worship conflicted with their spiritual beliefs.

The Vietnam War led to a decline in the number of mainline Protestant ministers and rabbis serving in the military. In part, this reflected the impact of the antiwar movement on many Protestant denominations, as well as the Reform and Conservative movements of Judaism. Although Roman Catholics remained the largest single denomination represented in the armed forces, the number of Catholic priests declined, reflecting the demographic decline in the number of ordained Catholic priests.

Under the All-Volunteer Army, the chaplaincy has taken on a more evangelical character. In part, this reflected not only the retreat of mainline chaplains but also the rising number of evangelicals serving in the military. Despite this growing number of evangelicals, Roman Catholic adherents remained the largest single faith. In 1974, the chaplaincy became more diverse with the inclusion of women as chaplains, reflecting a wider trend as an increasing number of religious denominations began to ordain female clergy. The first Muslim chaplain was appointed in the 1990s, and the first Buddhist chaplain in the 2000s.

Multiple and Conflicting Roles

Several inherent tensions emerge from chaplains' dual role as clergy and military officer. Although

the armed forces insist that chaplains must first and foremost consider themselves clergy who adhere to the tenets of their faith, they are also commissioned officers subject to military law and discipline. In the organizational structure, chaplains generally serve as staff officers in a specific command, but they also report to the Chief of Chaplains. Since chaplains have always been volunteers, most who served have reconciled the violence inherent in war with the ethical principles of their faith. In the case of the Christian tradition, many chaplains embrace the just war doctrine that accepts the use of violence to deal with evil.

While making religious accommodations by providing chaplains, the military has also placed limits on the degree to which servicemen and servicewomen can practice their faith. For instance, with few exceptions, they are banned from wearing beards and are not permitted to wear religious head coverings while on duty. Often, servicemen and servicewomen are required to remain on duty even during religiously significant holidays. Access to clergy and religious services can be difficult, especially for those deployed overseas. Some chaplains are essentially itinerant so they hold religious services for their adherents, especially for those serving Jews, Muslims, and Buddhists. Many smaller naval vessels have no chaplain stationed on board, and religious services—if conducted—must be led by lay leaders. For some faiths, the absence of a chaplain means certain religious rituals cannot be performed; for instance, only an ordained priest can say Mass or grant absolution in the Roman Catholic Church.

In all the services, official policies and an informal ethos stress that chaplains should serve the religious needs of all servicemen and servicewomen. Chaplains have often worked diligently to ensure that men and women of different faiths are able to worship, especially on religiously significant holidays. Tension exists, especially for many evangelical Protestants, over the question of proselytizing and interfaith gatherings. While official policies do not explicitly ban evangelical outreach, there is a strong sentiment within the chaplains corps, especially in the army, that an individual chaplain should not seek to convert those of other faiths (i.e., not raid the flock of other chaplains). However, some evangelical Protestants have insisted that their religious faith makes proselytizing imperative, and they also argue they must publicly point out the errors

inherent in other faiths. Chaplains are frequently tasked with giving prayers at ceremonies and events that are inclusive of individuals of all faiths. Several Protestant chaplains have protested when commanders issued directives mandating that prayers avoid a sectarian cast and mention of Jesus Christ.

The military continues to emphasize chaplains' diverse roles: promoting the free exercise of religion, strengthening troop morale, serving as a counselor to servicemen and servicewomen in distress, and furthering individual morality and personal responsibility. In wartime, they have often led funeral services for units to memorialize those killed in battle.

The servicemen and servicewomen they serve are growing even more diverse. Protestants and Roman Catholics continue to make up the majority of those in armed service, but there are growing numbers of Buddhists, Muslims, and Hindus as well. Despite the adage "there are no atheists in foxholes," slightly more than 0.5% of American service members have declared themselves atheist or agnostic. In a 2009 survey regarding the religious beliefs of those in the armed services, 20% of all servicemen and servicewomen listed no religious affiliation. There have been calls by some atheists in uniform and among secular humanist groups for the appointment of atheist chaplains.

The U.S. Constitution mandates no religious test to hold political office and establishes no national religion. Instead of weakening religion, religion has thrived within the American society even with this lack of state support and sanction. The military chaplaincy has helped ensure that servicemen and servicewomen do not have to abandon their religious faith in order to serve their country.

G. Kurt Piehler

See also Constitutional Rights, Personnel; Morale

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CHINA, PEOPLE'S REPUBLIC OF

At more than 6 million square miles and with a border shared with 14 different countries, China ranks as the third largest geographic country in the world. Currently the world's most populous country, China contains 1.3 billion people. The Communist Party of China (CPC) runs the country from the capital of Beijing and oversees multiple provinces, as well as the two special administrative regions of Macau and Hong Kong. The Chinese economy is the world's second largest and is also the fastest growing. China's expansive size means that it contains many environments, from deserts to monsoon-flooded rice paddies. The Yangtze and Yellow rivers, the country's two major watercourses, flow to the ocean in the east from Tibet. China contains mountains, subtropical rainforests, plains, grasslands, and deserts—including the Gobi. The expansion of these deserts is proving a major environmental concern. Chinese culture traditionally places a strong emphasis on the family, placing responsibilities on the family and nation above the individual.

This entry describes the political structure of the People's Republic of China (PRC) as it exists today and then provides an overview of Chinese history and current affairs. It also provides an overview of China's current military system. China's emergence as a global economic power in the early 21st century is nothing short of remarkable given the nation's turbulent history in the 19th and 20th centuries. But in considering China's history, it is important to keep in mind that for many Chinese this is a return to power once enjoyed by the nation in an earlier era. In the 1400s, while Europe was only emerging from an era of political and economic fragmentation, China was a major global power. The rise of Europe and later Japan would contribute to China's decline and fragmentation, which would not be reversed until the formation of the PRC in 1949.

Chinese Government and Politics

The government for the PRC has three central bodies: (1) the People's Liberation Army (PLA),

(2) the State Council, and (3) the Chinese Communist Party (CCP). The Paramount Leader is the head of these three bodies and generally holds the following posts: General Secretary of the Central Committee of the CPC, President of the PRC, and Chairman of the Central Military Commission. The Paramount Leader is part of the Politburo Standing Committee of the CPC, a small committee that consists of the top leadership in China that controls the CCP. The Politburo Standing Committee, however, is only a section of the larger politburo, which manages state and regional issues. The State Council, chaired by the Premier, controls the administrative tasks for the PRC, and the PLA enforces order. Furthermore, most positions of power in the PLA and the State Council are held by party members, though not all.

As in most communist states, the Communist Party and the government are separate institutions. At the same time, the Communist Party holds a monopoly on political power and only allows a few token opposition parties to exist. Since the liberalizations of the 1970s, there have been greater opportunities for free expression and dissent, but China still restricts basic human rights when authorities perceive any threat to the supremacy of the Communist Party. The government is especially zealous in censoring the Internet and controlling the flow of any information deemed subversive.

The National Party Congress legally controls the Communist Party, but actual power is exerted by a small politburo and even smaller standing committee. It is this small group of party elders that picks the senior leadership of the country and makes key policy decisions. Since Mao Zedong's death, the politburo's size and influence has increased, diminishing the autonomy of the Party General Secretary and Chinese Premier. Officially, the National People's Congress elects China's President and Vice President for 5-year terms. Regional legislative bodies and the PLA elect members of the People's Congress who serve 5-year terms. But in reality, China's senior government leaders are selected by the politburo.

Both the party and government exert control over China's judicial system. Human rights activists have protested the lack of due process within the judicial system and the widespread use of capital punishment. In the economic arena, the rule of law is not uniform, and there have been widespread complaints regarding China's failure to protect the

intellectual property rights of American companies, especially those in high-technology fields.

China is organized into 23 provinces, five autonomous regions (e.g., Inner Mongolia and Tibet), four municipalities, and two special administrative regions—the former Portuguese colony of Macau and the former British Crown Colony of Hong Kong. Provincial and local governments have significant autonomy within the Chinese system; this has allowed a number of regional party officials to build significant political power bases.

Imperial China

The Xia Dynasty, China's first recorded dynasty, dates back at least to 2100 BCE. Though plagued by invasions from warlord states, the Xia managed to maintain control over its core territories. By the Qin Dynasty (221–206 BCE), China began to build the Great Wall, a project that the Ming dynasty (1368–1644) expanded. As early as the Han Dynasty (202 BCE to 220 CE), China maintained diplomatic missions, culminating with the hosting of Marco Polo around 1266. The Ming Dynasty, the last dynasty run by ethnic Han Chinese, expanded Chinese land holdings and military might. Ming Emperors supported the creation of a powerful fleet that undertook a series of voyages around the Indian Ocean basin to project Chinese power and establish commercial relations with societies as far away as East Africa. In 1433, however, the Ming Dynasty stopped the expeditions to focus on internal concerns. In 1644, the Ming Dynasty fell to the Jurchens, also known as Manchu (from Manchuria), who created the Qing Dynasty, the last Chinese dynasty.

Trade relations between the Qing and the West soured quickly. Western nations had grown accustomed to trade with China, and items like Chinese silk, porcelain, and tea had become staples in European society. The Portuguese reached the country first, seeking trade and bringing Christianity, and soon after, the Dutch and British joined the Portuguese in establishing their presence in China. While Chinese officials viewed outside nations as subordinate and trade as unnecessary, the government allowed trade in limited amounts, focused on a select few cities like Macau and Canton. Furthermore, all foreign trade had to be handled by the Cohong, a Chinese merchant guild. Then, in 1760 with the creation of the Canton System, which

restricted foreign trade with China even further, the British East India Company pressed the Chinese government for more open ports for trade and a fixed tariff. To add to the tensions foreign powers had with China, traders struggled to sell foreign goods to the Chinese, forcing the exchange of gold and silver bullion for Chinese goods. When the British East India Company proved unable to gain a foothold in China, the British turned to the illicit import of opium.

Britain began to import opium in mass quantities into China following their establishment of control over opium production in India. China experienced an epidemic of opium addiction, and when China decided to enforce their anti-opium laws, the British responded with ultimatums and violence, sparking the First Opium War (1839–1842). The victorious British enforced the Treaty of Nanking, imposing a fixed tariff on trade, ceding Hong Kong to the British, and abolishing the Cohong. The Treaty of the Bogue supplemented the Treaty of Nanking, enforcing extraterritoriality for British subjects and giving Britain a “most favored nation” status. Afterward, France, the United States, and a series of other countries demanded similar treaties and were able to secure extraterritoriality in a series of unequal treaties. Subsequent disagreements led to another Opium War, and these issues, combined with internal discord, forced the Chinese to begin efforts to modernize the country.

China's attempts to modernize began with Conservative Confucian Reform or “Self-Strengthening.” China needed a complete modernization of the countries' administration, education, military, and more, but Conservative Confucian Reform did not provide for any drastic changes. At the same time, Japan sought to gain mainland colonies, specifically Korea. This Japanese push for expansion led to the First Sino-Japanese War. The war ended with the Treaty of Shimonoseki, with Japan as the victor; the loss humiliated China. Concessions in the Treaty of Shimonoseki forced China to open more ports for trade and gave Japan rights over Korea and control over several islands, including Taiwan.

China attempted several more reforms and modernizations in the years following the conflict, but none provided the complete modernization that China needed. Furthermore, China suffered from internal problems while continuing to blame

foreigners for the countries' difficulties. This sentiment resulted in the Boxer Rebellion, a bloody insurrection that sought to drive out all Westerners from China and laid siege to foreign legations in Beijing (1900). Once the United States and other foreign powers intervened to crush this rebellion, China faced even further restrictions and an indemnity.

Emergence of Modern China

By 1905, the Empress of China decided to undertake more drastic reforms, including the creation of a constitutional monarchy. However, the revolutionary group *Tongmenghui* opposed royal rule, leading to the October Revolution. Following the Revolution's conclusion, revolutionary Sun Yat-sen was made temporary President of the Provisional Republic of China in 1911. Later, following the abdication of Emperor Puyi in 1912, Sun became the leader of the Guomindang (Chinese Nationalist Party; also spelled Kuomintang). However, by 1913, Yuan Shikai seized power and soon after Sun was exiled. In 1916, Li Yuanhong replaced Shikai, though Li's control of the government remained limited, and Premier Duan Qirui held a majority of power until 1926.

The Guomindang experienced many problems. Most notably, the revolutionary upheaval resulted in destabilization, allowing parts of China to fall under the control of warlords. Social unrest resulted in the May 4th Movement in 1919, in which 3,000 students and professors flooded Tiananmen Square protesting the government's weaknesses. This protest radicalized members of the New Culture Movement in China, and 2 years later, they formed the Chinese Communist Party. In 1922, the Guomindang government forged an alliance with the CCP, leading to an offensive against the regional warlords.

The Northern Expedition (1926–1928) resulted in military victory over many warlords, and the remaining warlords chose to recognize the Guomindang government. Guomindang military leader Chiang Kai-shek was given the position “Chairman of the State Council” in 1926. Chiang brought drastic reforms to the area of foreign affairs, where relations began to improve. However, in 1927, the coalition between the Guomindang government and the CCP ended, with the CCP shifting its focus to cities and rural provinces, bringing social, land, and education reforms. Chiang opposed

CCP actions and began “Bandit Suppression” campaigns in 1931. The most famous campaign resulted in CCP’s Long March (1934–1935).

Conflict With Japan

During this period, Chinese-Japanese relations remained tense. Following reports that Chinese terrorists had attempted to destroy a Japanese railroad line in 1931—subsequently demonstrated to be a Japanese ploy now known as the Mukden Incident—the Japanese Kwantung army seized the city of Mukden as well as the rest of Manchuria from China. Rising tensions between the two countries eventually forced the CCP and Chiang Kai-shek into another alliance, called the Second United Front. In 1937, following the Marco Polo Bridge Incident, the Second Sino-Japanese War began in earnest, signaling the beginning of World War II in Asia.

As the Japanese Kwantung army pressed toward Nanking, the Guomindang abandoned the city and retreated west to the city of Chongqing (Chungking), which became the temporary Chinese capital for the remainder of the war. The Japanese military, on arriving in Nanking, began a reign of rape, murder, and terror known as the Rape of Nanking. Backed into a corner at Chongqing, the Guomindang faced a possible collapse, but with foreign countries providing aid, the war fell into a stalemate between Japan and China. Ultimately, however, American involvement in the Second World War resulted in Japanese defeat by 1945.

The Rise of Communism in China

The Chinese Civil War resumed with full force with the surrender of Japanese forces. Despite significant support offered to Chiang’s forces, as well as an effort to negotiate a political settlement by General George Marshall, the Chinese Communists prevailed in the Chinese Civil War. In 1949, Mao Zedong proclaimed the PRC.

Chiang and significant parts of his government and army fled to Taiwan and maintained that they were the only legitimate government of China. Initially, the United States moved to cut ties with Chiang after the Civil War, but the outbreak of the Korean War led to a reversal of U.S. policies. The United States refused to recognize the PRC and maintained that the Republic of China remained the legitimate government of China. The United

States provided Chiang with defense guarantees and moved significant naval forces to protect Taiwan from a possible invasion. Until 1971, the Republic of China would hold China’s UN seat and serve on the Security Council.

Mao and the Communist Party created a command economy that nationalized industry and collectivized agricultural production. Mao’s regime did stabilize the economy in the early 1950s, certainly aided by a period of peace after several decades of war. At the same time, Mao’s economic management would suffer a major failure in the 1950s under the Great Leap Forward, a 5-year program that sought to dramatically increase industrial production. This program failed miserably and led to widespread famine.

Mao’s regime did not tolerate political dissent. For instance, Mao fostered a cultural revolution in the mid-1960s that sought to undermine traditional centers of power within Chinese society. Empowered by Mao, youth in the Red Guard carried out a widespread purge of the Communist Party and elements of society deemed counterrevolutionary. Stability would be restored in 1967 by the intervention of the PLA.

Militarily, the PRC engaged in several armed conflicts. In 1950, Mao’s forces moved into Tibet and annexed the country. In November 1950, China entered the Korean War after UN forces approached the Yalu River border. Chinese intervention resulted in a serious defeat for American forces and ended U.S. enthusiasm for liberating North Korea from Communism. The Korean War ended in a stalemate in 1953 and served to heighten American fears regarding the spread of communism in Asia.

The Chinese military has not attempted to invade Taiwan, but in the late 1950s, it did shell the islands of Quemoy and Matsu in an effort to dislodge Chiang’s forces. In 1962, China launched a limited ground war against India to resolve a border dispute. In 1974, the Chinese seized control of a South Vietnamese island in the Paracel chain. A border war also broke out between Vietnam and China in 1979.

Initially, Mao firmly aligned the PRC with the Soviet Union; this would further raise U.S. fears about the threat of global communist aggression. In the late 1950s, however, Mao broke with the Soviet Union and pursued an independent foreign policy. Under President Richard M. Nixon, the United

States began an initiative to establish relations with the PRC in order to further separate the PRC and the Soviet Union. Nixon visited China in 1972, and in 1979, the United States established full diplomatic relations with the PRC.

Political instability followed Mao's death in 1975. Initially, the Gang of Four, a political faction that included Mao's widow, Jiang Qing, attempted to maintain Maoist orthodoxy. Ultimately, they would be toppled from power and disgraced. In their place would emerge moderate and pragmatic leadership under Deng Xiaoping. Under Deng, the PRC moved to open markets to international investment. The leadership also moved to reduce the amount of state control over the economy, a trend that would accelerate dramatically in the 1990s. Although elements of a command economy survived, the egalitarian ethos of the Maoist years was fully discarded by the 2000s, and a capitalist model was embraced. Great fortunes were made, but many urban workers and peasantry lost the social safety net that existed for them during the Maoist years.

Economic liberalization has not been matched in the political arena. Although authorities did allow for greater individual autonomy, especially in areas of personal dress and lifestyle, calls for ending the political monopoly of the Communist Party have been silenced. There has been social turmoil in recent decades, and some Chinese have demanded greater political freedom. Increasing social unrest resulted in the First Call for Democracy in 1978. Intellectuals began to write down their grievances, posting them on what became known as the Democracy Wall. Most participants in these movements faced arrest, and the Democracy Wall was shut down in late 1979. Later, 1986 brought the Second Call for Democracy, during which protests were held in major cities. Leaders of the movement were targeted and arrested, and those involved lost their party membership and any rights associated with being a party member. Furthermore, the party dismissed Hu Yaobang, a popular champion of education based on academic merit, whom officials blamed for this incident.

Tiananmen Square

By 1989, a number of ongoing economic and social issues led to increased unrest among some elements of the Chinese populace. China lacked a skilled

workforce, and economic inequality was growing. The population had grown too large for resource and job production to keep up. Student calls for freedom of speech and the press and increased funding for higher education resulted in no significant political reform. Additionally, public awareness of corruption within the government caused a spike in calls for the removal of dishonest officials. At the same time, the USSR was starting to crumble, and Soviet leader Mikhail Gorbachev began to implement new political reforms through programs of *glasnost* and *perestroika*. With even the USSR pursuing governmental reform, Chinese questions regarding the government only increased.

The death of Hu Yaobang, a former General Secretary of the Central Committee and Chairman of the CPC on April 15, 1989, saw Tiananmen Square flooded by students and intellectuals mourning his death; the mourning soon gave way to more strident calls for reform. The crowd called for democratic reforms, for participants in the Democracy Wall protest movement to be freed, and for Hu to be posthumously reinstated as a member of the Communist Party in good standing. The protestors demanded to speak with either Chairman Deng Xiaoping or Premier Li Peng. By May 4, the crowd at Tiananmen Square had swelled to around 100,000 people, prompting Deng to declare the demonstrations unlawful. This failed to quell the protest, with similar movements beginning to appear in cities other than Beijing.

In mid-May, Gorbachev visited China; it was customary to receive foreign dignitaries at Tiananmen Square. However, the ongoing protests made this impossible. With Gorbachev's visit, the crowd declared a hunger strike. On May 20, the government declared martial law, but the crowd decided not to leave and instead created the "Goddess of Democracy," a plaster and Styrofoam replica of the Statue of Liberty. On June 3, the government, feeling that the protests had begun to erode its authority, sent tanks to Tiananmen Square to break up the crowd. The tanks blocked exits and opened fire, while the protesters responded with rocks, sticks, and Molotov cocktails. By June 5, the crowd had fled the square. It was during this chaos that the famous picture of the man standing alone in front of a tank was taken.

As a result of the Tiananmen Square Incident, General Secretary Zhao Ziyang was placed under

house arrest; shortly thereafter, Deng Xiaoping retired as Chairman of the Central Military Commission.

The 1990s Recovery

By the early 1990s, the inflation problems that had in part led to the 1989 Tiananmen Square incident had abated. However, the incident left the PRC an international outcast. For the next 3 years, Communist hard-liners took control of the government and severely limited free enterprise. They also struggled to revive Maoist ideology, but the public reacted with disinterest. The CCP faced further challenges following the fall of communism in Eastern Europe, the worst embarrassment following the fall of the Romanian leader Nicolae Ceaușescu, a staunch ally of the PRC.

China's government continued to welcome foreign business and investment during the first part of the 1990s. While the Chinese government experienced some further opposition, the hard-liners never offered a serious challenge as they remained divided and lacked leadership. Notably, in April 1990, Li Peng, Premier of the PRC, arrived in Moscow where he met dozens of Soviet protesters labeling Li as a butcher. During his visit, Li rejected the idea of *glasnost* and *perestroika* being applicable for China.

By early 1992, Deng Xiaoping had reentered the public arena by touring southern China to restore faith in his reforms and to prevent a return to Maoism. During this time, Jiang Zemin became CPC General Secretary, President of the PRC, and Chairman of the Central Military Commission. By the mid-1990s, however, a number of issues with Deng's reforms remained. It became clear that many state-owned businesses remained unprofitable. As urbanization increased, unemployment in urban areas became an issue, and an urban housing shortage resulted in the creation of low-income slums in cities with major urban centers like Shanghai and Guangzhou.

It was during the 1990s that the Weiquan movement began. The Weiquan movement initially attempted to protect consumers' rights but gradually shifted into the political arena. Participants fought for their economic and political rights by attempting to gain help through the court system, pleading their case to the media, and forming demonstrations. Though some of this movement's

supporters were imprisoned without charge through the "Reeducation through labor" system, the movement had made some progress, most notably in the 2003 abolition of the custody and repatriation system, which allowed officials to remove people from cities who were deemed to not have a permit to live in a residence there.

In February 1997, Deng Xiaoping died, and his successor Jiang Zemin gave Deng's official eulogy, cementing his position as Deng's successor. In the wake of Deng's passing, his ideology became canonized as Deng Xiaoping theory, the official guiding ideology in the national constitution.

In July 1997, Hong Kong returned to PRC control after a 99-year lease with Great Britain ended. Its return highlighted Deng's One Country, Two Systems ideology, which suggested that China could have independent regions with their own capitalist economic and political systems, while China still used the socialist system. Under this policy, Hong Kong was able to maintain independence from China in all areas except foreign affairs and defense. In 1999, Macau returned to Chinese control from Portugal under a similar agreement.

Also of note, in 1997 Jiang visited the United States and met with President Bill Clinton. In return, President Clinton traveled to China in 1998. These meetings helped foster a better relationship between China and the United States. However, these attempts at good relations would soon be tested when American-led North Atlantic Treaty Organization forces bombed the Chinese embassy in Belgrade during the Kosovo War, resulting in the death of three Chinese journalists. This event created a strong anti-American sentiment in China, and though the incident was declared an accident, official apologies and statements regarding the matter did little to quell the anti-American sentiment. However, the Chinese government officially condemned the anti-American protests.

China in the 21st Century

By the turn of the century, China possessed a fairly healthy economy with an increase in foreign investment, but China also began to feel more international pressure regarding its treatment of its citizens. Human rights became a central concern for Western countries and formed a point of emphasis during Westerners' visits to China.

In April 2001, a U.S. Navy EP-3E ARIES II signals intelligence aircraft collided mid-air with a PLA Navy J-8II interceptor fighter jet near Hainan, resulting in an international incident known as the Hainan Island incident. The collision resulted in the death of the Chinese pilot and an emergency landing of the American aircraft on Chinese soil. The 24 crew members of the American plane were detained on Chinese soil and interrogated. After 10 days, the crew was released, but the cause of the crash remains unknown, as the Chinese government still retains control over both planes' black boxes and refuses to release any information. The release of the crew members followed the "letter of the two sorries" that was delivered by the U.S. ambassador Joseph Prueher to the PRC foreign minister Tang Jiaxuan to defuse the incident. The United States clarified that the letter was not an official apology, but the letter did express sorrow and regret over the incident that occurred.

Also in 2001, China and Russia signed the 20-year Treaty of Friendship and Cooperation. The treaty was designed to increase Sino-Russian cooperation and provide mutual assistance in economic, diplomatic, energy, ecological, and military areas. China and Russia were also able to agree on a defined border between the two countries.

In 2002, Jiang Zemin resigned from his position in the Politburo Standing Committee of the CPC and was soon replaced by Hu Jintao. In addition, Wen Jibao, a former ally to leader Zhao Ziyang, was promoted to premier, replacing Zhu Rongji. Despite Jiang's retirement, for several years Jiang continued to exert influence on the new administration.

Hu initially appeared open to democratic reforms. Hu wanted to allow people to have local representation, but conservative leaders in the Communist Party were upset about the implications of that move. In 2003, Hu laid out a plan to slowly allow more democratic participation, beginning at the township level and rising to national elections by 2018. None of these plans has borne fruit, however.

The Hu administration also dramatically increased restrictions on Internet use, which had been in place since 1996. These restrictions not only block specific websites and content but also monitor individual Internet access. These restrictions have become known colloquially as the "Great Firewall." Many activists have found ways to subvert these limitations, but there has also been a significant amount of self-censorship to prevent any possible

repercussions. The Chinese government has demonstrated its willingness to fine and imprison individuals for violating Internet restrictions.

Facing pressure from the party and military, Jiang resigned as Chairman of the Central Military Commission in September 2004. Though Hu and Wen continued to support Jiang's policies, the new leadership increased focus on the poorer areas of the Chinese population.

In 2008, a series of uprisings and protests began in Lhasa, the capital of Tibet, which subsequently spread to the rest of Tibet. Beginning on March 10, Tibetan Uprising Day, the protests became increasingly chaotic as rioting, looting, and burning swept across the country. With many Tibetans desiring independence from the PRC, the violence soon targeted ethnic Chinese living in Tibet. During the uprising in Tibet, foreign media were not allowed to enter Tibet, and journalists already in Tibet were told to leave. The PRC believed that the uprising was instigated and coordinated by the Dalai Lama, who has denied any involvement. In addition, the PRC claimed that the rebellion resulted in only 18 deaths, while the Tibetan government in exile believes that at least 99 people died. This incident occurred shortly before the 2008 Beijing Olympics, which focused global attention on Tibet and Chinese human rights violations. Since 2008, the PRC has made efforts to improve Tibet, adding new railroads, communication, and industries.

In addition to coping with issues in Tibet, the PRC began to have problems in Xinjiang, a western province that is predominately Muslim. Xinjiang has also made calls, like Tibet, for complete independence from the PRC. As a result, some extremist groups bombed trains, buses, and attempted a suicide bombing of a China Southern Airlines flight in 2008. The PRC has responded to these uprisings by sending in the PLA to quell dissent.

Many controversies arose when China was chosen to host the 2008 Summer Olympics. Outside commentators focused on Chinese human rights violations, China's support for oppressive governments, and air pollution in Beijing and its surrounding areas. In addition, there were reports that the Beijing Olympics could be targeted by a terrorist group or by pro-Tibetan protestors. Some commentators even pushed for boycotts of the Olympics—calls that ultimately went unheeded. In the end, the Chinese Olympics went ahead as scheduled and were free from any terrorist attacks.

Taiwan remains a thorn in the PRC's side. The PRC claims that Taiwan remains under its sovereignty and rejects the independence of the Republic of China. When Hong Kong returned to Chinese control, Taiwan called for independence. The PRC warned that military action would be used if Taiwan pursued this claim or if reunification was made impossible. Recently, Taiwan has grown closer to the PRC, largely as a result of mutual economic growth. However, the United States has continued to support Taiwan and maintains unofficial relations with the Republic of China government.

China continues to experience political and economic instability. There remains a desire to continue capitalistic reforms, but these have resulted in instability and led to growing economic inequality, population dislocation as rural Chinese migrate to urban centers, and pollution. Economically, the United States has been one of the largest consumers of China's goods and has built up a large trade deficit with this country. American imports from China are sustained in part by the willingness of the Chinese to finance the American national debt by purchasing U.S. government bonds. Monetary policy remains a point of contention between the two countries. Many within the American business community complain that China's currency is undervalued and needs to be raised to reflect the strength of the Chinese economy (and also raise the price of Chinese goods on the global market and in turn lower the relative cost of American-made products).

The year 2012 witnessed a transfer of power to Xi Jinping, and he was selected as China's paramount leader and elected to office of Party General Secretary with Li Keqiang as premier. Many have questioned the freedom of action Xi Jinping and Li Keqiang will have, given the increased size of the politburo. There is growing public dissatisfaction with increasing corruption among the many party and government officials and the wealth they have amassed. Growing pollution, catastrophic failures in public works (i.e., collapse of bridges and train derailments), and the failure to protect the health and safety of citizens from unsafe products have led to public protests in defiance of the government.

The Chinese Military

With 1.25 million active-duty personnel serving in the ground forces, China maintains one of the largest

standing armies in the world. Military conscription is universal, but large numbers of draft-age individuals are exempt. The ground forces are organized into 18 ground armies, 18 motorized infantry divisions, 22 motorized infantry brigades, 8 mechanized infantry divisions, 6 mechanized infantry brigades, 9 armor divisions, 9 armor brigades, 2 artillery divisions, and 17 artillery brigades. The ground forces possess 7,000 tanks and 8,000 artillery pieces. The Chinese air force maintains 3 airborne divisions, and the Chinese have a marine force consisting of 2 amphibious divisions.

The Chinese navy is organized into a North Sea Fleet and East-South China Sea Fleet. Significantly smaller than the U.S. Navy, the fleet includes 26 destroyers, 53 frigates, 48 diesel attack submarines, and 5 nuclear attack submarines. In 2012, the Chinese navy acquired its first aircraft carrier, though it has limited capabilities. In terms of air power, the Chinese military possesses 2,120 combat aircraft, including 1,570 fighters and 550 attack aircraft/bombers. The Chinese nuclear forces includes between 50 and 75 intercontinental ballistic missiles and 52 intermediate range ballistic missiles.

Significant debate exists among defense analysts, military leaders, diplomats, and civilian leaders outside China regarding the capabilities of the Chinese military and the country's long-term aspirations. Historically, China has been conservative in the use of force and has engaged in armed conflict only along its borders (i.e., Korea, Tibet, India, and South China Seas). In contrast to either the Soviet Union during the Cold War or the United States since 1940, China has not sought to project military power globally through foreign military bases or the deployment of forces outside Asia. Instead, it has relied on economic investments, trade, and soft power initiatives to further national interests internationally. The Chinese navy has, however, deployed forces to the Gulf of Aden as part of a multilateral effort to suppress piracy emanating from Somalia.

The Chinese military has traditionally remained subservient to the civilian leadership of the CCP. Given the nature of the Chinese government, the military's role in influencing Chinese governmental policy is often difficult to discern. The Chinese military possesses significant economic power through ownership of a number of profit-making businesses. With regard to military spending, the Chinese government publicly set outlays at \$106 billion in 2012,

but military spending is not transparent and is certainly higher than reported.

China, North Korea's only ally, has acted as intermediary between this isolated regime and the international community. China has forestalled harsher international action against North Korea and has moderated the actions of this rogue regime. In the wake of North Korean nuclear tests, however, in 2012 China voted in the United Nations to put economic sanctions on North Korea as punishment for these tests, reflecting a change in strategic policy.

In addition to rising issues with North Korea, China and Japan's relations have remained contentious. Both countries claim the Ryukyu Islands, which have been under Japanese control since the United States ended a period of control lasting from 1945 until 1971. China had held control over these islands until 1879, when Japan took control, and since their return to Japan, China has contested the current political situation. Furthermore, China continues to have border disputes with India, which became an issue of contention as early as 1914 and escalated into a month-long Sino-Indian War in 1962, which ended with a Chinese call for a cease-fire.

As the world's second largest economy, China has the ability to sustain and continue to modernize one of the largest armed forces in the world. China has been more willing to assert its growing power in Asia and has been aggressive in asserting territorial claims in the South China Sea. Whether it seeks to project military power globally is an open question. Although the prospects for CCP to give up their monopoly remain dim, the Chinese middle class is growing exponentially and may exert pressure for a more democratic system of government.

Anna Elaine Cook

See also Asia; India; Japan; Korea, North; Korean War (1950–1953); Mao Zedong; Pakistan; Russia; Taiwan; World War II

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CITADEL, THE

The Citadel is a state-supported military college located in Charleston, South Carolina. Founded in 1842 as the South Carolina Military Academy, its alumni have served in all conflicts since the Mexican-American War. Since its inception, The Citadel's goals were educating its cadets within a military environment and instilling in them the traits of honesty, integrity, and responsibility. The Citadel is one of the six Senior Military Colleges in the United States. As a Senior Military College, all on-campus students must be members of the Corps of Cadets at The Citadel. It also offers Reserve Officer Training Corps classes for all the branches of the military. Furthermore, cadets must wear uniforms at all times and take these classes. Although The Citadel does not require the mandatory commissioning of its cadets, approximately 40% do eventually take a commission in one of the four branches of the military.

In 1842, the South Carolina governor John P. Richardson called for opening The Citadel as a military academy, hoping it would produce useful citizens. It opened in 1843 with an enrollment of 34 students. Since then, The Citadel has produced more than 20,000 graduates, counting senators, flag officers, governors, chief executive officers, presidents of universities, and many other notables. The college now enrolls approximately 2,000 undergraduate students. Originally only offering three degrees—civil engineering, the sciences, and literary studies—The Citadel now offers a total of 20 majors, ranging from computer science to psychology.

Throughout its history, The Citadel has been an insular organization, set in its ways and resistant to change. Over the past several decades, the institution has worked to lose that stigma. In 1966, The Citadel admitted the first African American cadet, although it was far from an open acceptance of Blacks.

The road to racial diversity has been rough, but minority cadets now often find themselves in positions of authority in numerous roles throughout the campus and make up about 17% of the Corps of Cadets. In the early 1990s, The Citadel and the Virginia Military Institute (VMI) were both embroiled in lawsuits regarding their male-only admissions policies. The Citadel was successfully sued by Shannon Faulkner in 1995; as a result, she became the first woman to be admitted to the school as a cadet. After several years of legal battle between the U.S. Attorney General and VMI, the VMI lost its case. During the months of VMI's deliberation of whether to go coeducational or to become a private all-male college, The Citadel went coeducational. This marked a severe shift in the policies of the school, one that had polarized school officials, students, and residents of Charleston for quite a period of time. Today, female cadets are a common sight around the campus, making up 6.4% of the full-time student body. In 1997, following The Citadel's lead, VMI went coed as well.

In the past two decades, Citadel alumni have served in Operations Desert Shield and Desert Storm and the ongoing wars in the Middle East. During that time, the college's most prominent graduates have commanded the Blue Angels and the 1st Cavalry Division and served as the U.S. Marine Corps' Director of Intelligence. Since the beginning of the Global War on Terrorism, 14 Citadel alumni have fallen in the line of duty.

Academics at The Citadel

As of 2009, The Citadel enrolled 2,288 undergraduates. Of these students, approximately 2,100 are cadets who live on campus and in barracks. The cadets wear uniforms, attend mandatory formations and meals, and partake in various military duties and ceremonies throughout the week. For in-state residents, the cost of attending The Citadel as a freshman for the 2009–2010 school year was \$21,729, while it was \$17,663 for upperclassmen. For out-of-state residents, the cost of attending as a freshman for the 2009–2010 school year was \$35,539, while upperclassmen paid \$31,473. During the Fiscal Year 2007–2008, The Citadel had revenue of \$91,435,042 and expenditures of \$87,935,319.

During the 2008–2009 school year, The Citadel had 252 faculty members, of whom 173 served full

time. The faculty was composed of 167 men and 85 women, including 26 minorities. Of the faculty members, 191 have a doctorate. The three largest concentrations of faculty were in business administration, English, and history. The student-to-faculty ratio was 15:1, including part-time and graduate students. A total of 618 different classes were taught in the Fall 2008 semester, with the most common class size being 20 to 29 students. No classes had more than 99 students. The majority of classes had between 10 and 29 students.

The college divides its undergraduates among 16 majors, the three most popular being business administration with 618 students, criminal justice with 290, and civil engineering with 207. Students in all fields must take a core curriculum of four semesters of English, two semesters of history, two semesters of math, four semesters of science, and one semester of a social science. Those majoring in a nonprofessional field must also take four semesters of a foreign language. The three sciences that students can choose from are chemistry, physics, and biology. The foreign languages consistently offered at The Citadel are Spanish, German, and French, with other languages available on an irregular basis.

Tim Taylor

See also ROTC; Training, Army Officers; Women

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CIVIL AFFAIRS

Since the Revolutionary War, the U.S. military forces have faced the task of restoring order to civilian communities and rebuilding during times of war. For years, military commanders organized impromptu solutions until the institutionalization of civil affairs and military government during World War II. Since their establishment, U.S. Army Civil Affairs (CA) forces have proved themselves vital to the success of winning wars, securing peace, and laying a foundation for stability in troubled nations around the world. This entry discusses the history of military civil affairs from its institutionalization during World War II through its numerous deployments and increasing importance in unconventional conflicts, including the wars in Iraq and Afghanistan.

When deployed, CA forces perform numerous jobs critical to the success of both combat and noncombat operations. The first objective of CA forces surrounds support for conventional combat operations through the minimization of civilian interference, mobilization of civilian resources, and assessment of humanitarian and infrastructural needs. CA forces also provide critical support for Special Operations Forces' counterinsurgency (COIN) operations, aid to local and national government ministries struggling to rebuild, and assistance at times of natural disasters and civil disorder. Moreover, CA soldiers specifically contribute valuable expertise in the areas of rule of law, economic stability, governance, public health and welfare, and infrastructure as well as public education and information. Mission life cycles typically begin with humanitarian assistance, and as crises ease, efforts transition to assessments, long-term development plans, and institutional reconstruction.

Historically a U.S. Army capacity, modern CA forces comprise both active-duty and reserve soldiers principally within the army but more recently in other branches. Since the Vietnam War, the majority of CA forces are reservists and constituted roughly 90% of the force well into 2011. The remaining 10% resided in the active-duty 95th Civil Affairs Brigade. Reservists bring invaluable career experience in CA specialty areas but are limited in their ability to perform at combat operation tempo when deployed alongside active combat units. Due to skyrocketing demand, the Department of Defense

plans to increase the active-duty component to 26% by 2013 and have formed the 85th Civil Affairs Brigade to reach that goal. Army CA forces primarily train and are stationed at the John F. Kennedy Special Warfare Center and School at Fort Bragg, North Carolina. Multiple training programs prepare officers and enlisted personnel, including some marines, for CA missions through training in area studies, leadership, technology, and language. The CA graduates continue a legacy that formally began during World War II.

The Birth of U.S. Civil Affairs

Despite notable military government missions during the Mexican-American War, American Civil War, Spanish-American War, and World War I, the institution of military CA only coalesced prior to World War II. Not long after World War I, Colonel Irwin L. Hunt warned that soldiers lacked the training for U.S. military government in the postwar German Rhineland. The report began a struggle for defined policy that culminated in the 1930s issuance of Field Manual (FM) 27-10, *The Rules of Land Warfare*. Eventually, the judge advocate general published the first dedicated manual for military government and civil affairs in 1943, FM 27-5, *Civil Affairs and Military Government*. The manual explained the policy and procedure of military governments in enemy territory and civil affairs: a less aggressively named military government policy for friendly occupied territory.

Although the responsibility for CA shifted throughout the War Department, military leaders pushed ahead with institutionalization as participation in World War II neared. Even if the leaders preferred to avoid the task of using the military to govern, international law required the restoration of law and order in occupied territory. On April 2, 1942, Secretary of War Henry L. Stimson established the first School of Military Government at the University of Virginia, Charlottesville, which soon graduated 175 CA officers every 12 weeks. The first CA training program combined area studies with practical public administration and language training. Many of the recruits during World War II contributed crucial career experience, and the inaugural class included men with careers ranging from police chief and city manager to utility specialist and city attorney.

As the U.S. military forces pushed across North Africa, hard-learned lessons persuaded leaders to give the military the responsibility for governance. President Franklin D. Roosevelt initially intended U.S. civilian government agencies to govern occupied territory, but agency failures proved that the military was the only force capable of such a daunting task. Fortunately, coordination organizations, including the State-War-Navy Coordinating Committees, successfully corralled resources and proved the importance of the military and U.S. civilian agencies working together. Throughout the war, CA forces not only successfully operated military governments but also managed massive humanitarian assistance operations and, as the war ended, inherited postwar reconstruction.

Rebuilding Germany and Japan quickly consumed thousands of CA soldiers as they worked to establish independent, democratic governments. Two approaches emerged between Germany, which had no government at all, and Japan, where the government largely survived the war. In Germany, CA officers were left to completely rebuild, instill democratic ideals, finish denazification, and develop long-term economic recovery plans. Unfortunately, disagreements and slow cross-region coordination between Western occupying forces left West Germany without a central government until 1949. Alternatively, in Japan, the retention of a largely intact indigenous government permitted General Douglas MacArthur to coordinate a less-imposing top-down approach. With Japanese officials in charge, CA teams primarily monitored the reform process, assisted in elections, and advised local officials on issues they had not encountered under a totalitarian government. By 1952, the Japanese government successfully recovered independence, while the demand for CA forces only increased in conflicts throughout the Cold War and beyond.

Cold War and Beyond: Civil Affairs' Coming of Age

Dynamic Cold War-era conflicts soon pushed CA beyond the confines of World War II military government and tested many other skill sets of civil-military operations (CMO). The Korean War witnessed U.S. CA forces' first serious encounter that required coordination between the larger UN mission, non-governmental organizations (NGOs), and the inde-

pendent government of the Republic of Korea. Making matters worse, radical shifts in the battlefront curtailed development projects and forced CA forces to contribute as best they could, often limiting them to humanitarian and refugee aid. As the CMO dynamic changed over time, so did the doctrine, as FM 41-5 *Joint Manual for Civil Affairs*, and FM 41-10 *Civil Affairs Operations* signaled the shift away from military governance doctrine. During the Vietnam War, CA temporarily transformed into Civil Operations and Revolutionary Development Support (CORDS) to better combat the Viet Cong guerrilla insurgency. After its inception in 1967, CORDS assumed control of nationwide civil affairs efforts in South Vietnam, unifying U.S. Army and the U.S. Marine Corps Combined Action Platoon and civilian agency programs and resources. The CORDS' multifaceted strategy included psychological operations, work alongside Special Forces with indigenous Montagnard tribes, and the controversial Phoenix program. Even though CORDS secured many victories, the Vietnam War ingrained an aversion to nation-building and long-term development projects that diminished the effectiveness and limited the potential of successive CA operations.

In the final years of the Cold War, avoidance of nation-building hampered intensive CA operations, but CA soldiers nevertheless continued a legacy of meaningful achievements. In Grenada and Panama, CA forces successfully met infrastructural repair and assessment demands and assisted with the restoration of governmental institutions. Later during the Persian Gulf War, advanced planning and multinational coordination within Task Force Freedom paved the way for a very successful CA mission. CA teams worked with combat maneuver units in a humanitarian capacity to manage civilians and prisoners of war, while other teams managed reconstruction and \$500 million in emergency services contracting. In Somalia, a small yet effective CA contingent developed a strategy to coordinate scores of NGOs through a remarkably successful Civil-Military Operations Center (CMOC). These deployments demonstrated that coordination and preemptive planning were absolutely essential to success, while most problems emanated from a lack thereof. Moreover, the disdain for nation-building fostered an organizational culture that increasingly underestimated and misunderstood the value of civil affairs.

Deployments during the 1990s echoed similar themes to earlier experiences, most notably CA forces' defiant spirit to overcome restrictions and successfully improve civilian quality of life in their area of operations. In the 1992 Haiti intervention, CA forces restored electrical service and provided much needed humanitarian support, in spite of restrictions on infrastructure projects and a divided CMOC that hamstrung coordination with NGOs. In Bosnia, CA forces once again found themselves chained to humanitarian missions due to restrictions. But a second-phase operation reversed this and opened a multinational effort to assist with elections, infrastructure, and long-term planning. While multinational coordination efforts proved difficult, resourceful CA soldiers devised creative solutions that combined mission goals of the North Atlantic Treaty Organization with projects that benefited civilians. Finally, in Kosovo, CA troops once more overcame a lack of preparation, short deployments, and resource restrictions to stem a refugee crisis and guide long-term institutional reconstruction.

Counterinsurgency and Stabilization Missions in the 21st Century

U.S. military operations in Afghanistan, starting in 2001, and Iraq, in 2003, became the single most influential experience for U.S. CA forces since World War II. Both wars stretched CA forces to their limits and drove military leaders to rethink their aversion to nation-building, and a more comprehensive use of CA assets. Demand for CA soldiers skyrocketed as they were spread thin across the two battlefronts in Iraq and Afghanistan, not to mention operations in East Africa and South Asia. Shortages spurred the expansion of Marine Civil Affairs Groups and the creation of the navy's own Military Civil Affairs Group, as the army fought to adapt and to increase its own numbers. Meanwhile, deployed CA soldiers' dwell times halved as CA reservists, only 5% of the reserve force, bore 23% of total reserve casualties. Civilian agencies tied to new coordinated Provincial Reconstruction Teams (PRTs) also struggled to find recruits in their effort to relieve their own personnel shortages. Nevertheless, Defense Secretary Donald Rumsfeld divorced CA reservists from Army Special Operations Command in 2006, a move condemned

for harming deployment scheduling, training, and equipment access.

The PRT emerged in Afghanistan in 2002 as the primary vehicle for CA and CMOs. Initially called Coalition Humanitarian Liaison Cells, PRTs included two military CA teams augmented by representatives from the Departments of State and Agriculture and the U.S. Agency for International Development. The two teams split between quick impact development projects and traditional CMOC coordination efforts with the United Nations and NGOs. Strategically located in provincial capitals, the teams sought to extend the influence of the central government. Over time, all Afghan PRTs came under the North Atlantic Treaty Organization's International Security Assistance Force control, and by 2009, 19 partner countries took ownership of various PRTs. While military and civilian teams strived to improve conditions in their regions, separate chains of command within U.S. PRTs and lack of multinational coordination on objectives and accountability metrics demonstrated pervasive weaknesses with PRTs and CMOs.

As the war in Iraq worsened, the PRT model was introduced in 2005 and grew a multilevel program with teams at provincial and local brigade and regimental combat team levels. The first PRTs included up to 80 personnel, mainly civilians from the Departments of State, Agriculture, and Justice and the U.S. Agency for International Development, as well as a representative from the Army Corps of Engineers, CA and military liaison officers, and Iraqi personnel. Teams focused on governance, reconstruction, and security and sought to assist and embolden traditionally weak provincial and local authorities. Later during the 2007 Iraq troop surge, President George W. Bush assigned smaller embedded PRTs to local brigade and regimental combat team levels. Embedded PRTs developed strategies to connect communities and utilize Commander's Emergency Response Program funds and the State Department's Quick Relief Funds to sponsor local initiatives and projects ranging from hospital and school repair to women's centers for legal rights. Both embedded PRTs and PRTs in Iraq and Afghanistan intentionally operated in relative obscurity to give credit to local officials rather than American occupiers. This lack of transparency provoked criticism in the United States where observers

experienced difficulty tracking PRT accomplishments and spending. As the Iraq War neared its end, PRT missions concluded in September 2011, 1 month prior to the release of FM 3-57 *Civil Affairs Operations*, which incorporated many of the lessons learned in the past decade.

The future of CA remains uncertain except for the demonstrated need for soldiers with the skills and expertise to not only win wars but also secure peace in regions fraught with conflict. Defense Department plans to increase the active component of CA will only improve their effectiveness and capacity for future missions that build on hard-earned lessons and improvements in Iraq and Afghanistan. Indubitably, the unpredictable irregular wars of the future will watch CA forces and doctrine adapt to new challenges and conquer old weakness.

Alex S. Kasper

See also Civil Defense; Civil-Military Relations; Humanitarian Intervention, Foreign; Iraq War (2003); Occupations; United Nations; War in Afghanistan

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CIVIL DEFENSE

The events of September 11, 2001, ushered in a new era in American history. Never before in the history of the nation had such damage or loss of life been heaped on the people of America by an amorphous nonstate organization clearly bent on destroying the United States. The source of the threat notwithstanding, the asymmetric effects of the attack spawned an avalanche of homeland security public policy documents, most of which were focused on preventing, protecting from, responding to, and recovering from acts of terror. The focus of these policy documents was, is, and will likely remain a top-down approach to counterterrorism and anti-terrorism. This entry discusses civil defense policies, strategies, and departments in the federal government from post-World War II to the present.

The Department of Homeland Security, established in 2003, is the executive branch department charged with leading and coordinating national preparedness efforts at the national, state, and local levels. The involvement of the Department of Defense in this effort has been haphazard at best and continues to be problematic for officials at the national level. Though the recent history related to homeland security seems daunting, there are many parallels to civil defense programs dating back to the end of World War II.

With the advent of the destructive power emanating from nuclear weapons, scientists, politicians, and citizens seemed to acknowledge that life in America had changed forever and not in a positive way. Then, in 1949, when the Soviet Union exploded its first nuclear weapon, the federal government began the process of organizing the defenses of the nation to deal with the potential catastrophic outcomes related to nuclear attacks. The efforts to develop a cohesive defensive strategy for nuclear war became far more difficult than might have been thought. Early on, because so little was known about the full effects of nuclear weapons, the attempts to develop comprehensive policies were hampered by constant reorganizations and reassignment of responsibilities among different agencies. The problems associated with developing strategies were often plagued by distinct differences in defense philosophies as well as significant mismatches between what was proposed

and the resources available to complete the proposed programs. Throughout most of the Cold War, the conflict in philosophies inhibited nearly every administration and Congress from developing and implementing a comprehensive civil defense program.

The major philosophical differences could be found in those who advanced the defensive strategy of sheltering citizens and officials and those who believed in evacuation of urban areas. Furthermore, the advancement of various nuclear offensive strategies had significant influence on civil defense efforts. The great nuclear war thinkers of the Cold War, such as Herman Kahn, Thomas Schelling, and Bernard Brodie, each advanced ideas that, if implemented, would lead to quite different views on what defensive measures might be developed and implemented. Similarly, ambiguous assignments of responsibilities in the executive branch, including the Department of Defense, did not ease concern or uncertainty. Eventually, pacifistic antinuclear warfare interests began to temper offensive and defensive discussions related to the potential use of nuclear weapons in war. Likewise, the occurrence of major natural disasters began to influence presidents to advance the idea of “dual-use” capabilities, particularly at the state and local levels. This change would become a common theme from as early as the Nixon administration. The most significant change in policy, however, was that the emphasis was changing from worrying about nuclear war to focusing on the nascent concept of “all-hazards” emergency management. This new approach had more resonance with state and local governments, because nuclear war and its outcomes were not events to which lower level government could adequately prepare for or respond to. During the administration of Jimmy Carter, the Federal Emergency Management Agency was established to bring national government emphasis to events that were far more likely to occur. There was one administration that proved to be a notable exception, and that was the 8 years that Ronald Reagan was president.

President Ronald Reagan was a determined Cold War warrior who saw the world in clear colors. He was convinced that the Soviet Union and communism were evil and that the West, in particular the United States, had an imperative to diminish, if not eliminate, communism as a pernicious influence in the world. As long as the Soviet Union and its totalitarian government existed, true freedom could not be realized around the world.

The Reagan administration, in 1983, advanced the Strategic Defense Initiative, a modern version of creating an antiballistic missile “shelter” for the United States. Though the initiative was arguably a violation of ratified strategic arms limitation treaties, President Reagan insisted on establishing a ballistic missile defense office with its home in the Department of Defense.

President Bill Clinton named James Lee Witt as the Director of Federal Emergency Management Agency. Witt brought competence and expertise to the agency that changed the culture of the agency for the better. His efforts in building cooperation with state and local governments to develop awareness of and preparedness for catastrophic natural events were his most notable accomplishments. Also during the Clinton administration, the national government took action to fund and prepare for outcomes associated with weapons of mass destruction (WMDs). In particular, Congress sought to integrate civilian government activities with military capabilities by asking the Department of Defense to build civilian support teams when WMDs were involved. As late as 2000, the administration developed the Office of Homeland Security to integrate activities associated with the potential use of WMDs. This office, found in the White House, had interagency responsibilities.

One of the outcomes of the events of 9/11 was a rearrangement of military combatant commands. On October 1, 2002, General Ed Eberhart took command of U.S. Northern Command (NORTHCOM), a combatant command with responsibilities for military’s homeland security activities inside the United States. With the establishment of NORTHCOM came the reassignment of forces from Forces Command so that the new organization could have a full array of capacities and capabilities to support civilian authorities faced with catastrophic events, whether natural or human-made. Over time, however, NORTHCOM’s influence on homeland security policy has been haphazard at best. Far too often, military and civilian government cultures have been found to be incompatible. Of particular concern are the questions related to authority at event scenes and profound questions related to federalism. The Department of Defense has also had difficulty in the interagency arena dealing with federal agencies. Though charged with homeland security responsibilities, NORTHCOM has been ineffective

in fulfilling its mission to the satisfaction of the 39,000 general purpose jurisdictions that support the citizens of the United States. Perhaps no stronger evidence of this disconnect can be found than by examining the role of NORTHCOM in the response and recovery to Hurricanes Katrina and Rita and the recent BP (British Petroleum) oil spill in the Gulf of Mexico. Though the Coast Guard and the Corps of Engineers were highly visible, virtually nothing was heard about the role of NORTHCOM in supporting these events.

There appears to be a glimmer of hope for improving operations and cooperation between the Department of Defense and all those lower level governments. The wherewithal of NORTHCOM is without parallel when WMDs might be the cause of a catastrophe. Without the capacities and capabilities of the command, no civilian government would be able to mount a credible response. Thus, as the landscape of homeland security continues to evolve, NORTHCOM and civilian governments might eventually find common ground that benefits all parties.

Samuel H. Clovis Jr.

See also Bombs, Nuclear; Homeland Security, Department of; Natural Disaster, Military Response to; Posse Comitatus Act; Strategy, Nuclear; Terrorism; U.S. Northern Command

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CIVIL DISORDER

At the Constitutional Convention, America's Founding Fathers foresaw the need for a means to calm national tensions and factional disagreements inherent in a democratic society. While they understood the need for security, they worried about a reoccurrence of a polarizing situation like the Boston Massacre. Throughout the history of the nation, from the Whiskey Rebellion to anti-war protests against the Vietnam War, presidents have struggled to preserve law during times of civil unrest. This entry discusses the history and evolution of military intervention in civil disorder in the United States, including revolts against the federal government, violent labor strikes, and the role of the National Guard in responding to riots and assisting after natural disasters.

Constitutional Debate and Early Military Intervention

As the Constitutional Convention delegates gathered in Philadelphia in 1787, a large part of the debate stemmed from Shays' Rebellion. The previous summer, the popular uprising in Massachusetts had emerged from a debtor rebellion against the judiciary. The confrontation between an ill-prepared state and angry citizens proved the vulnerability of the government.

The debate prior to ratification focused around militias, states' rights, and the balance between civil and military forces. Although delegates understood the need for a federal intervention in case of a failure of civil law, they worried about congressional power over states' militias. They finally reached an agreement that allowed Congress to raise a military and enforce the law with specific requirements for intervention in civil disorder. The first legal precedent found in the Calling Forth Act and the Uniform Militia Act of 1792 allowed the federal government to deploy federalized militias if the civil authorities proved unable to enforce the law. Further safeguards required a state's appeal for help, judicial approval,

and a presidential issuance of a cease and desist order to the insurgents among other requirements. With this framework in place, the federal government's response to the Whiskey Rebellion established the first precedent of its use.

In 1794, President George Washington carefully set the first precedent for the use of a nationalized militia force in a civil disorder during the Whiskey Rebellion. The rebellion formed after a national excise tax on distilled liquor prompted widespread disdain on the western frontier, particularly in Pennsylvania. When civil authorities and local militias proved unable to enforce the tax because of violence, Washington intervened and issued a formal cease and desist ultimatum. Due to the nature of the dissent, which Washington deemed treasonous, he quietly raised a multistate militia and sent a more visible diplomatic party to investigate the troublesome counties. The delegation showed an effort to exhaust peaceful alternatives, while the administration awaited Supreme Court Justice James Wilson's confirmation of rebellion that circumvented Pennsylvania's initial insistence on confronting the unrest alone. Although the federal delegation found a large moderate faction, the delegates agreed with the suspicion that the president must use military force to fully quell dissent. Civil authorities, reinforced by more than 15,000 militiamen, successfully restored order with very few casualties. Ultimately Washington set a very cautious example of military intervention but uncertainty surrounding the expediency of using regular soldiers rather than militia remained.

Antebellum, Civil War, and Reconstruction

During the next 50 years, the development of use of force evolved as a variety of small disorders gave way to the ultimate confrontation over slavery. In 1807 after squelching the Burr Conspiracy, President Thomas Jefferson secured landmark privileges to employ federal soldiers in cases of domestic insurrection. The bill drafted by Jefferson and passed by Congress still required compliance with stipulations in the 1792 Calling Forth Act but rejected the widely held mistrust of the use of regular military forces in domestic civil disorder. In the following years, President Andrew Jackson ordered the first labor riot intervention in 1834, and President John Tyler chose not to intervene in the Dorr Rebellion, which decided the winning government in Rhode

Island; both were signs of future conflicts. During the Boston Slave Riot of 1854, Attorney General Caleb Cushing issued an opinion, later called the Cushing Doctrine, that supported military intervention to uphold the Fugitive Slave Law. The doctrine suggested that marshals had the ability under *Posse Comitatus* to call forth militia and military soldiers for support. The opinion, although relatively insignificant at the time, created the opportunity to circumvent important constitutional protections later during Reconstruction.

The onset of the Civil War marked a drastic change from a tradition of restricted military intervention as President Abraham Lincoln fought to reincorporate the Southern states. In 1861, Lincoln possessed more leverage in the use of force due in part to the removal of the 1795 judicial approval requirement and changes to the 1807 federal force law. This and the suspension of habeas corpus (the protection against unlawful detention) granted the War Department more leverage and leeway in dealing with insurgents, rebels, draft dodgers, and disloyal elements. During the war, the once-revered tool of the executive with protective prerequisites gained wider use among commanders and civil authorities with newfound discretionary powers. The 1863 draft riots throughout the Northern cities became the largest case of civil disorder that the War Department faced. Again, training and logistics between multiple leadership elements exercising their own discretion plagued their ability to control the looting and violence throughout the riots. As the war ended, the Reconstruction experience expanded the domestic use of military force even further.

Reconstruction witnessed a climax in the liberal use of military intervention in support of the Radical Republican agenda. New institutions, including the Freedmen's Bureau and the Civil Rights Act, placed federal soldiers in the role of enforcing national law concerning the civil rights of Blacks. Furthermore, the disbandment of Southern militias, seen as remnants of the Confederate Army, left the federal military to reinforce civil authorities. This raised enormous controversy because federal military forces became a tool of Radical Republican politicians, both at state and national levels, to protect their vision for America and the new South. Local and state officials increasingly understood and called for military assistance based on the Cushing Doctrine's summary of

Posse Comitatus. In resistance, the Southern White majority formed vigilante groups, including the Ku Klux Klan, that proved enormously destructive to the Reconstruction process.

President Ulysses S. Grant's experience with increased military authority in the final years of Reconstruction marked a reduction in the significant use of the military in civil unrest. Beginning in 1870, Grant wielded new powers under the Enforcement Acts to crush vigilantism in the South. While these measures proved successful in reducing violence, the federal government began a slow departure process that was completed by 1877 when White Democratic majorities retook control of Southern state governments. The following year, the Posse Comitatus Act of 1878, drafted by a Kentucky congressman, signaled a return to the constitutional limits of military intervention and the ironic death of the Cushing Doctrine initially intended to support slavery. The laws from 1861 and the Ku Klux Force Act strengthened executive power, but the Posse Comitatus Act removed the discretionary power enjoyed by civil authorities throughout Reconstruction. As Reconstruction ended, the military quickly found a new role in intervening in labor conflicts.

Labor Conflicts and Bonus Army

The late 19th century introduced the nation's military to the controversial role of ending labor conflicts between companies and workers. In the years that followed the Civil War, reoccurring devastating economic downturns wiped out workers' pay, while management consolidated power and wealth. The railroads, which had grown exponentially after the Civil War, witnessed the greatest strikes yet in American history. The Great Railroad Strike of 1877 marked a turning point in labor relations when a strike begun by railroad workers in West Virginia spread across the country. While primarily led by railroad workers, the strike spread to numerous industries where workers struck in solidarity, effectively shutting down railways and whole towns. Governors attempted to break the strikes with police, militia, and National Guard units, but defection and uncontrolled shootings incensed mobs that set out burning whole rail yards. An appeal by the West Virginia governor Henry Mathews stirred President Rutherford B. Hayes to action as federal

troops were deployed with Gatling guns and artillery to his state and others. Despite violent confrontations between strikers and assorted strikebreaking forces, the federal military with superior firepower restored peace with significantly less violence than their National Guard counterparts.

Years later, the 1894 Pullman Strike brought the federal government into another labor conflict in the Pullman company town outside Chicago, Illinois. The strike initiated by the high cost of living in Pullman's company town opened a larger boycott of Pullman train cars by Eugene V. Debs's nationwide American Railway Union. The then attorney general Richard Olney, a former railroad attorney, coaxed President Grover Cleveland into sending federal forces under the auspices of restoring U.S. mail flow caught in closed rail yards. The president did not notify Illinois governor John P. Altgeld before the deployment and faced Altgeld's vociferous complaint that his own National Guard could handle the strike. Until the deployment of federal troops, the strike remained calm, but the presence of soldiers quickly incited riots. Reinforcements and the indictment of strike leaders including Debs marked the end of the strike and fresh resentment of military forces for siding with business owners and breaking the union.

Although presidents continued to use military intervention to calm labor conflicts, the Progressive Era ushered in new mediation tactics to avoid undue violence. The Pennsylvania Anthracite Coal Strike of 1902 drew the attention of President Theodore Roosevelt, who intervened to avoid a coal shortage during the coming winter. Although National Guardsmen temporarily occupied the coalfields, the president shaped a practice of using mediation committees to resolve strikes. As the labor conflict intervention evolved, focus shifted to a new fear of Bolshevism and racial violence.

In 1932, many American veterans of World War I, both Black and White, suffered significantly from the onset of the Great Depression. Their service overseas during the 18-month U.S. participation came at a high cost with disproportionate pay to their counterparts engaged in war industries at home. A movement called the Bonus Expeditionary Force or Bonus Army emerged behind the veteran leader William W. Waters, who, along with the Veterans of Foreign Wars, pressed the government to pass the World War Adjusted Compensation Act. Veterans from across the country converged on Washington, D.C., and

set up camp along the Anacostia River while they lobbied Congress. When the Senate rejected the bill after an impressive effort that won a victory in the House of Representatives, President Herbert Hoover ordered the Bonus Army evacuated from the city. During the expulsion from their massive tent city along the Anacostia, a scuffle with police that ended with two veterans shot dead sparked military intervention. The military had previously drawn up plans in anticipation of a riot and swooped in with bayonet-bearing soldiers supported by tear gas, mounted cavalry, and tanks. Under the leadership of General Douglas MacArthur, the U.S. Army forcibly expelled the veterans and their families and set the tent city ablaze. Both the president and MacArthur voiced concern for communist undertones in the Bonus Army's effort to seek fair compensation. The expulsion upset the general public, soured Hoover's reelection bid, and drew criticism of MacArthur's excessive use of force.

Civil Rights and Urban Riots

Racial violence and unrest also grew as demographics shifted because of the Great Migration in the early 1900s. During this period, African Americans moved north for the higher pay and increased freedom of northern industrial cities. The Red Summer of 1919 witnessed some of the most violent racial clashes between Whites and Blacks across the country. Washington, D.C., and Omaha, Nebraska, among other places, experienced serious violence that required federal military intervention to restore peace. As military forces intervened, rumors of Bolshevik extremism associated with the suspicion of labor unions stigmatized the appearance of violence that stemmed from social and economic inequalities suffered in Black communities. As the causes for such incidents remained, so did the instances of unrest that lasted through World War II.

After World War II, military forces again faced unrest as the civil rights movement pushed to secure equal rights for African Americans. Conscious of past intervention, the federal military avoided involvement, while National Guard troops were increasingly called by governors to intervene in conflicts over integration in the final years of Jim Crow laws. In 1957, President Dwight D. Eisenhower famously used federal troops to integrate Central High School in Little Rock, Arkansas. Arkansas governor Orval Faubus initially deployed National Guard troops to

block integration in defiance of the federal government and the changing national opinion of segregation. Thanks to the 101st Airborne detachment and the nationalization of Arkansas's National Guard, integration resumed, and the students who became known as the Little Rock Nine had additional protection from angry Whites.

As the fight for civil rights continued, National Guard units found themselves in ugly conflicts, caught between the orders of their governors and individual feelings and convictions. During the 1962 integration of the University of Mississippi in Oxford, National Guard troops were called to defend federal marshals. The marshals were sent to protect James Meredith, the first African American student at Ole Miss, but found themselves besieged by a violent mob. The troops later recounted the shock of finding themselves on the receiving end of bricks, bottles, and bullets as they sped past barricades to rescue the marshals. The violence experienced in Arkansas and Mississippi, among many other states, taught the federal military to better plan and prepare for peaceful and swift control of outbreaks of civil disorder.

By the mid-1960s, urban areas across America hosted serious violent civil disorder and riots. One of the first such riots occurred in the Watts area of Los Angeles in 1965, where 34 people died before California National Guardsmen restored order. The riots all echoed pervasive tensions between Black and White communities, particularly concerning police brutality. Later in 1967, riots in Newark, New Jersey, and Detroit, Michigan, again destroyed millions of dollars of property and took scores of lives. The tremendous use of lethal force evidenced in the 10,000 rounds of ammunition fired by the National Guard in Newark highlighted its lack of training and preparation. New rules implemented after the summer of 1967 restricted the use of lethal force by military forces intervening in civil disorders. During riots in the wake of Dr. Martin Luther King Jr.'s assassination in 1968, federalized National Guard and army regulars relied instead on nonlethal tear gas to control rioters with fewer fatalities. Some military insiders feared an increased oversensitivity to lethal force, but improved outcomes pointed to the success of less aggressive tactics.

Antiwar Movement

Throughout the 1960s, the military response to civil disorder reflected frustrating setbacks but also

significant improvements in dealing with urban riots and the emergence of the antiwar movement. In 1967, more than 20,000 antiwar protestors marched on the Pentagon near Washington, D.C., in one of the largest protests since King's 1964 March on Washington. The military's anticipation and planning succeeded in controlling a minority of rowdy protestors, while the majority protested peacefully. Despite criticisms of soldiers' excessive use of rifle butts and clubs, their sparing use of force sharply contrasted the experiences of New Jersey and Detroit earlier in the year. These and other protests led the Pentagon to form its own Pentagon Police force in 1971 as worries mounted over the safety of Defense Department personnel.

One year later, in August 1968, the military again prepared for a long-awaited confrontation in Chicago during the Democratic National Convention. Military officials worried about large turnouts, but as expectations shrank, the military, partly at the behest of President Lyndon B. Johnson, decided against a troop presence. Throughout the convention, police and Illinois National Guard troops kept watch over a mostly peaceful crowd. The violent conduct of the Chicago Police earned marked criticism and signified the only reason military planners considered troop intervention for the protection of protestors from the police. Surprisingly, public opinion polls revealed that a large portion of the general public felt the response fell short of what protesters deserved. Nevertheless, the only federal military personnel in Chicago that summer were intelligence and radio surveillance units, later attacked over the legality of surveilling citizen protests.

The darkest day of military intervention in the antiwar movement occurred in 1970 on the campus of Kent State University when National Guardsmen fired on students protesting the invasion of Cambodia. Shaken by rock throwing, Ohio National Guard troops suddenly opened fire and killed four and injured nine student protesters. The event became an enormous embarrassment for the National Guard and an impetus for improvements in training as well as increased protests on campuses. As the war neared its end, protestors gathered for what became the last large protest of the era on May Day in 1971. Nearly 100,000 protestors gathered in Washington, D.C., with limited oversight by military personnel, who were only needed to distribute water on the exceptionally hot day.

Changing Face of Civil Disorder

In the years after the Vietnam War, the military enjoyed a decreasing role in civil disorder as police took the lead. Only the 1992 riots in Los Angeles, following the acquittal of four police officers indicted in the roadside beating of Rodney King, required the mobilization of the National Guard and federal forces. After President George H. W. Bush approved the intervention, the troops supported the police, who benefited from a dramatic decrease in violence linked to their arrival.

With a decrease in riots, National Guard troops often respond to in natural disasters to provide logistics and supplies to people affected by hurricanes, floods, and droughts. The National Guard played significant roles in Hurricane Andrew in 1992 and more recently during Hurricane Katrina in 2005. During Hurricane Katrina, troops from every military branch assisted state National Guard units with search and rescue, logistics, medical, and other responsibilities throughout the Gulf states and particularly in hard-hit New Orleans, Louisiana. The Posse Comitatus Act prevented regular military forces from enforcing the law, but they regularly patrolled and supported police with their presence. Again, pervasive frustrations dating back to the 1960s surfaced as critics argued that National Guard units lacked resources and training to handle responsibilities they faced in New Orleans.

As Mexican border tensions increase, national military forces, including the National Guard, continue to support border security as well as drug interdiction missions that began in the early 1990s.

Alex S. Kasper

See also Border Patrol; Constitution, U.S.; National Guard, Army; Natural Disaster, Military Response to; Posse Comitatus Act; Reconstruction

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CIVIL WAR, AMERICAN

The American Civil War started on April 12, 1861, when Confederate guns under the command of General P. G. T. Beauregard opened fire on Union forces stationed in Fort Sumter, South Carolina. The war lasted 4 years with major combat ending on April 9, 1865, when the Confederate general Robert E. Lee surrendered at Appomattox Court House, Virginia. The conflict was the nation's bloodiest war with a cost of about 620,000 lives—more than all other American wars combined. In the North, more than 1 million men were in uniform at any given time during the war, while in the South, as many as 850,000 served. There were approximately 10,000 different battles in places stretching from Virginia to New Mexico on land, and from the coast of France to the Gulf of Mexico on water.

The Civil War remains an extensively studied and historically significant event. The war freed 3.5 million slaves and put to rest the question of a state's right to arbitrarily nullify federal law or secede from the Union. Some considered the Civil War to be the world's first modern war because it was the first large-scale conflict in which there was widespread use of technologies produced by the Industrial Revolution. Railroads, telegraph lines, and quick-loading rifles are but a few of the innovations used on a massive scale during the Civil War.

Causes of the War

The origins of the Civil War can be traced to the U.S. ratification of a constitution that allowed slavery to remain a legally protected institution. During the antebellum period, however, states became divided over the existence of slavery. Abolitionist sentiment in the North grew as the Second Great Awakening and remnants of the Enlightenment took hold in American society. Many Northerners saw slavery as un-Christian and cruel, while in the South, the institution was considered an economic necessity.

Nineteenth-century territorial expansion west continuously upset the balance of political power between slave and free states. The United States annexed Texas in 1845, triggering the Mexican-American War, which resulted in an additional 500,000 square miles added to the U.S. territory. The status of slavery in these lands was a concern for Northern and Southern politicians, who vied to gain a majority in Congress. Outside the political arena, citizens began to take fiery stands on either side of the debate. One man's actions demonstrated how dire and serious the slave question was. John Brown, an abolitionist settler in Kansas, killed five pro-slavery men and later led a small band of men who seized the federal armory at Harpers Ferry, Virginia, in an attempt to start a slave insurrection. Brown was caught and hanged for his crimes. His actions fueled the existing militant attitude among Southerners determined to defend slavery.

In the late 1850s, the Republican Party gained political strength in the North by promising to stop the spread of slavery into new territories, and in 1860, the party's presidential nominee, Abraham Lincoln, was elected president. Within weeks of Lincoln's election, Confederate forces fired on Fort Sumter in the Charleston harbor. Inside the fortress were 80 Union soldiers, who manned the fort despite the secession of South Carolina the previous December. Although by the time the fort was fired on, seven states had seceded, armed conflict until then had been avoided. Within 5 weeks of the firing on Sumter, four additional states left the Union.

Raising Armies and Determining Strategies

Although the United States Military Academy at West Point, New York, had been producing army officers for more than half a century, both sides lacked enough officers and needed to mobilize

massive armies of citizen-soldiers. Generally speaking, the Civil War soldier was not a professional but a volunteer or a draftee. Any experience he had was from service in local militia. Even though most Civil War soldiers were not professionals, historians have stressed the strong martial spirit and fascination with warfare that existed among much of the male population. In examining the combat motivation, historians have argued that soldiers on both sides embraced a culture of courage that stressed individual valor and viewed even the expression of fear as dishonorable.

Nevertheless, both sides would resort to conscription to fill their ranks over the course of the war. The Confederacy adopted conscription in 1862, raising approximately a fifth of the needed manpower through the draft. Conscription remained unpopular in the South both because it clashed with Confederate ideology that emphasized states' rights and because it exempted certain classes from military services, most notably plantation overseers. The federal government adopted conscription in 1863, though it failed to raise significant numbers of troops for the Union Army. The draft spawned massive dissent, including one of the worst riots in American history in New York City in July 1863.

The senior leadership of this war shared a common education based on attendance at West Point, and many had served together in the Mexican-American War. They had absorbed the lessons of the Napoleonic War as interpreted by the writings of Antoine-Henri Jomini. Initially, Union and Confederate commanders believed that the key to success (and glory) was the search for a climactic battle that would break the enemy's will to fight, as had been the defeat of a far larger Russian and Austro-Hungarian army in 1806 at Austerlitz at the hands of Napoleon.

As the winds of war grew stronger in 1861, both governments chose their military leadership. For the Union, Lieutenant General Winfield Scott was the sitting general in chief, but he was too old and overweight to command in the field. For a strategy to beat the South, Scott conceptualized the "Anaconda Plan." The plan's design was to stop all naval commerce in and out of the South by blockading southern ports and denying the Confederacy access to the Mississippi River. On land, a multiprong invasion by the Union Army would secure key southern cities of economic, political, and strategic importance.

Although ambitious, the plan's design limited casualties and did not call for the destruction of the South's infrastructure.

Confederate president Jefferson Davis, former army officer and U.S. secretary of war, acted as the South's military operational planner with Generals Robert E. Lee and Braxton Bragg acting as his advisors at different times during the war. Davis planned to carry out a mostly defensive war by blocking major Union advances and fighting offensively only when necessary or when victory would garner foreign recognition and support. The rural and agrarian South did not have the industrial capacity to produce the war materiel needed for a sustained offensive strategy. Nevertheless, the South's most celebrated general, Robert E. Lee, believed that victory could only be achieved by destroying the North's army with well-planned offensive campaigns.

Both armies throughout the war sought the climactic battle reminiscent of Napoleonic tactics. Nineteenth-century theory rested on the idea that the offense was the only way to win wars. For Confederate leaders, thrusting north into Union territory made perfect sense despite their overall defensive strategy as the goal of the war was victory, and the only way to win was to destroy the Union Army in a single, climactic battle.

The quest for a climactic battle proved elusive for commanders on both sides. Instead, the war eventually shifted to a "hard war" that included the emancipation of slaves and a war of attrition in which General Ulysses S. Grant sought to grind down Lee's army and bring war directly to the civilian population. Although much of the Civil War centered on conventional battles between opposing armies, guerrilla activity was endemic, especially in the border state of Missouri.

The Beginning of the War

The First Battle of Bull Run was the first major engagement of the war. It occurred on July 21, 1861, near Manassas Junction, Virginia. Confederate forces were massed along Bull Run creek to stop the Union advance against the Confederate capitol in Richmond, Virginia. The resultant Southern victory not only routed much of the Union Army but also vanquished the popular belief that the war would be a 90-day affair. The defeat also persuaded Lincoln to replace his field commander, Brigadier General Irvin McDowell,

with Major General George B. McClellan. After the battle, McClellan spent the next several months training and reorganizing what was named the Army of the Potomac.

In the West, Grant won a series of battles in February 1862 at Forts Henry and Donelson in northern Tennessee. The victories gave control of the Cumberland and Tennessee rivers to Federal forces and ensured that Confederate forces would have to withdraw from Kentucky where they had occupied Columbus and Bowling Green. Grant was promoted to major general. In early April, as Grant's army pushed south, Confederate generals Albert Sidney Johnston and P. G. T. Beauregard attacked him at Shiloh, Tennessee. Grant narrowly won the Battle of Shiloh, and Albert Sidney Johnston was killed. The fiercely fought 2-day battle produced such horrific

casualties that some Union commanders, including Grant and Brigadier General William T. Sherman, were convinced that a Union victory could be won only by complete military conquest.

The next month, McClellan launched an ambitious campaign that bypassed Confederate forces defending the northern approaches to Richmond. McClellan floated his 100,000-man Army of the Potomac down the Chesapeake Bay to the mouth of the Rappahannock River at Fortress Monroe, Virginia. Once there, his army marched up the James Peninsula. Lacking aggressiveness and overly cautious, McClellan stalled outside Yorktown, convinced that the Confederate opposition outnumbered his force. A month passed before the Union finally moved up the peninsula toward Richmond. In late May, at Fair Oaks and Seven Pines, just a few



Federal Cavalry, First Bull Run, July 1861.

Source: Photo by George N. Bernard. Courtesy of the Library of Congress.

miles east of Richmond, Confederate general Joseph E. Johnston attacked two Union corps who were isolated by a swollen river. The action was a draw but could have been an overwhelming Confederate victory had Joseph E. Johnston acted more decisively. Because of this, Davis replaced Joseph E. Johnston with General Robert E. Lee, who quickly attacked a tired and overly cautious McClellan. Although the Union won all the resultant battles, known as the Seven Days Battles, the Army of the Potomac slowly withdrew from the peninsula in July to reinforce the newly formed Army of Virginia under Major General John Pope. Pope was ordered to attack Richmond from the northeast and was well under way by the time McClellan arrived to assist. During this time, Lincoln also appointed Major General Henry Halleck as general in chief of the Union Army. For the Confederacy, their new savior and hero, Lee, would serve as the general in chief of the Army of Northern Virginia for the remainder of the war.

Despite the Confederate's overall defensive strategy, political and military leaders nevertheless saw the advantages of well-planned offensive campaigns. The first of these occurred after Pope's defeat at the Second Battle of Bull Run, which was fought soon after McClellan's withdrawal from the peninsula and on the same ground as the First Battle of Bull Run. Confident that a military presence would persuade Marylanders to secede, Lee invaded the North from Maryland's western border. McClellan, put back in command of Union forces after Pope's defeat, cautiously shadowed Lee as the split-up Confederate units moved toward their objective in Pennsylvania. Confederate plans were discovered when a Union soldier found Lee's orders wrapped around cigars near an old Confederate camp. Although McClellan got the plans and knew the Confederates were divided, he did not act. On discovering that his strategy was known by the Federals, Lee regrouped and established a defensive position at Sharpsburg, Maryland, along Antietam Creek. Here, McClellan finally attacked on September 17, 1862. Lee was able to defend his position because the Union attacked piecemeal. The battle was the bloodiest single day of fighting in American history. After the battle, Lee retreated to the safety of Virginia, while McClellan only cautiously watched. Lincoln, fed up with McClellan's inaction, replaced him with Major General Ambrose Burnside.



President Lincoln and General McClellan on the Battlefield of Antietam, September 1862.

Source: Photo by Alexander Gardner. Courtesy of the Library of Congress.

The Cause of Freedom

The Union victory at Antietam gave Lincoln the opportunity to announce his plans for emancipation, which he did on September 22, 1862. Lincoln feared that without a battlefield victory, the Emancipation Proclamation would appear to be a desperate political move and would only undermine the Union cause and open the possibility of foreign intervention. Issued on January 1, 1863, the proclamation applied only to slaves within the unoccupied Confederacy. The document, however, changed the fundamental character of the war. At the beginning of the war, Lincoln rationalized military action by appealing to the goal of preserving the Union. He saw the United States as the world's test case for democracy and refused to let the country be destroyed by a minority who objected to national policy. Many Northerners agreed with this sentiment, and in the first half of the war, many enlisted to preserve the

Union. Americans on both sides fought to preserve a structure and way of life that they had before the war. As they saw it, the war was fought to turn back the clock and restore things as they were before Fort Sumter. By the end of 1862, it was clear that this was not going to be possible. The Battles of the Peninsula and Antietam convinced the North that the South was not going to give up easily and that slavery could not continue in any shape or form if the North was going to win. The total destruction of slavery would require the defeat of the South and its armies. But the Emancipation Proclamation also served to diminish the likelihood of foreign intervention on behalf of the Confederacy. By mid-1863, fully trained and equipped Black Union regiments were being fielded. Allowing Black males to serve in the Union Army was both practical and politically

beneficial. The added manpower allowed the Union to maintain its numbers in light of ever-increasing Northern antiwar protests and draft riots. In addition to fighting, Union soldiers built roads, canals, and defensive works and pulled guard duty all over the occupied South. In light of these facts, allowing Blacks to serve made practical sense. Approximately 180,000 Black males served in the Union Army and Navy during the war.

Southern Offensives

At the same time Lee invaded Maryland, Confederate Bragg took advantage of the dispersed disposition of Union forces in the mid-South and concentrated his army in east Tennessee and invaded Kentucky. It took weeks for Union forces to react, concentrate,



A Black Union soldier guarding 12-pounder cannons. Napoleon, City Point, Virginia.

Source: Courtesy of the Library of Congress.

and move to meet Bragg's invasion force. They did so at Perryville, Kentucky, on October 8, when both sides stumbled into each other while searching for water. Although the Confederates held the field and inflicted more casualties at battle's end, their strategic disposition forced them to abandon Kentucky and regroup in central Tennessee.

Throughout the winter of 1862–1863, Union and Confederate forces fought for control over central Tennessee and northern Virginia. South of Nashville at Murfreesboro, Tennessee, the two armies fought to a draw over nothing more than the desire to make a demonstration before year's end. In northern Virginia, Burnside attacked Lee at Fredericksburg, Virginia. Knowing McClellan had been dismissed for inaction, Burnside acted within weeks of his appointment as head of the Army of the Potomac. Burnside took the town easily enough but ordered more than a dozen failed bloody assaults against Lee's entrenched Confederates manning the heights above the town.

After Burnside's defeat at Fredericksburg, he attempted to march his army around the Confederates, only to be mired down in muddy roads. In January 1863, Major General Joseph Hooker was placed in charge, and he cleaned up and reorganized the demoralized Union Army. Hooker was aggressive and cocky, and in May, he made a bold flanking maneuver in an attempt to get behind Lee. Lee met Hooker's advance at Chancellorsville, Virginia. During the battle, Lee again broke with doctrine by dividing his smaller force and ordering Lieutenant General Thomas "Stonewall" Jackson, Lee's most trusted subordinate, to carry out an aggressive flanking maneuver around the Union right. The move worked splendidly and Jackson's troops surprised and all but routed the Union Army's right flank. Hooker, stunned by a shell early in the battle, lost his nerve and acted hesitantly throughout the engagement. Only the setting sun saved Hooker's army from total defeat as Jackson was not able to push the attack to its fullest. That night, Jackson was shot by a Confederate picket when reentering his lines after a reconnaissance. Although the South won the battle, Lee felt that he had lost his best general.

In the spring of 1863, in the West, Grant set out to secure the full length of the Mississippi River for the Union by capturing Vicksburg, Mississippi, the last Confederate city on that river. Having failed

to take Vicksburg from the North, Grant had his fleet of boats run Vicksburg's gauntlet of guns and steam downstream past the town. From the river's west bank, Grant's army moved south through a series of bayous to link up with the fleet and cross the Mississippi River 50 miles south of Vicksburg. Once on the east bank, Grant marched to attack the Confederate rail hub at Jackson, Mississippi. Once in possession of Jackson, Grant turned west and besieged Vicksburg. After more than a month, the city was finally surrendered to Grant on July 4, 1863. After hearing of Vicksburg's fall, besieged Confederates just a few miles south at Port Hudson surrendered. The victories effectively cut the Confederacy in two and secured the full length of the Mississippi for the Union.

Lee's second invasion of the North resulted in the battle at Gettysburg, Pennsylvania, the biggest ever fought in North America. Lee personally believed that a good defense often required a strong offense, and in June 1863, he again took his army north away from war-weary Virginia to seek foreign recognition with a victory on Northern soil. The Army of the Potomac, now commanded by Major General George Meade, shadowed the Confederates and kept themselves between Lee and Washington, D.C. When the two forces met, the 3-day battle was largely a series of Confederate attacks against entrenched Union defenders. In the end, the two sides suffered a combined 53,000 losses. Defeated, Lee retreated virtually unimpeded to Virginia, never again to invade the North with such a large force.

The Naval War

A crucial element of Scott's Anaconda Plan would be the implementation of a naval blockade. To this end, the Union Navy vastly increased in size to effectively seal off southern ports, and by the end of the war, the United States possessed one of the largest and technologically advanced navies in the world. Initially, the blockade would be porous, but over time it would tighten, exacerbated by the Union Army's capture of key ports along the coast and Mississippi River. Moreover, the Union Navy and Army cooperated in a number of joint operations, most notably off the Sea Islands of South Carolina, in McClellan's Peninsula Campaign, and in the seizure of key centers such as New Orleans and Mobile.

The Confederate Navy could not match the Union Navy in number of vessels but instead placed greater emphasis in commerce raiding as away to strike back at the Union war effort on the high seas. In addition, the Confederacy proved technologically innovative in developing an ironclad warship as a way to counter the numerical advantage of Union. Simultaneously, the Union Navy designed its own ironclad ship, the *Monitor*, that would meet the Confederate vessel the *Virginia* in an epic but indecisive engagement in 1862. Along with developing ironclad vessels, the Confederates successfully deployed a submarine that managed to sink a Union vessel (although the *Hunley* would be lost at sea). To further counter the blockade, the Confederate Navy deployed mines and torpedo boats. In the end, it would not be enough, and by 1864 the South would be almost totally cut off from European markets and goods.

The War of Attrition and the March to the Sea

July 1863 was a pivotal month during the war. Grant's victory at Vicksburg split the Confederacy and gave the Union unrestricted use of the Mississippi River. Union forces were then shifted to east Tennessee for an offensive thrust into Georgia. Although defeated at Chickamauga, Georgia, and besieged at Chattanooga, Tennessee, Union forces under Grant's leadership eventually pressed Confederates out of southeast Tennessee and opened Georgia to a Union offensive by year's end. In northern Virginia, Lee's army held a defensive line and reacted to Meade's attempt at a fall offensive. Meade's cautiousness with Lee caused Lincoln to once again find a new commander. In March 1864, Grant's stellar performance earned him a promotion to lieutenant general and general in chief of all Union forces. Meade remained in command of the Army of the Potomac but worked under the watch of Grant for the remainder of the war.

As early as 1862, Grant and Sherman had determined that complete military conquest was the only way to defeat the Confederacy. In the spring of 1864, the two generals put their philosophies to work. To prevent the Confederate Army from reinforcing units under Union attack, Grant and Sherman coordinated their spring offenses to kick off simultaneously.

In May, Sherman and his Army of the Tennessee moved south into Georgia. Sherman's objective

was the supply and rail hub of Atlanta. In Virginia, Grant and Lee faced each other for the first time. Grant's strategy was to maneuver in such a way that Lee was forced to fight him. This strategy was costly as the Union Army often attacked entrenched Confederates. Nevertheless, Grant was able to absorb the losses and Lee was not.

For several months, Sherman fought a series of battles in north Georgia against Joseph E. Johnston and Lieutenant General John Bell Hood before finally taking Atlanta in early September. The much needed victory helped Lincoln win reelection in 1864. At the very time Sherman moved against Georgia, Grant moved south and met Lee near the old Chancellorsville battlefield called The Wilderness. Although that engagement was a Confederate victory, Grant did what no other defeated Union commander had previously done; he moved against Lee the next day. For the next several weeks Grant fought Lee in a series of battles that produced horrific casualties for the Union. Although the Federals suffered some defeats, the pressure of constant combat forced Lee to fall back toward Richmond while sustaining casualties he could not replace. By mid-June, just 1 month after starting the movement south, Grant had pushed Lee to the outskirts of the vital rail and communications center of Petersburg, just 20 miles south of Richmond. Here, the two armies settled into a 10-month siege.

When Sherman took Atlanta, Confederate forces under Hood retreated west. Instead of pursuing, Sherman marched east for Savannah after setting ablaze military stocks and about one third of Atlanta. The Union objective was to take the war into the heart of the Confederacy by destroying supplies and attacking the South's will to fight. By December, Sherman pushed his march to the Atlantic Ocean and presented Savannah to Lincoln as a Christmas gift. In the meantime, Hood's retreating army turned north for an offensive strike into middle Tennessee. After a series of reckless attacks at Franklin in November 1864 and at Nashville in December, Union forces destroyed Hood's portion of the Army of Tennessee at the Battle of Nashville.

After rest and resupply, Sherman turned north and marched into the Carolinas to link up with Grant in Virginia. As in Georgia, Sherman burned supplies, tore up rail lines, and freed slaves. On March 19, Joseph E. Johnston, who had charge of the Army of Tennessee in North Carolina, attacked

Greensboro, North Carolina. It would be another month, however, until the last battle of the war was fought in west Texas.

Historical Interpretations

The Civil War in American memory has created a variety of historical interpretations that contribute to a vast and diverse historiography. In the decades following the war, the “lost cause” interpretation of the war took root in Southern culture. This mood was generated and perpetuated to restore Southern honor and place the fault of the war on Northern hostility. The lost cause theory elevated Lee to a god-like status and credited the birth of the Confederacy to what James McPherson called “divine principle.” The lost cause marginalized slavery and painted Northerners as aggressors against Southern sovereignty. In contrast, Northerners portrayed the war as a crusade against slavery. Early in the 20th century, Progressive historians claimed that the economic strife between the agrarian South and the industrialized North caused political friction, which led to war. By mid-century, the Revisionists school rose out of romantic notions that the South was a victim of both Northern and Southern radical factions that spread hatred and caused the war. Regardless of causation interpretation, what is clear is that the roots of the war are a combination of complex political, economic, and social issues that resulted in secession when a president was elected whose platform threatened slavery.

In addition to the discussion over how Americans remember the Civil War, historians continue to debate several major questions that synthesize tactics, campaigns, and commanders with the common soldier, nationalism, and the home front. Most notably, Bell Irvin Wiley was the first historian to look at the soldier experience in his works *Life of Johnny Reb* and *Life of Billy Yank*. Since the publication of these pivotal volumes, several historians have added significant layers onto the study of the common soldier through studying the multitude of letters and diaries left behind. Historians such as McPherson, Gerald Linderman, Earl Hess, and Reid Mitchell retrace the steps of the men in their ranks in an attempt to determine the nature of their day-to-day experience, how they were able to withstand hardship and loss, and most important, why they fought. Building on scholarship on the common soldier, scholars such as

Jason Phillips, Kenneth Noe, and Chandra Manning attempt to understand the ideological motivations such as slavery, nationalism, and masculinity that intrinsically kept men in their ranks. Other scholars, such as Hess and Linderman, place the common soldier within the context of the higher command and campaign strategy to understand how unit cohesion, morale, and courage motivated soldiers to withstand combat.

Initially, a major scholarly debate centered on why the North was able to defeat the South. While some synthesis has been reached, the growing body of literature on the commanders, campaign strategy, and tactical challenges continues to intrigue historians. For example, Joseph Glatthaar looks at leadership within the Army of Northern Virginia and its subsequent effects on the troops, Hess investigates trench warfare during the Petersburg Campaign, and Gary Gallagher adds an intricate assessment of the Union high command to couple his previous work on the Confederate leadership. Similarly, scholars retrace how the Civil War shaped modern military training in the late 19th century. For example, Carol Reardon demonstrates how Civil War tactics, technology, and battlefields served as training for the American military during the Progressive Era. Reardon’s study argues that the Civil War battlefields served as the training grounds, while testimony and experiences of veterans served as the push for modern military institutes, protocol, and education that stands today.

As historians continue to debate the outcome of the war, several scholars attempt to answer these traditional questions from new angles such as non-traditional warfare, the home front, and dissent. A group of scholars, in particular, Daniel Sutherland, move beyond the Eastern and Western theaters in an attempt to investigate guerrilla warfare and its effect on the attention, resources, and concern of both the Lincoln and Jefferson administrations. In addition, scholars such as Nina Silber, Matthew Gallman, Jennifer Weber, Aaron Sheehan-Dean, Stephen Ash, and Stephanie McCurry, among others, argue that the politics, conditions, and occupied areas on the home front were directly correlated to the armies and the soldiers who fought. This scholarship argues that there was a direct correlation between the participants in the political administration, home front, and battlefield. Therefore, as historians continue to ask the traditional questions such as whether or not the conflict was inevitable, why the North won,

and the nature of the common soldier experience, the scholarship on the Civil War demonstrates how answers to these questions are seemingly endless because the depth and complexity of the effects of the conflict on the participants continue to provoke inquiry by successive generations.

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See also African Americans; Jomini, Antoine-Henri; President as Commander in Chief; Reconstruction

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CIVIL-MILITARY RELATIONS

Civil-military relations is the term used to describe the relationship between civil society and the military. Most often, the term refers to the relationship between civilian leaders of the state and the leaders of the military organizations created to defend it. In the broadest sense, however, civil-military relations include political, economic, and cultural relationships between civil society and the military at all levels. Military recruitment, civilian attitudes toward the military, and the economic effects of military procurement policies are examples of the wide range of relationships encompassed by the term.

Major Issues in Civil-Military Relations

A central concern in the study of civil-military relations is how civilian leaders establish and maintain

authority over the military when the military possesses the coercive power to take control of the state. With civilian control of the state as the normative ideal, students of civil-military relations examine the governmental structures, political processes, and cultural practices that affect the likelihood of the military overthrowing a civilian government or imposing its will on civilian authorities in other ways. In the United States, the possibility of a military takeover of the government has remained remote for a number of reasons, including the Constitution's clear designation of civilian control, the competing centers of power within the government, and the acceptance of civilian supremacy as part of the officer corps' professional training.

The study of civil-military relations also considers the extent to which the military obeys the commands of its civilian leaders. The military can undermine civilian control by refusing to comply with orders from civilian superiors or by failing to follow those orders fully and promptly. The political scientist Peter Feaver (2003) uses agency theory to describe ways in which the military, as the agent, does or does not carry out the policies of civilian leaders. When the military disfavors policies, Feaver says, it may "shirk" its responsibility for implementing them through delay or other means.

Another major issue in the field of civil-military relations involves the appropriate roles of civilian and military leaders in making decisions related to the military. Even nations with well-established traditions of civilian supremacy over the military have found it difficult to determine which decisions should fall to civilian leaders and which to the military. The issue often arises during deliberations over whether or not to use military force in pursuit of national policies and, once the decision to use force is made, how best to use it to achieve the desired end. In his influential work on civil-military relations, *The Soldier and the State* (1957), the political scientist Samuel Huntington argued that, while the military should defer to civilian authority on questions of broad policy, civilians should give the military the autonomy to conduct operations as it sees fit. He said that civilian leaders lack the expertise to make decisions at the operational level, and their attempts to intervene usually undercut the military's effectiveness. Huntington's critics contend, on the other hand, that no clear line exists to separate political decisions from the purely military. Civilian

leaders must at times make decisions about military operations, they say, because military actions at all levels can have political consequences.

Huntington and other scholars of civil-military relations have also examined the issue of the military's role in the political process. Huntington asserted that, just as civilian leaders should avoid involvement in the affairs of the military, military leaders should refrain from political activity. Indeed, in most modern democracies, the expectation is that the military as a whole should be politically neutral and that members of the military should abstain from political actions such as running for office or endorsing candidates. In the United States, the ideal of political neutrality, reflected both in law and in notions of military professionalism, has discouraged the direct involvement of military personnel in partisan politics. Still, the military has found other ways to exert influence in the political sphere. Leaks to the news media, the cultivation of key allies in Congress and other areas of the civilian government, and the politically astute distribution of procurement funds are examples of the methods that military leaders have used to steer policies in the directions they favored.

Civil-Military Relations in U.S. History

American conceptions of civil-military relations took shape during the colonial period. Most colonists shared the view of the British Whig party that the military—standing armies in particular—represented a threat to political liberties. The colonists' suspicion of standing armies contributed to the widening breach between the colonies and the mother country when the British government sent regular troops to Massachusetts to quell political protest in the 1760s and 1770s. The newly formed United States established a standing army of its own once the revolution was under way, but the Continental Congress kept the army under close supervision. George Washington, commander of the Continental Army, strengthened the tradition of civilian supremacy through his scrupulous respect for congressional authority during the war with Britain and his opposition to the so-called Newburgh Conspiracy of 1783, in which Continental Army officers contemplated open defiance of Congress in response to its failure to pay them.

The Constitution made the president commander in chief of the military, but the framers, wary of

having the military become an instrument of executive power, gave Congress control over its budget. The Constitution also reduced the concentration of military power by providing for state militias as well as national armed forces. For the military, the Constitution's system of divided civilian control meant that it sometimes received mixed or even contradictory signals about policies from civilian leaders.

Through much of the 19th century, the American military, small in size and geographically scattered, had little influence within the political system. The beginning of the Civil War in 1861 produced a dramatic expansion of the military's size and offered the opportunity for an increase in its political influence as well. President Abraham Lincoln, however, kept military affairs firmly under civilian control. Lincoln was an active commander in chief who participated in the formulation of strategy, questioned and prodded his sometimes slow-moving generals, and at times even directed troop movements. Generals such as George B. McClellan complained that the assertiveness of Lincoln and other civilian leaders interfered with their ability to conduct the war, but the military generally accepted the idea of civilian oversight and command. The period of Reconstruction that followed the Civil War entangled the military in domestic politics in unprecedented ways. The Congressional Reconstruction Act of 1867 divided the defeated southern states into military districts commanded by army generals who became responsible for supervising elections, overseeing the formation of new state governments, and protecting the civil rights of the recently freed slaves.

Following its foray into the heated politics of Reconstruction, the military struggled to avoid a return to the status it had held before the Civil War—poorly funded and politically inconsequential. The rise of the United States as a world power, however, meant new responsibilities and increased appropriations for the military. The desire of civilian leaders to enhance the nation's role on the international stage led to an expansion of the navy beginning in the 1880s, and the war with Spain in 1898 and the acquisition of overseas colonies that resulted from the American victory brought a substantial increase in the size of the army.

The nation's new global prominence led to involvement in two World Wars in the first half of the 20th century. In both conflicts, civilian and

military leaders worked reasonably well together, with civilian officials setting the broad strategic goals and the military making decisions at the operational level. The relations were not completely harmonious, however, and disagreements over policy arose between civilian and military leaders in both wars. President Woodrow Wilson frustrated many in the military during World War I, for instance, by ordering, against the recommendations of his top commanders, the intervention of U.S. forces in the Russian civil war in 1918. In World War II, President Franklin D. Roosevelt disregarded the advice of General George C. Marshall, the highly respected army chief of staff, when he ruled out an Allied invasion of France in 1943. Still, in both wars, military leaders recognized the authority of the presidents to decide such matters, largely kept their disputes with civilian leaders from the public eye, and worked to implement policies established by their civilian superiors.

The end of World War II in 1945 found the U.S. military in a relatively strong position. Its success in the war, combined with the need for a large peacetime military created by the Cold War with the Soviet Union, elevated its prestige and influence. Although the military generally continued its practice of deferring to civilian authority, military leaders challenged civilian leaders on a number of occasions in the early Cold War period. During the administration of President Harry Truman, internal battles between the navy and the air force over funding and their respective roles in U.S. wartime strategy went public in the so-called Revolt of the Admirals in 1949. The open criticism of the administration's defense policies by high-ranking naval officers led General Omar Bradley, chairman of the Joint Chiefs of Staff, to describe the officers' actions as a "rebellion" against civilian control. President Dwight Eisenhower, himself a former general, faced a less public but equally resolute resistance against his strategic policy of "massive retaliation" from a number of high-ranking army officers in the 1950s.

The most notable case of military defiance of civilian authority occurred in 1951, when General Douglas MacArthur, commander of UN forces in the Korean War, openly criticized the Truman administration for its refusal to expand the war by bombing targets in China. MacArthur's public critique of the administration's strategy of limited war prompted Truman to relieve the general of command for

insubordination. The firing of an extremely popular general by an unpopular president outraged many Americans. Yet even among those who doubted the wisdom of Truman's action, few questioned his authority to remove MacArthur, and most scholars of civil-military relations consider the episode a significant demonstration of the strength of civilian control.

Another land war in Asia, the Vietnam War of the 1960s, also generated disagreement between civilian and military leaders and added to the debate over the appropriate roles of military and civilian leaders. During the conflict, many in the military resented what they perceived as the overly restrictive management of military operations by President Lyndon B. Johnson and civilian officials of his administration. Civilian interference, said critics of the Johnson administration, impeded the American war effort. Johnson's supporters, on the other hand, defended the president for placing limits on military operations to prevent the war from possibly escalating into a broader conflict. The ultimate failure of American efforts to prevent the takeover of South Vietnam by communist North Vietnam contributed to the intensity of the controversy over the Johnson administration's relations with the military.

The American experience in Vietnam caused many members of the military to question the wisdom of interventions in foreign conflicts by U.S. forces, especially when those interventions lacked clear objectives. This skepticism affected the military's response to the numerous peacekeeping missions that civilian leaders called on it to perform in the last decades of the 20th century. The Joint Chiefs of Staff, for example, opposed the decision of President Ronald Reagan to send a contingent of U.S. Marines to Lebanon as part of an international peacekeeping force in 1982. The failure of that mission—the troops were unable to restore peace to the area and hundreds of marines died when terrorists bombed their barracks—reinforced the military's doubts about such interventions, as did the failure of the mission to provide humanitarian aid in Somalia in the early 1990s. In contrast, many in the military pointed to the U.S. invasion of Panama to overthrow the dictator Manuel Noriega in 1989 and the U.S. response to the Iraqi invasion of Kuwait in Operation Desert Storm in 1991 as models of effective intervention and harmonious civil-military relations. In both cases, President George H. W. Bush

largely deferred to the judgment of his military advisors on the size of the forces involved and the conduct of the operations.

In 1992, the growing debate in the United States over whether the country should use military force to stop the bloodshed caused by "ethnic cleansing" campaigns in Bosnia and Herzegovina led General Colin Powell, chairman of the Joint Chiefs of Staff, to articulate a set of guidelines for civilian policymakers to consider before authorizing an armed intervention. In a published opinion piece, Powell argued that the United States should not intervene unless the mission had well-defined goals, strong public support, and a commitment from civilian leaders to use decisive levels of force to achieve victory. Powell's action caused controversy. Some experts on civil-military relations contended that he had undermined the authority of civilian leaders to decide on questions of policy by offering his advice through a public forum rather than through official channels and by seeming to insist on standards that a proposed intervention must meet before military leaders would endorse it.

The election of Bill Clinton as president in 1992 initiated a period of increased conflict between civil and military leaders. Clinton's personal history—he had avoided military service during the Vietnam War through student deferments and had taken part in antiwar demonstrations—as well as his perceived disregard for the armed forces made some in the military reluctant to accept him as commander in chief. The opposition of many military leaders to the administration's policies in the interventions in Haiti in 1994 and Kosovo in 1999 added to the tension. The greatest source of discord, however, was the Clinton administration's efforts in 1993 to overturn the ban on gays serving in the military. Military leaders, including members of the Joint Chiefs of Staff, publicly criticized the proposed change in policy and worked with allies in Congress to block the move. The dispute led to the passage of compromise legislation—the "Don't Ask, Don't Tell" bill—which continued the prohibition on gays serving in the military but prevented the military from inquiring about the sexual orientation of military personnel.

The terrorist attacks of September 11, 2001, resulted in increased popular support for the armed forces and an even greater reliance on the military as an instrument of U.S. policy. The U.S. invasions

of Afghanistan in 2001 and Iraq in 2003, followed in both cases by long-running counterinsurgency campaigns, focused renewed attention on the appropriate roles of civilian and military leaders in conducting military operations. Many in the military criticized civilian officials of the administration of President George W. Bush for involving themselves in the details of the operations rather than merely setting the strategic goals and letting the military take care of planning and executing the campaign. The criticism fell in particular on Secretary of Defense Donald Rumsfeld, who insisted on a rapid reduction of U.S. troop strength in Iraq after the fall of Saddam Hussein's regime despite the advice of Army Chief of Staff Eric Shinseki that far larger numbers of troops would be necessary to maintain order in the country. Regardless of the dissatisfaction in the military with many aspects of civilian leadership, civilian control of the military remained strong. A striking reminder of this occurred in 2010, when President Barack Obama relieved General Stanley McChrystal as commander of U.S. forces in Afghanistan for disparaging remarks that the general and members of his staff had made about members of the Obama administration to a journalist.

Current Issues in Civil-Military Relations

The principle of civilian control of the military is well established in the United States in law and tradition, but what civilian control means in practice will likely remain a source of contention. As the disputes between military and civilian leaders in both the Vietnam and Iraq wars reveal, no consensus has developed over what their respective roles should be in making decisions about military operations once civilian authorities choose to use force in pursuit of national interests. The role of the military in the political system is also likely to remain controversial. Two developments of recent years promise to cause disagreement as well. One is the increasing tendency of Western nations to conduct military operations under the command of transnational organizations such as the United Nations and the North Atlantic Treaty Organization, a practice that raises questions about the extent to which the military's obligation to obey civilian authority extends to civilian leaders of foreign nations. Another is the growing reliance of the U.S. armed forces on civilian contractors to carry out military tasks, a practice that raises questions

about the extent to which contractors should adhere to the same standards as the military in obeying civilian authorities and avoiding political activity.

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See also Congress, U.S.; Constitution, U.S.; Huntington, Samuel; Politics, Military Participation in; President as Commander in Chief; Professionalism

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CLASSIFICATION SECURITY

Classification security is a prescribed uniform system that establishes standards for the protection of national security information (NSI). A national classification security system protects defense- and foreign relations-related information obtained during our interactions with other nations as directed by the president. The president, using constitutional

authority, administers the protection of classified information via executive orders (EO). Since 1940, various presidents have established classified security programs for the protection of NSI. The unauthorized release of NSI to the public would cause varying degrees of damage to national interests. The current EO 13526 provides the authority and guidance for defining, protecting, marking, and declassifying NSI throughout the life cycle of the records.

Since the first EO dealing with NSI (EO 8381 issued in 1940), the classification security system has reflected contemporary national security concerns and political environments. The most recent iteration of the EO dealing with NSI (EO 13526 issued on December 29, 2009) inherited most of the characteristics that originated with President Bill Clinton's groundbreaking EO 12958, further institutionalized by President George W. Bush in 2003, along with a few new items from the current administration of President Barak Obama. The EO places controls on the marking levels and the longevity of classification decisions. The EO also defines what information meets the three classification levels: (1) confidential, (2) secret, and (3) top secret. It is also important to note what the order does not cover: Specifically excluded from the classification system defined by the NSI EO is information covered by the Atomic Energy Act of 1954 dealing with the design, production, and use of nuclear weapons and special nuclear material. This entry describes the procedures and standards for classifying information by the U.S. federal government.

Original Classification Authority

Only executive branch officials may classify information, and they must be designated in writing by the president of the United States. These officials are known as original classification authorities (OCAs). The OCAs are responsible for applying the guidance provided in the EO within their particular agencies. As per the EO, the number of OCAs is limited to keep a measure of control on the production of classified material within the federal government. In addition, OCAs must be able to positively identify the damage to national security if the records they are classifying are inadvertently released.

The OCAs must attend annual mandatory training to understand their responsibilities for classifying information. The training emphasizes such issues

as overclassification, classification safeguards, and records declassification. An OCA's authority can be suspended if the OCA does not attend the annual training.

OCAs are just that—original classification authorities. Other executive branch officials can classify documents, but only when those documents contain information derived from other classified records.

Standards for Eligible Categories

For information to be classified, it must be owned by, produced by or for, or under the control of the U.S. government. Under the current order, the kinds of information eligible for classification fit within the following categories:

1. Military plans, weapons, and military operations
2. Foreign government information—information that originated with another country
3. Intelligence activities (including covert action), intelligence sources and methods, or cryptological systems
4. Foreign relations or foreign activities of the United States, including confidential sources
5. Scientific, technological, or economic matters relating to national security
6. Nuclear information not covered by the Atomic Energy Act of 1954, primarily information dealing with programs that protect and safeguard special nuclear material and nuclear facilities
7. Infrastructure projects, installation plans, and their vulnerabilities or capabilities related to national security
8. The development, production, or use of weapons of mass destruction

There are kinds of information specifically prohibited from security classification. The classification system cannot be used to conceal violations of the law, inefficiencies by persons or organizations, or administrative errors. The system cannot be used to conceal embarrassment to a person or an agency. Security classifications may not be used by contractors or inventors to restrain competition or to prevent or delay the release of information that does not require protection in the interest of national security.

Classification Levels

The three levels of classified information and their definitions are as follows:

1. *Top secret*: Release of information classified at this level can cause exceptionally grave damage to national security.
2. *Secret*: Release of information classified at this level can cause serious damage to national security.
3. *Confidential*: Release of information classified at this level can cause damage to national security.

While there may be other markings applied to documents in addition to the above-mentioned terms, no other terms or markings are authorized for use in identifying classified information.

OCA should apply the lowest level of classification when in doubt.

Duration of Classification

There is no connection between duration and level of classified information. The duration is a date or event less than 10 years, 10 through 25 years, or up to 25 years. All information under the order will be automatically declassified at 25 years unless the originating agency requests a duration longer than 25 years because the information still meets the original standard for classification under the order. The regulation allows information to be protected beyond 25 years without a need to exempt at 25 years as required by the order for information that would reveal a human intelligence source or key weapons design.

Access to Classified Information

There is always a necessary tension between the rights of the government to protect sensitive information from the public and the rights of the public to know how its government conducts business in the name of its citizenry. Interwoven within the U.S. classification system is the concept that an informed citizenry has the right to make the request for mandatory review for classified NSI on one side and the concept that all information is subject to the loss of sensitivities with the passage of time and should be declassified and publicly disclosed when the standards for protection are no longer warranted under the EO. The order clearly states that “information shall be

declassified when it no longer meets the standards for Classification.” The intent or concept is that information will be declassified when it is determined by the OCA that the release of the information will no longer cause damage to national security. In essence, no information may remain classified indefinitely.

In some cases, our government has declassified information citing that the public interest outweighed the continued protection under the order. The mandatory review provisions under the order allow the public to request the executive branch to review classified information for declassification and public access. The government has the right to acknowledge the request and review but also has the right not to confirm whether the documents or information exists. OCAs should always maintain a high standard for classification and allow for the release of the information in a timely and efficient manner and only protect that information the release or public disclosure of which would cause damage to the national security of the United States.

Security Classification Guides

Every executive branch agency or department with OCAs must also develop classification guides that identify the specific kind of information to be classified by the OCA as well as the appropriate level of classification. Classification guides must be approved by an official who has program or supervisory responsibility over the information or by the senior official as defined in the EO. The system requires that the guide be maintained and updated in a timely manner for the consistent protection of classified information. Classification guides can only classify information for 25 years, and except for human intelligence sources and key weapons designs, information cannot exceed the duration of 25 years as stipulated under the provisions of the order. Classification guides can and should be revised during the federal records life cycle and incorporated into a declassification guide for use in the protection of the information.

Once the OCA determines the decision on the classification level based on potential damage to national security and duration of the information, the information must be codified in a guide so that it can be used, internally and externally, by other government agencies. In using classified information, a government employee has two sources of information for classifying national security-related information. The use of a classification guide will indicate

all necessary instructions for markings, durations, and downgrading and declassification. The other authoritative method for use by an employee is the derivative classification by using source documents, materials, memos, and reports that must respect all of the original markings, duration, downgrading, and declassification instructions.

Neil Carlson Carmichael Jr.

See also Defense, Department of; National Security Act; National Security Council; President as Commander in Chief; U.S. State Department

Further Readings

Classified National Security Information Final Rule, 32 C.F.R. pts 2001 and 2003 (2010).
Exec. Order No. 13526, 3 C.F.R. 707 (2010).

CLAUSEWITZ, CARL VON

Carl Philipp Gottfried von Clausewitz (1780–1831) was a Prussian army officer and military educator, historian, and theorist. Clausewitz was born on June 1, 1780, the fifth of six children of a Prussian tax official, Friedrich Gabriel Clausewitz, who had served as an army officer during the Seven Years' War. Although Clausewitz's father claimed aristocratic status (i.e., the right to use the term *von* before his surname), official recognition of the family's membership in the nobility did not occur until 1827. Clausewitz's two older brothers, Friedrich and Wilhelm, enjoyed distinguished army careers. In 1810, Clausewitz married Marie von Brühl, the daughter of a count who had served as military tutor to the Prussian crown prince, the future King Frederick William III, Clausewitz's sovereign. Clausewitz died of cholera in Breslau on November 16, 1831. A prolific writer, Clausewitz's collected works come to 10 volumes, of which the first 3 constitute his magnum opus, *Vom Kriege* (*On War*). The remaining 7 volumes are devoted to histories of military campaigns. This entry discusses the life of Clausewitz and examines his multivolume book on military strategy, *On War*.

Biographical Overview

Clausewitz joined the Prussian army as a lance corporal in the spring of 1792. He was promoted to

ensign in 1793, second lieutenant in 1795, first lieutenant in 1804, captain in 1809, and major in 1810. In 1812, he resigned his commission in reaction to his king's decision to support the French invasion of Russia, a step that he considered incompatible with Prussia's national interest and honor. Clausewitz then entered the Russian army as a first lieutenant, becoming a colonel by 1813. Prussia changed sides in 1813. Clausewitz subsequently rejoined the Prussian army in 1814 with the rank of colonel. In 1818, he became a major general. Clausewitz attended the Berlin Institute for Young Officers from 1801 to 1804, graduating at the top of his class, and was a member of the Military Society, a discussion group of progressive officers, from 1802 to 1805. During this period, he earned the favor of Gerhard von Scharnhorst, Prussia's leading military reformer, whose preference for history over theory, and belief in the importance of educating military leadership, heavily influenced Clausewitz's intellectual development. Scharnhorst's patronage also advanced Clausewitz's military career.

Clausewitz gained firsthand experience of major armed conflict in the wars of the French Revolution and Empire (1792–1815). He participated in serious fighting in campaigns against the French in 1793 and 1794. Clausewitz was subsequently involved in a number of great engagements. He fought at the Battle of Auerstädt in 1806, where his battalion suffered heavy casualties and ultimately was surrounded and forced to surrender. Clausewitz was attached to the Russian cavalry at the Battle of Borodino (1812). He took part in the pursuit and destruction of the French army in the winter of 1812–1813, in the course of which he witnessed the infamous slaughter of French stragglers at the Berezina River (November 27–28, 1812). Clausewitz served as an officer of the Russian army attached to the Prussian army at the Battles of Lützen (May 2, 1813) and Bautzen (May 20–21, 1813). In the former action, though nominally a staff officer, he led a cavalry charge and was wounded. Clausewitz was the chief of staff to a corps commander at the Battles of Ligny (June 16, 1815) and Wavre (June 18, 1815), which were part of the Waterloo campaign.

Clausewitz was connected in manifold ways to the political and military elite of Prussia and Russia. Clausewitz's relationship with Marie von Brühl, a

member of the Prussian royal court, began in 1802. From 1803 to 1809, he served as aide-de-camp to Prince August (son of Prince Ferdinand, who was the brother of Frederick the Great and of Prince Augustus William, the latter the grandfather of King Frederick William III). From 1808 to 1812, Clausewitz served unofficially and officially as an aide to Scharnhorst, who led the military reform effort following the catastrophic defeat of Prussia by France in 1806, and who for a time was chief of the general staff and de facto head of the Ministry of War. In 1810, Clausewitz was assigned to teach at the General War School and appointed military tutor to the crown prince. Clausewitz discussed matters of state and military affairs with King Frederick William III before and after his resignation from the army in 1812. While in the Russian army, Clausewitz was closely associated with the high command and on occasion advised Tsar Alexander. He played an important role in the negotiation of the Convention of Tauroggen in December 1812, which involved General Johann David Ludwig Yorck, commander of the Prussian auxiliary corps that supported the French invasion of Russia. In 1813, Clausewitz drafted Yorck's scheme to expand the Prussian army with reservists and militia. This was followed by a resumption of his assistance to Scharnhorst until the latter's death after the Battle of Lützen. In 1813 and 1814, Clausewitz was chief of staff to the Russian general Count Walmoden, commander of the Russo-German Legion. In 1815 and 1816, Clausewitz was chief of staff to Augustus Wilhelm von Gneisenau, commander of the Army of the Rhine from 1815 to 1816. From 1818 until 1830, Clausewitz was administrative head of the General War School. In 1830, he was appointed a member of the First and later Second Artillery Inspection Departments and also to membership in the Supervising Commission for Military, Scientific and Technical Subjects. In 1831, Clausewitz was made chief of staff to Gneisenau, commander of the Prussian Army of the East.

On War

Clausewitz studied the history of the campaigns he had been in, as well as others in which he had not, writing lengthy and detailed historical accounts. His experience, and rigorous reflection on experience

and history, provided the foundation for his most famous work, the treatise *On War*. Clausewitz's widow published the manuscript posthumously in 1832. Though unfinished, its main arguments are discernable. Clausewitz's practical objective in writing *On War* was to address the threat posed to Prussia's national existence by a resurgent revolutionary France in the post-Napoleonic era. Clausewitz attributed Prussia's near destruction in the Napoleonic wars to the inexperience of its military and political leadership and the failure of the Prussian government to choose a course of resistance to the French following the defeat of the army. He thus conceived of a radically different approach to military education that was meant to better prepare inexperienced military and political leaders for decision making in war under difficult circumstances and argued in favor of protraction of hostilities by a defender even after catastrophic military setback.

Clausewitz's educational argument is that a properly formulated approach to the study of war could significantly improve the ability of military and political leaders to make sound decisions. He was convinced that proper study was a matter of replicating the decision-making experience of successful commanders in chief of the past. Clausewitz thus called for the reenactment of historical cases of strategic decision making, followed by reflection on the experience of reenactment. Clausewitz was convinced that a great deal of importance that affected command decision is never recorded. For this reason, he argued, reenactment had to be based on a combination of verifiable historical fact and factors whose existence and effects had to be surmised. *Surmise* is to be informed by propositions about the nature of war, which had been derived from observation of actual decision making in war that had been codified into theory. Clausewitz called the process of reenactment and reflecting on reenactment "critical analysis," and he believed that this activity could enhance the intuitive faculties that are the source of effective military and political judgment. Critical analysis did so by focusing attention on why decision making is difficult rather than whether acts of decision are right or wrong.

Clausewitz's second major argument is that defense is a stronger form of war than offense. Clausewitz was convinced that a defender with the determination to resist could protract hostilities, and

by so doing, he could exhaust even a greatly superior invader. He argued that such a process of attrition would either set the stage for successful counter-attack by the defender or discourage the attacker, which would then because of internal dissension seek terms short of its original objective. For Clausewitz, therefore, the fundamental strategic issue is not, as the Swiss military theorist Antoine-Henri Jomini had maintained, concentration of force, but rather the political will to carry on the fight. Clausewitz's thinking about these matters is embodied in three related propositions: (1) war is an extension of politics by other means, (2) politics is a matter of domestic as well as foreign affairs, and (3) politics affects the attacker more than the defender. In the event of the destruction of the defender army by an attacker bent on the destruction of the national existence of the defender, Clausewitz calls for resort by the defender to action by armed civilians through what was called "people's war"—that is to say, guerrilla war.

Clausewitz does not believe that any theoretical formulation, including his own theoretical statements on the relative strengths of the defense and attack, can prescribe the actual conduct of war. But this does not rule out the use of theoretical propositions to set the terms of thinking about particular aspects of a strategic problem. Theory accomplishes this by identifying the nature of things in war. By so doing, it pushes deliberation in directions that it might otherwise not have gone, raising questions rather than providing answers. The purpose of such a process is to prevent bad intellectual habits—such as maintaining belief in the decisive strategic significance of concentration of force—from determining strategic courses of action.

On War consists of eight books, the first seven of which are concerned primarily with the direction of warfighting by the commander in chief. Books 1 and 2, which constitute a general introduction, outline Clausewitz's two main arguments. Books 3 through 5 are concerned with what Clausewitz calls the elements of war, which are strategy, tactics, and the operative characteristics of armies; in these sections, Clausewitz provides theoretical instructions for the surmise required to augment verifiable historical facts. Books 6 and 7 are about what Clausewitz calls the parts of war, which are defense and attack; in these sections, he provides a detailed exposition of his contention that the defense is a stronger form of war than offense. In Book 8, Clausewitz addresses

the problem of war planning—that is, he discusses the nature of political and military intellectual acts that necessarily precede the direction of warfighting by the commander in chief. In this final book, Clausewitz resorts to prescriptive theoretical instruments (e.g., "center of gravity"), because he believed that war planning could be addressed productively by finite and fixed propositions in a manner that he did not believe to be the case with war proper—that is, the direction of warfighting.

Clausewitz maintained that his approach to studying supreme command and views on defense and attack constitute a scientific theory—that is, a method based on accurate observation of real phenomena—of fighting between nation-states that is valid for all levels of war from low to high intensity. He also believed that the ideas put forward in *On War* invalidate all conventional general theories of war—that is, theories of war that describe the dynamics of war with comprehensive prescriptive intent. *On War* is almost universally regarded as the most important study of its subject, but disagreement about the identity and meaning of its major and secondary arguments is widespread. This is the case because Clausewitz's approach to the study of armed conflict is novel, difficult, and complex, and thus it is prone to being misconstrued by inattentive or incomplete engagement by readers. For these reasons, the full force of *On War*'s major arguments has yet to be felt.

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See also Guerrilla Warfare; Military Science; OODA (Observe, Orient, Decide, and Act); Staff Relationships

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CLOSE AIR SUPPORT

Close air support (CAS) refers to actions undertaken by aircraft against hostile forces in close proximity to friendly ground units. This requires integration of air missions with ground forces through the use of observers or coordinators to confirm targets and ensure that attacks do not threaten friendly forces. This entry describes the evolution of CAS aircraft and operations from World War I to the present.

History: World War I to Operation Iraqi Freedom

Although the noted theorist Giulio Douhet promoted the development of aircraft for strategic bombing as early as 1921 in *Command of the Air*, physical limitations of range and payload during the first decades of the age of flight kept aircraft close to the front lines. The outbreak of World War I triggered dramatic innovation in aeronautical technology and tactics, and both sides eventually produced specialized airframes to meet the requirements of observation, air-to-air bombing, and ground attack missions. One of the most famous CAS aircraft of World War I was the German Albatros J.I, which featured armor steel plating to protect the crew while strafing trenches in direct support of the infiltration tactics of *Sturmtruppen* companies. Specialized armor would become a common characteristic of CAS aircraft, but unfortunately so would fratricide, from strafing the wrong troops, which highlights the importance of intimate cooperation between ground and air forces regardless of airframe or operation. Communication was fairly limited due to the rudimentary nature of radio at the time, so aviators generally relied on flags, smoke, and the relatively stagnant trench lines to distinguish friend from foe.

Many limitations of combined arms combat were dissolved in 1937 by Hanz Guderian with the

advent of Blitzkrieg warfare and the introduction of the iconic Junker Ju 87 Stuka. Although the Stuka would reveal its weaknesses as a medium bomber in the Battle of Britain, as a CAS platform, it was exemplary. However, despite its murderous accuracy and terrorizing howl, the true source of Nazi success in overrunning Europe was the constant radio contact that the Luftwaffe maintained with advancing Panzer divisions. This technique was mirrored later in the war by Major General Elwood "Pete" Quesada, who pioneered air-ground warfare in North Africa and perfected it with General Omar Bradley in Europe. He added the use of the radar to direct fighter-bombers and made pilots ride in tanks as forward air controllers for "armored column cover" missions. Notwithstanding precautions such as distinctive markings on ground and air vehicles and ad hoc coordination measures like the "no bomb line," the lack of specific CAS doctrine led to significant fratricide incidents during World War II.

Technical and doctrinal innovations during World War II should have solidified the role of tactical attack aircraft in support of ground maneuver, but they were nearly subsumed by the invention of the atomic bomb and the birth of Strategic Air Command. The U.S. Marines maintained the combined arms tradition throughout the 1950s, but in spite of promises to continue support for the U.S. Army with the establishment of Tactical Air Command, the U.S. Air Force continued to pursue the holy grail of decisive "strategic" air power. At the start of the Korean War, the air force was so focused on strategic bombing that it considered air strikes anywhere within artillery range of friendly units to be CAS, while the marines defined it as air strikes within 50 to 200 yards of friendly troops, delivered within 15 minutes of request. Therefore, General Douglas MacArthur relied almost exclusively on the marines for CAS until the air force reluctantly initiated the Air Liaison Officer program and reintroduced forward air controllers to aid ground-based tactical air control parties.

During the Vietnam War, until the highly capable OV-10 Bronco was produced and then supplemented by the F-100 Super Sabre and F-4 Phantom, jets were flying fast forward air controller missions in areas where the surface-to-air threat became too great. Guided air-to-surface weapons, like the laser-guided Paveway bomb, also entered the arsenal at this time, and though the most well-known

use for these weapons was on interdiction targets like the Thanh Hoa Bridge, they were well suited for CAS where precision guidance was desired. Despite advances in communications technology, including the introduction of Identification Friend or Foe, night vision aids, and computerized targeting on radar systems, CAS aircraft were not impervious to poor coordination at the execution level, though standardized terminology and procedures such as the nine-line standardized format for passing targeting information to CAS platforms dramatically improved results.

Another major improvement in doctrine was the creation of fire support coordination measures such as no-fire areas and the fire support coordination line (FSCL). Fire support coordination measures improved understanding of the necessary cooperation between ground and air forces; however, many of these linear designations lost their meaning in the close counterinsurgency fights in South Vietnam, and the debate still rages over who controls targeting and airspace deconfliction beyond the FSCL. This point was driven home during Operation Desert Storm when the FSCL was originally located at the border between Saudi Arabia and Iraq, thus restricting deep operations by the U.S. Army, and then moved too far north to allow the U.S. Air Force to pursue the retreating Republican Guard in the waning hours of the "100-hour war." The same problem existed more than a decade later in Operation Iraqi Freedom, despite the introduction of killbox CAS, which separated the area of responsibility into grids that could be cleared individually down to 5 nautical mile squares. Marines, on the other hand, tend to keep the FSCL close to the forward line of troops to ease integration of their organic air assets, which also allows more freedom of action beyond the FSCL. The 1994 U.S. Air Forces's *Joint Force Air Component Commander (JFACC) Primer* concluded, "The most reliable way to maximize the enemy's risk is to place the FSCL at the range where artillery and missiles stop being the greatest threat to the enemy and air attack becomes the greatest threat" (p. 34). This sounds easy in theory, but in practice, especially in modern maneuver warfare where the front line changes by the minute, or in counterinsurgency fights that do not have a definable distinction between friend and foe, and in areas where covert action is the norm, the placement of fire support coordination measures can be problematic.

In spite of many studies, after-action reports, and discussion among joint doctrine experts, this argument has yet to be fully resolved.

The Contemporary Period

The arrival of Global Positioning System-guided precision munitions, unmanned combat aerial vehicles, and digital satellite communications linking the battlefield to a global command and control network have transformed the CAS environment. CAS doctrine also experienced a transformation when the army and air force established the Air Land Forces Application Agency in 1975 to develop multiservice tactics, techniques, and procedures to fill interoperability voids between units, staffs, and the armed services. The navy and marines joined the project in 1992, and it became the Air Land Sea Application Center, which now provides a forum to share joint expertise in areas such as joint fires, aviation urban operations, and the theater air-ground system.

Two major technological revolutions have shifted CAS from the tactical to the strategic level of war. The first is the 24-hour news cycle fueled by global access to local news via the Internet and the second is the ability of rear-echelon air operation centers to *see* and *affect* the battlefield through radar, electro-optical/infrared imagery, and even live-streaming video from the RQ (Pioneer, DarkStar, Global Hawk, Hunter, Shadow, Raven) and MQ (Predator, Reaper, Fire Scout, Warrior) series of remote-piloted weapon systems. These technologies have taken a battlefield effect and put it into the daily lives and decision-making cycles of our most senior leaders.

The use of bombers, such as the B-1 Lancer ("Bone"), has also changed the landscape of coordination procedures and expectations for CAS. In some cases, aviators operating at high altitude only require coordinates or use a targeting pod that practically removes the need for a colocated tactical air control parties with eyes on the target. It is likely that in the not too distant future, unmanned combat aerial vehicles such as DARPA's X-45 may exceed current manned capabilities in the critical areas of cost/maintainability, range/endurance, survivability/firepower, and sensors/communications. The question remains whether they will be more or less effective in higher threat environments.

On the darker side, though exact statistics are difficult to obtain, it is generally accepted that about



U.S. Marine Corps Corporal Caleb Love watches for insurgent activity from the door of his UH-1N Huey helicopter while providing close air support for coalition forces engaging insurgents in the city of Ubadyi, Iraq, during Operation Steel Curtain on November 16, 2005. Love is a Huey helicopter crew chief with Marine Light Attack Helicopter Squadron 369 of Camp Pendleton, California.

Source: Department of Defense photo by Sergeant James P. Aguilar, U.S. Marine Corps (released).

2% of casualties between World War I and Vietnam were caused by fratricide, but in recent operations such as Desert Storm, Operation Enduring Freedom, and Operation Iraqi Freedom, the fratricide level has been significantly higher, in most cases exceeding 10%. These figures are not solely attributable to CAS and are significantly inflated due to greater accountability, better reporting procedures, and the current enemy's general inability to inflict mass casualties. Yet the potential for fratricide and collateral damage from air strikes has induced changes in strategy, as evidenced by General Stanley McChrystal's 2009 directive to restrict the use of CAS in residential areas. However, the problem has less to do with a specific deficiency in CAS platforms or doctrine and more to do with the character of urban combat,

the lack of coherent strategic communications, and a counterinsurgency strategy of avoiding civilian casualties at all costs. Similar problems were solved by the French in Algeria by establishing *quadrillage* (surveillance using a grid pattern) and *regroupment* (village resettlement) to allow free-fire areas for mobile helicopter search-and-destroy missions.

No matter what the service, country, or cause, CAS is a difficult and dangerous mission for both those in the air and those on the ground. While proper doctrine can make coordination easier, and specially designed aircraft can make execution safer, the most enduring aspect of ensuring effective and efficient CAS is constant cooperation between air and ground forces. Among the most significant non-technological developments are enhanced training



The aircraft carrier USS *Harry S. Truman* (CVN 75) sits in the Persian Gulf as the crew conducts shipboard and small boat drills on February 8, 2005. The Truman Strike Group and Carrier Air Wing 3 are conducting close air support, intelligence, surveillance, and reconnaissance missions over Iraq.

Source: Department of Defense photo by Airman Rome J. Toledo, U.S. Navy (released).

opportunities for CAS pilots to work more closely with ground forces under realistic conditions, such as Green Flag at the Joint Readiness Training Center in Fort Polk, Louisiana, and the National Training Center at Fort Irwin, California. As stated in Joint Publication 3-09.3, *Joint Tactics, Techniques, and Procedures for Close Air Support* (2003), “Although simple in concept, CAS requires detailed planning, coordination, and training for effective and safe execution” (chap. 1, p. 1). Regardless of who has control of the airspace and assets or what the platform looks like, CAS will be successful only with a common understanding of the capabilities and limitations each arm of the combined team brings to the fight, a shared mental model of the tactical situation

and operational objectives, and constant training between air and ground forces.

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See also Friendly Fire; Persian Gulf War; Strategy, Air Power; Tactics, Air

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CLOTHING

See Uniforms

COALITION, WARFARE

Coalitions represent the wartime alliance between multiple partners designed to meet specific, and often short-term objectives. Coalitions can traditionally be differentiated from alliances in terms of membership, with coalitions often consisting of multiple partners, and their short life span, often being disbanded after meeting the coalition's specific

wartime goals. Coalitions in the 20th century tended to blend the line between alliance and coalition more so than in the 19th century when coalitions only tended to be formed in times of conflict. Increasingly, the peacetime alliances of the 20th century became the wartime coalitions that dominated warfare in that century. Nations that participate in coalitions are often motivated primarily through self-interest, generally this being a sense of self-protection. This entry examines the characteristics of coalitions and gives examples of how they functioned in the 20th century.

Characteristics of Coalitions

Coalitions are extremely varied in their makeup and in how they function, but there are characteristics that are common to most. Generally, coalitions tend to fall into two patterns of partnership. The first is between equal states. An example here would be the relationship between Great Britain and France during World War I that saw both powers vying to claim an equal share of leadership within the coalition. The second is between greater and lesser powers. A prime example here would be the U.S.-Australian coalition in the Pacific during World War II. In this example, the United States, owing to its economic and material advantage, clearly was the partner who determined the coalition's course of action during the conflict.

The historian Jehuda Wallach notes that the effectiveness of a coalition is determined by several factors. In a coalition of equals, such as the British-French example, the success of the coalition is often linked to the relationships that emerge between commanders in the field more than on the relationship between the individual states' governments. In a coalition between a greater and lesser power, it is not necessarily true that the greater power will always exert the greatest influence over the coalition. Multiple factors must be taken into consideration for determining how effectively the greater power will dominate the relationship. The two most important aspects that must be considered are first, an abundance of manpower, and second, greater economic power. The U.S.-Australian example provides ample evidence of how these two factors are the most important in determining a greater power's effectiveness in shaping a coalition relationship.

Until the United States established a preponderance of power in terms of men and materials, Australia was able to negotiate a larger role for itself in the military partnership. However, after mid-1942, the United States generally was able to dictate the plan of action in the southwest Pacific.

Coalitions, because of the multiple actors involved as well as the various levels of contact, can be notoriously difficult to manage successfully. The coalitions crafted to challenge Napoleon in the early 19th century stumbled before finding success in 1814 and then again in 1815. Several notable weaknesses of coalitions include the divergent war aims of the multiple partners, the failure of coalition partners to effectively coordinate political and military relationships, the impact of public opinion within each member state, language barriers, the question of the amalgamation of coalition forces, the coordination of logistics, and the difficulty of imposing a supreme command structure on a coalition.

Another important characteristic of coalitions is that they amplify the resources available to member nations to carry out military actions. This has had the effect of making wars longer in duration and greater in their destructive capability. Also, the diverging aims and interests of partner nations serves to make the achieving of peace a more difficult process. In many ways, coalition warfare serves to make the crafting of a peace more difficult than the winning of the war itself. A prime example here is the attempt by the Allied powers and the United States to reach a consensus peace during the Versailles Peace Conference in 1919.

Examples of Coalitions in the 20th Century

American involvement in World War I is representative of coalition warfare. Unlike the British, French, or Russians, the United States was not tied by any formal alliance structure to the Allied effort. This was even noted by the Wilson administration's decision to adopt the title of Associated power rather than Allied power. American involvement was short term and designed to meet specific objectives: the defeat of Imperial Germany and to secure the United States a bargaining position in crafting the postwar peace. After the end of the conflict, the United States did not maintain any formal military relations with the Allied powers.

The example of World War II blurred the line between alliances and coalitions. While the United

States, Great Britain, and the Soviet Union were not tied by any formal alliance, the cooperation displayed, especially between the American and British militaries, went beyond the generally ephemeral nature of coalition warfare. World War II was also important in helping reshape thinking on the place of coalitions in world affairs. In the aftermath of World War I, many states had looked at coalitions as a root cause of the conflict and sought to limit their use. World War II reversed that trend as the growing threat of the Cold War with the Soviet Union made coalitions a necessity in the post-World War II era.

The most recent example of the functioning of a coalition in wartime was the Persian Gulf War in 1990–1991. In the aftermath of the Iraqi invasion of Kuwait in August 1990, the United Nations passed a series of resolutions that would result in the U.S.-led coalition of 34 nations evicting Iraqi forces from Kuwait after a brief air and ground campaign. U.S. president George H. W. Bush was especially keen to make sure that the military campaign was not seen as a wholly American operation to quell worries about the expansion of U.S. influence in the Middle East.

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See also Iraq War (2003); Persian Gulf War; World War I; World War II

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COALITION PROVISIONAL AUTHORITY

The Coalition Provisional Authority (CPA) was a multinational governing body formed to rebuild Iraq in the wake of the 2003 invasion by a coalition led by the United States. Citing UN Security Council

Resolution (UNSCR) 1483, and the laws of war, the CPA assumed a mission as the de facto government within Iraq to restore conditions of security and stability, to create conditions in which the Iraqi people could freely determine their own political future, and to facilitate economic recovery, sustainable reconstruction, and development. It vested itself with executive, legislative, and judicial authority over the Iraqi government to provide for the effective administration of Iraq during the period of transitional administration. This entry discusses the background and history of the CPA from its beginning in 2003 and its activities until its dissolution in 2004.

Background and Formation of the CPA

Following the successful invasion and deposition of Saddam Hussein's regime in Iraq, the responsibility for overseeing reconstruction efforts in Iraq fell to the Office of Reconstruction and Humanitarian Assistance led by retired U.S. Army lieutenant general Jay Garner. Recognizing the events surrounding the invasion of Iraq by coalition forces, the UN Security Council passed UNSCR 1483 charging the coalition with the obligation as the occupying authority to promote the welfare of the Iraqi people, restore security, and create conditions that would allow Iraqis to determine their future. UNSCR 1483 made the coalition the legal governing authority, recognized the creation of a transitional Iraqi government council, and removed previously imposed sanctions placed on the former regime of Saddam Hussein. Under the oversight of an international body, the International Advisory and Monitoring Board, and with explicit input from the Iraqi people, UNSCR 1483 also authorized the coalition authority to utilize Iraq's oil revenue for postwar development. While UNSCR 1483 did not expressly establish a specific organization to carry out the coalition's responsibilities, it would become the legal foundation for the creation of the CPA when on May 16, 2003, the U.S. presidential envoy to Iraq, Ambassador L. Paul Bremer, issued CPA Regulation Number 1. CPA Regulation Number 1 identified Bremer as the administrator of the CPA; promulgated the authority of the CPA to temporarily administer Iraq with all executive, legislative, and judicial authority necessary to achieve its objectives; designated the commander of coalition forces in direct support of the CPA to promote a

safe and secure environment in Iraq; and established the applicable laws, regulations, and orders with which the CPA would carry out its functions. With this proclamation, the Office of Reconstruction and Humanitarian Assistance ceased to exist and Garner returned to the United States.

When he was named presidential envoy to Iraq, Bremer was charged with oversight of the coalition's reconstruction efforts and a process by which Iraqis could rebuild their governing institutions. As the administrator of the CPA, Bremer reported to the president of the United States through the secretary of defense as he directed and coordinated all U.S. government programs in Iraq not under the control of the U.S. military's Central Command commander. From his headquarters in Saddam Hussein's former Republican Palace in Baghdad, Bremer organized the CPA around seven staff offices (Security Affairs, Economic Policy, Civil Affairs, Oil Policy, Communications, Regional Operations, and Development) and four geographic headquarters (North in Irbil, Central in Baghdad, South Central in Al Hillah, and South in Basra). Each regional headquarters operated semiautonomously to build four common postwar reconstruction pillars of sovereignty: (1) security, (2) essential services, (3) economy, and (4) governance.

CPA Activities and Dissolution

On the same day as the CPA's establishment, Administrator Bremer issued CPA Order 1 for the disestablishment of the Iraqi Baath party. With this order, full members of the Baath party were removed from their positions and banned from future employment in the public sector. Furthermore, the top three layers of management in every government institution were subject to investigation for affiliation with the Baath party and possible criminal conduct. With significant implications for the future occupation of Iraq by the coalition, the expressed intent of the order was to ensure that the future government in Iraq is not threatened by Baathist elements returning to power. Quickly compounding the effects of CPA Order 1, Bremer issued CPA Order 2 on May 23, 2003, formally disbanding the Iraqi army, effectively placing 300,000 armed men out of jobs and on the streets.

In keeping with the authorities of UNSCR 1483, the CPA issued Regulation 6 on the formation of

the Iraqi Governing Council as the principal body of the Iraqi interim administration, pending the establishment of an internationally recognized, representative government by the people of Iraq. The Iraqi Governing Council was bestowed authorities and responsibilities outlined in UNSCR 1483 to ensure that the interests of the Iraqi people were represented in both the interim administration and in determining the means of establishing a representative government through consultation and coordination with the CPA.

Again, with respect to UNSCR 1483, the coalition “authority” was to be responsible for administering a development fund for the postinvasion reconstruction. Within UNSCR 1483, the UN-administered Oil-for-Food Program ended, and it transferred funding authority to the CPA to provide funding for the postwar reconstruction programs: governance, security, economy, and essential services. As its primary governance role, the CPA’s charge was to restore full sovereignty to the Iraqis. With the establishment of the Iraqi Governing Council, the Transitional Administrative Law, and elections that led to the creation of the interim Iraqi government, the CPA charted the path toward Iraqi sovereignty. Within the security program, the CPA helped the Iraqis create the means to assume responsibility for their internal and external security. It thus laid the foundation for various security services and organizations, including the Ministries of Defense and Interior, the Iraqi army, and Iraqi Police Service to help define the legal framework of those entities within the new government. Principally through management of Iraq’s wheat purchase program, a currency exchange program, and energy infrastructure programs, the CPA enabled Iraq to transition to a market-based economy. Finally, the CPA worked to restore Iraq’s essential services to near and beyond preinvasion conditions. The CPA initiated the reconstitution of Iraq’s dilapidated infrastructure after a decade of atrophy with development programs in oil production, water and sanitation infrastructure, transportation and communications networks, and essential services of health and education.

On June 1, 2004, the Iraqi Governing Council dissolved itself after having approved the Transitional Administrative Law for Iraq and subsequent establishment of the Interim Government of Iraq. Within little more than a year after the expulsion of Saddam Hussein’s regime and 2 days prior to the

UN-imposed deadline for ending the occupation of Iraq, Bremer handed over legal documents to the Iraqi chief justice on June 28, 2004, declaring Iraq a sovereign state. Subsequently, with this transfer of power, the CPA ceased to exist, and Bremer returned to the United States.

John P. J. DeRosa

See also Iraq Insurgency (2003–2011); Iraq War (2003); Iraq War, Planning for; Nation-Building

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COAST GUARD, U.S.

Established by law in 1915, the modern Coast Guard joined together the Revenue Cutter Service, whose origins date back to 1790, and the civilian Life Saving Service. In 1939, the Lighthouse Service was amalgamated with the Coast Guard. Historically, they performed numerous functions, from enforcing customs laws to steamboat inspections. Between 1915 and 2003, the Coast Guard operated under the control of the Navy, Commerce, and Transportation Departments at various times. In 2003, the Coast Guard was transferred to the Department of Homeland Security as part of a reorganization of governmental law enforcement agencies. This entry discusses the history, missions, personnel, and vessels and aircraft of the U.S. Coast Guard.

History and Organization

America’s Coast Guard is a uniformed military service, even though it is not part of the Department of Defense. As an armed force, Coast Guard authorities include those given under Title 10 in U.S. Code.

By law, during wartime, the president may transfer the service to the secretary of the navy. Only in World War I and World War II did the Navy Department take control of the Coast Guard. In other conflicts, the Coast Guard remained under the Treasury Department, later Department of Transportation, and later Department of Homeland Security. The Coast Guard's roles in the two World Wars were extensive. In both conflicts, the Coast Guard engaged enemy submarines off the coast of the United States in addition to rescuing survivors from sunken merchant ships. The Coast Guard also had principal responsibility for securing American ports from sabotage. In World War II, the Coast Guard created an elaborate system of beach patrols to prevent the landing of enemy agents and saboteurs. In addition, Coast Guardsmen and vessels participated in a number of overseas operations, including the invasion of Guadalcanal and the D-Day landings on June 6, 1944.

Since World War II, the Coast Guard has remained independent of the U.S. Navy but has participated in every war of the Cold War and post-Cold War eras. In the aftermath of the September 11, 2001, attacks, the Coast Guard's tradition of port security and coastal patrolling was given renewed emphasis.

Missions

Coast Guard personnel differ from the armed forces serving under the Department of Defense in that they also have federal law enforcement authorities under Title 14 in the U.S. Code. U.S. Coast Guard active-duty commissioned, warrant, and petty officers have authority to enforce federal laws. The service can enforce federal laws on waters subject to U.S. jurisdictions, in international waters, and on all vessels under U.S. jurisdiction. Unlike the armed forces serving under the Department of Defense, the Coast Guard is exempt from the Posse Comitatus Act of 1878 (18 U.S.C. § 1385), which prohibits federal military forces from conducting domestic law enforcement.

The U.S. Coast Guard is the nation's largest maritime law enforcement agency and possesses broad jurisdictional authority, as well as significant regulatory and public safety responsibilities. The Coast Guard is a multimission force. Its primary responsibility is to serve as the lead federal agency for homeland security. On December 21,

2004, the principal assigned duties were described in the National Security Presidential Directive 41/Homeland Security Presidential Directive 13—National Strategy for Maritime Security Supporting Plans. The Coast Guard's current duties include coordinating the Maritime Operational Threat Response Plan, designed to coordinate the federal response to threats in the maritime domain.

Coast Guard forces have many other duties, including conducting search and rescue at sea; fisheries protection; maintaining and operating the U.S. icebreaker fleet; maintaining maritime aids to navigation; marine environmental protection, including preventing invasive species and responding to oil and chemical spills; marine safety; and coordinating ports, waterways, and coastal safety and security, including serving as the "captain of the port" and permitting bridge construction.

Among the service's law enforcement missions is serving as the lead federal agency for enforcing U.S. immigration laws at sea. The Coast Guard monitors maritime transit zones not only to interdict but also to assist and rescue undocumented migrants. Drug interdiction is another significant law enforcement responsibility, one that entails a significant deployment to the Caribbean.

The humanitarian role of the Coast Guard remained a mainstay of this armed service even after 9/11. Coast Guard vessels and aircraft annually rescue scores of merchant sailors and pleasure boaters, often in extreme weather conditions. After Hurricane Katrina hit New Orleans in 2005, the Coast Guard rescued more than 24,000 individuals from rooftops and flooded homes and evacuated several thousand medical evacuees.

International Role

The Coast Guard is also the lead U.S. representative to the International Maritime Organization. It is the specialized agency of the United Nations responsible for improving maritime safety and preventing pollution from ships. After 9/11, the Coast Guard was instrumental in developing and securing the adoption of the International Shipping and Port Facility Security Code, an initiative to establish global standards for improving security and combating terrorist threats to seagoing vessels and maritime infrastructure.

In addition to its "warfighting" missions, the Coast Guard provides training assistance to foreign

coast guards and maritime services. It has assisted several Latin American countries to bolster their abilities to counter the international drug trade. After the United States removed President Manuel Noriega from power in Panama in 1990, the Coast Guard assisted Panama in rebuilding its maritime service.

The Coast Guard also participates in the International Ice Patrol that tracks icebergs in the North Atlantic and ensures that they do not obstruct commerce.

Personnel

In 2009, the Coast Guard included 42,000 men and women on active duty, 7,500 reservists, 29,000 auxiliaries, and 7,700 full-time civilian employees. The Coast Guard Academy in New London, Connecticut, serves as the primary source for commissioned officers, and the facility in Cape May, New Jersey, is the sole training center for new enlisted personnel.

The Coast Guard has a history of African American service that dates back to the origins of the revenue cutters in the 1790s and later the Lifesaving Service. The Coast Guard was ahead of the U.S. Navy in World War II in commissioning Black officers and integrating vessels and land stations. Institutionally, the Coast Guard proved much more willing than the U.S. Navy and other branches in fully integrating its service. Despite this historical commitment, the Coast Guard currently has the lowest proportion of service by African Americans in the enlisted and officer corps.

In World War II, the Coast Guard did create a reserve program for women—SPARs—and more than 11,000 served during the conflict. The name was derived from a contraction of the Coast Guard motto “Semper Paratus,” and its meaning, Always Ready. In contrast to the other armed services, women were completely demobilized from this branch after the conflict’s end. The Korean War led to the reactivation of the women’s reserve, and a small number of women continued to remain in the service through the 1970s.

The Coast Guard was quite responsive to the women’s movement that emerged in the 1970s. It was the first service to abolish combat exclusion that limited the assignments that women officers and enlisted personnel could hold. In 1976,

the Coast Guard Academy became the first service academy to admit women. The Coast Guard was also ahead of the U.S. Navy in integrating women into combat vessels. In 1977, a total of 24 women were sent to serve aboard the *Morgenthau* and the *Gallatin*—2 female officers and 10 enlisted personnel per ship. Two years later, a woman officer was appointed to command the cutter CGC *Cape Newagen* operating in Hawaii.

Vessels and Aircraft

In contrast to U.S. Navy ships, Coast Guard vessels are lightly armored and carry modest armaments. The Coast Guard divides vessels in its fleets into two classes: (1) cutters and (2) boats. Cutters are more than 65 feet in length and have adequate accommodations for the crew to live aboard. Vessels less than 65 feet in length are considered boats and are deployed primarily to inland rivers and lakes. Since responsibility for maintaining navigation aids forms a significant aspect of the Coast Guard’s mission, much of the fleet consists of buoy tenders and other similar vessels. Icebreakers are the largest vessels in the Coast Guard’s fleet.

High endurance cutters, 378 feet in length, serve as the primary vessels for law enforcement, as well as search and rescue operations on the high seas. The bulk of the *Hamilton* and *Hero* classes of cutters were built in the 1960s and 1970s and underwent modernization in the late 1980s. The *Bear* class of medium endurance cutters (270 feet) was intended to engage in antisubmarine warfare during times of war and routinely join the larger cutters in search and rescue operations. The 210-foot *Reliance* class cutters were primarily designed to support search and rescue operations and are capable of towing a 10,000-ton vessel. Built in the 1960s, these vessels were modernized in the 1980s with modifications that included increased emphasis on their firefighting capabilities. Since World War II, the U.S. Navy has given the Coast Guard castoffs, including a fleet of ice breakers in the 1960s. For instance, *Alex Haley*, a former navy salvage ship, 282 feet in length, entered the Coast Guard service in 1999 and is stationed in the Bering Sea and operates in Alaskan waters.

The Coast Guard has a fleet of 211 fixed- and rotary-wing aircraft, which are used for patrols and rescue missions of vessels in distress. Coast Guard

aviation assets are based both on shore and on larger cutters with helicopter flight decks.

Command

The Coast Guard commandant is a four-star equivalent. An admiral appointed by the president, the commandant is not formally part of the Joint Chiefs of Staff but is invited to participate in Joint Chiefs of Staff discussions that affect Coast Guard operations and activities.

Institutional and administrative components of the service are headquartered in Washington, D.C., with responsibilities divided between the deputy commandant for operations, who oversees marine safety, security, and stewardship programs, and the Coast Guard chief of staff, who supervises personnel, logistics, and acquisition.

The operational Coast Guard is organized into 17 districts divided between the Atlantic and Pacific Commands, each under a three-star flag officer. District commanders control most Coast Guard forces in their geographic area of operations. In 2007, the service established the Deployable Operations Group, which has a national rather than a regional mission. Its mission is to deploy specially trained and equipped maritime security assets under a single unified command authority for special missions, such as counterterrorism operations.

Homeland Security

Before 9/11, the Coast Guard was already hard pressed to perform all its missions with available resources and personnel, especially given the renewed emphasis on port security and securing the borders. In addition, the service's ships and planes had not been modernized since the 1960s. Following the Coast Guard's transfer to the Department of Homeland Security, the service felt even greater stress in accomplishing its assigned missions. As of 2010, the service also lacked sufficient personnel to fully man the reorganization in the Atlantic and Pacific Commands begun in 2007.

Though the Coast Guard had stated as its objective to perform all non-homeland security-related law enforcement activities back to 95% of pre-9/11 levels by the end of 2004, that goal proved elusive. According to the Coast Guard's Annual Performance Review,

the gap between resource hours between homeland security and non-homeland security missions has narrowed since 2004 from 26% to 10%. Yet balancing missions remains difficult. As of Fiscal Year 2009 (October 2008 to September 2009), the service only reached its performance goals in 6 of 11 mission areas. Coast Guard combat readiness levels were achieved only 44% of the time. The service's goal is 100%.

In addition to struggling with a "high operational" tempo (frequently deploying personnel and equipment for missions), the service continues to remain hamstrung by chronically low budgets that do not allow for adequate investments for modernizing ships and planes. In 2002, the Coast Guard undertook a major servicewide acquisition program called Deepwater, but since its inception, the initiative has been plagued by underfunding, controversy, and cost overruns.

In an age when terrorism has blurred the boundaries between war and peace, the Coast Guard is the branch of the armed services uniquely poised to fight the Global War on Terrorism. In contrast to the uniformed services under the Department of the Defense, the Coast Guard has a long tradition of enforcing a range of criminal laws and appears poised to maintain its central role in military and law enforcement operations in the future.

James J. Carafano

See also Border Patrol; Drug Interdiction; Homeland Security, Department of; Organization, Coast Guard; Training, Coast Guard Enlisted; Training, Coast Guard Officers; U.S. Coast Guard Academy

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CODE OF CONDUCT

The Code of Conduct, now formally known as the Code of the U.S. Fighting Force, provides American military personnel with guidelines for dealing with the threat of capture, interrogation, and coercion by enemy forces. The code was approved by President Dwight D. Eisenhower on August 17, 1955, with the expressed purpose of better preparing each service member “to counter and withstand all enemy efforts against him,” and to help instruct him on “the behavior and obligations expected of him during combat and captivity.” Today, every member of the U.S. Armed Forces receives annual training on the code. High-risk personnel, such as pilots and commandos, receive additional training in survival, evasion, resistance, and escape techniques, known as SERE. This entry highlights the content of the code and its history from the Korean War to the present.

Prior to the Korean War, American military leaders paid little attention to the conduct of captured Americans. The United States did participate in a series of international agreements, most notably the Geneva Conventions of 1949, that defined the responsibilities of captors toward enemy prisoners of war, but these agreements ignored the responsibilities of the prisoners themselves.

Korea, however, marked the first conflict in which enemy captors waged a comprehensive campaign to exploit American prisoners for political gain. During the war, North Korean and Chinese jailers employed torture, starvation, and intense political indoctrination to coerce various acts of collaboration from their American prisoners, including radio broadcasts, peace appeals, and germ warfare confessions. In addition, 21 Americans (and one British marine) refused repatriation at war’s end, leading many to suspect that the communists had somehow “brainwashed” their captives. These suspicions gained publicity at the height of the McCarthy era, when many Americans feared a secret communist plot to overthrow the government.

Under intense pressure to address reports of widespread misconduct and brainwashing, Secretary of Defense Charles E. Wilson appointed a Pentagon committee to study these allegations and propose solutions. The committee heard expert testimony from scholars, physicians, and former prisoners and recommended a series of policy changes, including

establishment of a code to guide the conduct of captured American servicemen. The code’s six articles emphasized the prisoner’s obligation to resist capture, keep faith with fellow prisoners, obey lawful orders, and “make every effort to escape.”

In addition, prisoners were to provide interrogators with only their name, rank, service number, and date of birth, later dubbed “the Big Four.” According to an internal Pentagon summary of the committee’s deliberations, U.S. Air Force representatives initially opposed this restriction as unrealistic, archaic, and inherently passive. They advocated that prisoners be allowed to discuss routine matters that provide no aid to the enemy while making every effort to evade and resist interrogation by adopting various stratagems designed to mislead the interrogator. U.S. Army, Navy, and Marine Corps representatives, however, insisted on the more restrictive language, and the air force complied. Although the code was not incorporated into the Uniform Code of Military Justice, it repeatedly emphasized the accountability of prisoners for their actions.

Following Eisenhower’s approval, the Pentagon distributed several thousand copies of the Code of Conduct to schools and civic organizations while implementing a broad, well-publicized program of training within each branch of the armed forces. In response to the brutal interrogation of its pilots during the Korean War, the air force established a school for SERE, and attendees endured imprisonment, interrogation, and mistreatment within a mock prison camp. During the Vietnam War, the other services established their own schools, each designed to provide intensive training for those personnel considered most vulnerable to capture and exploitation.

The Vietnam War provided a grim test of the newly established code. As in Korea, Americans were again fighting to defend an ally from communist aggression, and as in Korea, the Vietnamese communists abused and tortured captured Americans to gain propaganda victories. Unlike their predecessors, however, the majority of Americans captured in Vietnam were air force and navy pilots. These prisoners were generally older, better educated, and better trained than the thousands of young, poorly trained enlisted men captured by the Chinese and North Koreans in the previous war.

After their release in 1973, relatively few American prisoners of war were accused of

collaboration or misconduct, suggesting that the code had achieved its desired effect. Many returning prisoners of war echoed this sentiment, citing the code as an inspiration to continue resistance despite several years of confinement, mistreatment, and physical and mental abuse.

Critics, however, noted that few prisoners actually managed to maintain the code's idealistic standards in the face of prolonged torture, and several incidents since Vietnam seem to reinforce this criticism. During the Persian Gulf War of 1991, for example, captured American pilots appeared on Iraqi television to condemn American "aggression." In 1994, a disoriented army helicopter pilot who was shot down over North Korea confessed to having committed "an intolerable crime." Although each case violated the code's restriction against making "oral and written statements disloyal to my country," the Pentagon took no punitive action after these prisoners were repatriated, suggesting a more flexible interpretation of the code's requirements.

The original code has been modified twice since 1955. In 1977, President Jimmy Carter authorized removal of the word "only" from the article describing information that prisoners could share with their captors. This change removed the restriction to "the Big Four." In 1988, President Ronald Reagan authorized a change in language that made the code gender neutral.

Today, all American service members continue to receive periodic training on the Code of Conduct. SERE training has expanded to accommodate more students, and the focus of that training has changed to reflect the challenges of combat in the 21st century, which include potential capture by warlords, criminals, and terrorist groups.

William C. Latham

See also Air Force, U.S.; Army, U.S.; China, People's Republic of; Geneva Conventions; Interrogation; Korea, North; Korean War (1950–1953); Marine Corps, U.S.; Navy, U.S.; Persian Gulf War; Prisoners of War; Training, Air Force Pilots; Training, Naval Aviators; Uniform Code of Military Justice; Vietnam War

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COLOMBIA

On the surface, Colombia would appear to have the potential for greatness within the environs of the Western Hemisphere. With its capital in Bogotá, Colombia's 2010 population of 44.2 million made it the fourth largest nation in Latin America. The country enjoys both ample resources and access to markets via the Pacific Ocean and the Caribbean.

Unfortunately, despite these advantages, Colombia has been beset by violence for much of its history. Some clashes have been political in nature. After achieving independence from Spain, the country oscillated between oligarchical rule and outright dictatorship. Violence employed in the service of state power is a common, well-established practice. Consequently, the rule of law has suffered. In the modern era, Colombia's most recent constitution dates back to only 1991.

Economically, Colombia has undergone significant changes since World War II. Once dominated by agriculture, services (52.9%) and industry (37.5%) drive the contemporary legal economy. Although the country posted impressive growth rates in the recent past (7.7% gross domestic product in 2007), the global recession has largely reversed this trend. Colombia, like many of its Latin American counterparts, is experiencing steep economic decline today.

Colombia's society has changed as much as its economy. After World War II, approximately 70% of the country lived in rural areas. Presently, that proportion is reversed. Many are attracted by higher wages or the prospect of better public services in cities like Medellín. Others have simply escaped failed farms or encroaching violence. Urban migration has largely failed to meet many of these expectations. The massive shantytowns surrounding Colombia's major cities are rife with disease, primitive living conditions, unemployment, and underemployment. Rather than serving as a brake on criminal

enterprises, they are often a haven for crime, from petty theft to the great drug cartels. The ongoing drug war, discussed below, has exacerbated social problems. Endemic warfare between the government, the cartels, guerrillas, and right-wing paramilitary groups has imposed a heavy cost on the average citizen. In 2002, Colombia had the third highest number of internal refugees in the world after Angola and Sudan. This entry explores the history of Colombia, with a focus on Colombia's drug trade, *La Violencia*, and the relationship between Colombia and the United States.

From *La Violencia* to the War on Drugs

The event most important to Colombia today is *La Violencia* (1948–1965), the civil war between the nation's Liberal and Conservative parties that resulted in the deaths of approximately 160,000 people. The bloodletting effectively destroyed constructive political dialogue in its aftermath and retarded anything resembling the reconstruction of basic social institutions. The mid-1960s brought little relief. During the heyday of the Alliance for Progress, a massive U.S.-sponsored program that introduced billions of dollars of economic and military aid to Latin American countries, American assistance improved Colombia's ability to resist a Cuban-inspired revolution. Counterinsurgency programs focused on internal stability but failed to identify the dividing line between political dissent and subversion, a distinction already blurred by the two major political parties during *La Violencia*. Consequently, American aid supported the formation of irregular civil defense groups designed to aid the state in prosecuting the war against insurgents. These paramilitary organizations were the genesis of the United Self-Defense Groups of Colombia (*Autodefensas Unidas de Colombia*, or AUC) that dominated the country a generation later. In response, the Colombian Left armed itself. One offshoot was the Revolutionary Armed Forces of Colombia (*Fuerzas Armadas Revolucionarias de Colombia*, or FARC) in 1964. As was the case with many embryonic Marxist and leftist organizations of the time, the armed force demonstrated solidarity with the Cuban Revolution. It also became a necessary component of self-preservation and the promotion of a political agenda in a country lacking the rule of law.

The drug war is the most recent chapter in a much longer history of violence. This was particularly evident during the so-called extradition wars that raged between the national government and the cartels from 1984 to 1991. Provoked by deliberate attempts to bring traffickers to justice in Colombia and the United States, the cartels unleashed a wave of assassination attempts and attacks on the police, the judiciary, and other public officials. Thousands were killed and wounded in the process.

Colombian authorities responded in kind. The dramatic death of Pablo Escobar on a Medellín rooftop in 1993 highlighted what became a larger police and military campaign against the Medellín and Cali cartels that largely succeeded in the 1990s. However, the defeat of two larger organizations did not result in a victory in the drug war. In relatively short order, the two cartels were replaced by hundreds of small organizations.

Thus, a combination of factors facilitated Colombia's evolution into the primary source of cocaine in the Western Hemisphere. Chronic internal instability created a political, economic, and social vacuum that the cartels readily filled. At the same time, increasing U.S. and Western demand facilitated the transfer of millions (and later billions) of dollars into the hands of criminal organizations, guerrilla groups, and corrupt government officials. In 2007, the UN Office on Drugs and Crime estimated that Colombia produced 600 metric tons of cocaine with a "farm gate" value (i.e., the wholesale value of coca leaf and paste) of \$934 million.

Moreover, the drug trade essentially rescued a declining Marxist guerrilla movement from oblivion. As the Medellín and Cali cartels retreated under U.S. and Colombian pressure, the FARC filled a specific vacuum, providing security for smaller, emerging drug traffickers in exchange for cash. The actual amounts are staggering. By the late 1990s, academic sources estimated that narcotics provided guerrillas between \$500 million and \$1.5 billion annually. The financial boon allowed FARC strength to increase to approximately 15,000 fighters by 2000. It has also reportedly financed connections with organized crime in Chechnya, Russia, Ukraine, and Uzbekistan. These relationships have improved the market for Colombian cocaine and granted traffickers ready access to vast stores of Cold War-era weaponry. Both the cartels and smaller Colombian syndicates have similarly benefited from outside

expertise. Lacking the ability to construct truck bombs in 1993, Pablo Escobar simply contracted out the work to the FARC rival, the Colombian National Liberation Army (*Ejército de Liberación Nacional*, or ELN).

Colombia and the United States

Since the conclusion of World War II, the Colombian military has largely operated as an adjunct of the U.S. military establishment. Bound to the United States by the 1947 Rio Pact and the Inter-American Defense Board, Colombian training, equipment, and force structures have largely mirrored American standards. Today, counternarcotics programs have replaced Cold War priorities and tied the two countries together even more closely. Between 1987 and 1994, the United States provided half of the \$320 million in arms purchased by Colombia. Beginning in 1990, the United States provided military sales for counternarcotics operations in the amount of \$15.4 million. This quickly expanded to \$58.1 million by 1992. Colombia's 2005 military expenditures, as a percentage of its gross domestic product, placed it 35th in the world and the highest of all Latin American nations.

Military training under American auspices also significantly grew. Colombia provided the largest contingent to be trained as part of the U.S. International Military Education and Training program. A total of 7,618 personnel, or more than a third of those trained in Latin America, received instruction in the United States and at facilities scattered around the hemisphere.

Although the Ronald Reagan, George H. W. Bush, and Bill Clinton administrations devoted considerable time and resources to the drug war in Colombia, it received an additional boost in the late 1990s when American policymakers officially adopted what became known as Plan Colombia. Originally developed by the Colombian government in 1999, the \$7.5 billion strategy promised an integrated political, military, and economic effort on a national scale.

Toward these ends, the United States provided \$1.3 billion in assistance for a major effort against drug trafficking at its source. The American military expanded its system of ground-based radar installations to close holes in surveillance previously exploited by smugglers using small aircraft.

American aid also increased Colombian mobility through the provision of UH-60 and UH-1H helicopters. Between 1999 and 2003, the Colombian military and police received 84 new aircraft. To bolster the flow of information regarding insurgent and trafficking organizations, U.S. intelligence provided greater cooperation, particularly with the police counternarcotics division (*Dirección de Antinarcóticos*, DIRAN).

On the ground, the United States expanded its training programs. To win back the initiative in the countryside and make full use of improved air mobile assets, U.S. advisors assisted in the creation of *Fuerza de Despliegue Rápido* in 1998 (Rapid Deployment Force). American military personnel were also responsible for creating three special forces battalions dedicated to counternarcotics operations in the southern departments of Caquetá and Putumayo. American assistance was instrumental in forming the Riverine Brigade as part of the Colombian Marine Corps to patrol the waterways of Putumayo, Guaviare, Guainía, and Magdalena Medio.

The September 11, 2001, attacks on the United States added yet another layer to the U.S.-Colombian military relationship. Counterterrorism programs have accelerated significantly in the past decade. Between 2002 and 2009, Colombian security forces received \$50.7 million in U.S. antiterrorism assistance and training. Some of this money, specifically \$10 million, went to protect oil infrastructure in Arauca. Other projects included training light units to combat terrorists in Colombia. American assistance created sixty-four 150-man mobile *carabinero* units—based on the U.S. Army Rangers—to patrol rural areas in search of guerrillas and terrorist cells.

Colombia's Drug Industry Today

The direct results of the war on drugs have been dubious at best. During the Clinton years, the total number of hectares under cultivation in Colombia alone grew from 39,700 in 1993 to 122,500 in 1999. Eradication programs initiated after 2001 were able to reverse this trend. However, cultivation rebounded from 78,000 hectares in 2006 to 99,000 hectares in 2007, a 27% increase. Potential cocaine production also remains high. According to the UN Office of Drugs and Crime, Colombia produced 600 metric tons of cocaine in 2007, down from the peak

of 695 metric tons in 2000 but almost double the total of 350 metric tons in 1997.

Despite the rapid uptick in U.S. aid under Plan Colombia, the FARC has been able to match American funding almost dollar for dollar. In 2000, the FARC secretariat instructed its various fronts to increase tax collection and other fund-raising to \$600 million a year, roughly equal to the 2003 American military and counternarcotics aid package of \$624 million. With money available on this scale, guerrillas and traffickers have advanced their purchases of sophisticated weapons and maintained their hold on Colombian officials who remain susceptible to bribery and intimidation.

Larger economic considerations are probably more to blame than simple incompetence or an over-emphasis on things military. The foremost dilemma in the drug war is the simple earning power of coca. A peasant in Peru's Upper Huallaga Valley cultivating coca for the drug industry could earn between \$8,000 and \$50,000 a year in 1988. No other cash crop comes close to this kind of wealth or influence. Evo Morales's rise from a national leader of coca farmers to president of Bolivia in December 2005 was a statement on Latin American politics and U.S. policy.

As a consequence of these factors, the drug war has taken on the appearance of a quagmire in Colombia and elsewhere. Despite the massive investment of time and treasure, as well as the increasing subordination of civilian law to military contingency, progress is tentative at best. Violence has spilled over into Ecuador, Panama, Peru, and Venezuela. In the meantime, drug trafficking has expanded into the less sanctioned areas of Central America and the Caribbean.

In the end, the drug war has failed because it is a conflict unredeemable by military means. The drug industry, indeed the entire process by which drugs are grown, processed, and distributed, lacks what the military terms *a center of gravity*. This was in evidence when the destruction of the Medellín and Cali cartels simply resulted in new networks that easily filled a vacuum created by the Colombian government. This basic reality applies to South America as a whole, wherein the decentralized nature of drug cartels makes the war analogous to squeezing a balloon. Even as Plan Colombia has advanced, success has not followed at the same rate in Peru or Bolivia.

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See also Counterinsurgency; Drug Interdiction; Guerrilla Warfare; South America; U.S. Southern Command

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COLONIAL WARS (1607–1774)

Anglo-American colonial warfare in North America, from the founding of England's first permanent settlement at Jamestown in 1607 to the eve of the American War of Independence in 1774, pitted England against Native Americans, imperial rivals, and its own colonists. The interaction of European and indigenous martial cultures, coupled with the introduction of Old World diseases and a global capitalist economy, made total wars the principal form of conflict on the continent. Anglo-American colonial warfare in North America consisted of four distinct phases. Phase 1 (1607–1688) was a period of proprietary warfare that established many of the enduring features of cross-cultural conflict in the New World. Phase 2 (1689–1753) was a period of proxy war that relied primarily on militia units. The French and Indian War, Phase 3 (1754–1763), was a

global imperial war marked by the increased use of professional soldiers and adherence to conventional European definitions of victory. Constabulary operations designed to consolidate Britain's tremendous territorial gains dominated Phase 4 (1763–1774); ironically, these operations ultimately enervated the empire. This entry discusses these four phases of warfare in colonial America.

Indian Warfare Before Columbus

Warfare among indigenous societies in pre-Columbian North America usually resulted from violations of reciprocity. This cultural tenet required individuals and groups to generously respond in kind in every aspect of their lives to demonstrate honor and trustworthiness. Reciprocity demanded leaders and groups meet their mutual obligations to one another, but it did not imply equality. Chiefs and senior alliance members frequently redistributed more wealth than they received as tribute to consolidate their position. Gift giving ceremonies and trading relationships were two of the most important acts of reciprocity and the likeliest to provoke conflict when groups violated conventional expectations because Indians interpreted the refusal to reciprocate as a sign of overt hostility. Trade was even more contentious because of numerous protocols that required political alliances before trade commenced, the recognition of trade routes as private clan property within communal societies, and the insistence on customary "prices" that did not fluctuate, according to the historian Denys Del  ge.

Precontact Native American wars fell into three broad categories that frequently overlapped one another: (1) "national wars," (2) "blood feuds," and (3) "mourning wars." Tribes fought "national" wars against their traditional enemies and allies who failed to meet their reciprocal obligations; in short, for political and economic reasons. Because these wars served as a form of negotiation, the antagonists often sent formal declarations of war to their opponents. Chiefs primarily mobilized warriors for these large-scale operations by conducting diplomacy with other villages where their clan members lived but sought allies among other nations as well. Blood feuds, on the other hand, were small-scale wars that sought vengeance because Indian notions of justice did not distinguish between personal acts of murder and killing that took place on the battlefield. Death

at the hands of an ally required a formal apology such as the calumet ceremony or a form of gift offering to compensate the clan for its loss. A killing by an enemy demanded blood revenge. According to the historian Daniel Richter, "mourning war" was a kind of blood feud predominantly practiced by the Iroquois, but in addition to revenge, it sought to replenish spiritual power and combat depopulation caused by disease and warfare by kidnapping and adopting enemies into the tribe. While most wars remained limited because of the combatants' desire to reestablish the status quo, power vacuums created by the generational rise and fall of chiefdoms, or "cycling," prompted sanguine wars of conquest.

The European Way of War

Europeans' ideological motivations for war differed significantly from those of precontact Indians. Europeans fought numerous religious wars in the 16th and 17th centuries. Although conflicts such as the German Peasants' War (1524–1526), the French Wars of Religion (1562–1598), the later English wars in Ireland (1570–1603, 1641–1653), and the Thirty Years' War (1618–1648) also had political, economic, and social motivations, the soldiers' belief that they were defenders of the true faith and instruments of God's will permitted them to commit atrocities as they sought to extirpate their Catholic or Protestant enemies. Ideology also justified unlimited violence against political enemies such as traitors and rebels. Lord Protector Oliver Cromwell massacred nearly 5,000 people in two Irish garrisons during 1649 for being both Royalists and Catholics.

In the wake of the Peace of Westphalia in 1648, intra-European wars began to lose their hard ideological edge, and wars were increasingly fought for commerce, empire, and dynastic succession. England sought to protect its growing trade through mercantilist policies first laid down in the Navigation Acts. Parliament backed these measures with military force, resulting in three Anglo-Dutch Wars (1652–1654, 1665–1667, 1672–1674) and the War of Jenkin's Ear (1739–1742). Britain's imperial wars originated with a series of dynastic power struggles in continental Europe that rapidly spread to North America. Colonists referred to the conflicts by the sitting monarch's name: thus, the War of the League of Augsburg/King William's War (1688–1697), the War of Spanish Succession/Queen Anne's War

(1702–1713), and the War of Austrian Succession/King George's War (1740–1748). Each of these wars led to raids against the English frontier settlements, which in turn provoked attempts by the English to capture Quebec and other French bases of operation in the Maritimes and Spanish St. Augustine in Florida. The Seven Years' War/French and Indian War (1754–1763) was unique because it started in the colonies over control of the Ohio River Valley and then expanded to Europe and around the globe.

The historian Wayne Lee notes that although Native Americans fought wars among themselves before the arrival of Europeans, warfare spiraled out of control thereafter. There were three main reasons for this. First, European and African diseases caused massive depopulation among Native American groups that lacked immunological defenses. While not all groups suffered at the same time or in the same proportions from these epidemics, these demographic disasters created a "shatter zone" that led to the destruction of existing tribes and the creation of new ones by the survivors. Second, European contact also undermined Native American political equilibrium by breaking down reciprocity. The introduction of capitalist markets violated reciprocity because European prices fluctuated and the Indians closest to the markets usually established monopolies and refused to redistribute goods equitably. Disparate European and indigenous martial cultures also subverted reciprocity and increased violence because neither side understood the other's rules of war, leading to atrocities and betrayals. Third, European weapons such as firearms and metal hatchets gave attackers tactical advantages thus making warfare deadlier and prompting preventative wars, thereby creating a feedback loop of mourning war.

Apocalyptic depopulation rapidly reversed the military balance of power in North America during the proprietary period, the first of the four phases of colonial warfare, which lasted from 1607 to 1688. During the First Anglo-Powhatan War (1609–1614), Powhatan's tribesmen numbered 24,000 and his warriors besieged Jamestown causing the infamous "starving times" that killed 110 of the 200 settlers and led to the English decision to abandon the colony; only the timely arrival of a relief fleet allowed the English to return. Opechancanough, Powhatan's brother and successor following the chief's death in 1618, initiated two Tidewater Wars (1622–1632, 1644–1646) with dramatic massacres. On March

22, 1622, Powhatan warriors slaughtered 347 of the 1,240 English colonists in Virginia. Their second assault killed nearly 500 in one day, but because the colony had grown to 14,000 this only amounted to 3.5% of the population. The demographic tide turned against the Powhatan, and they could no longer hope to drive out the English.

The other revolutionary change was the introduction of firearms and metal weapons because they increased the lethality of the battlefield and altered the balance of power between indigenous and European groups by instituting arms races. The Iroquois's campaign of annihilation against the Huron, Neutral, and Erie Indians between 1640 and 1660 clearly showed that European weapons enhanced offensive capability that, according to the historian Craig Keener, prompted Indians who possessed them to wage preventative wars against their neighbors before they acquired the weapons and nullified their advantages. Despite official prohibitions against selling firearms to Indians, the Hudson Bay Company traded 10,100 flintlocks to the Cree in upper Canada between 1670 and 1689, while the French in Louisiana traded a similar number in exchange for 100,000 furs in 1744. The historian Patrick Malone contends that the Indians learned to fix the weapons, make ammunition, and even blacksmith at a rudimentary level, but they never mastered the production of gunpowder. They were also savvy customers who readily saw the advantages of stealth and reliability offered by flintlocks over matchlocks and exclusively bartered for them while the English continued to employ matchlocks. King Philip's War (1675–1676) was the first colonial war where most of the Indian warriors opposing the English possessed flintlock firearms. Initially a reason for Philip's great success, this reliance on flintlocks contributed to his downfall when his supply of gunpowder ran out and the Mohawk prevented his warriors from resupplying at New York.

Considering the Native Americans' tactical expertise, access to firearms, and substantial, though rapidly declining, numbers during the proprietary period, it is not surprising that Anglo-Americans sought them out as allies. Through the famous "Covenant Chain" alliance, New York relied on the Mohawks to secure its northern flank against first its Indian and then French enemies. They also used that alliance to claim authority over the Mohawks' tributary tribes following King Philip's

War. Connecticut was the most successful recruiter of allied Indians during the proprietary period, while Massachusetts and Plymouth only tepidly enlisted Christianized Indians who lived at missions known as Praying Towns. Not only did Indian auxiliaries substantially augment the size and combat power of the forces that the colonies could field, but they also provided up-to-date strategic intelligence about the enemy's order of battle and intentions. Wayne Lee stresses how Native American pathfinders safely guided colonial forces to remote enemy hideouts and helped them strike deep into enemy territory by conducting independent raids. Although Anglo-American armies relied on Indian allies to perform these functions throughout the entire colonial period, their dependence on them was most acute during the proprietary period because the colonists had no alternative. There were too few rangers, and the militia did not train in light infantry tactics.

Another defining characteristic of colonial warfare that was imported from Europe during the proprietary period was the concept of "feed fights." Unable to force the Indians to fight on their terms, the English systematically targeted their crops instead, harvesting all that they could and destroying the rest. This method of strategic attack against the Indians' villages and other supply bases became a permanent feature of Anglo-American colonial warfare, and when combined with the irregular tactics of *petite guerre* (small war), constituted America's "first way of war" according to the historian John Grenier.

The scorched earth policies of the feed fights combined with two significant structural features of colonization in North America that pushed conflict toward total war during this initial phase of conflict. First, the English companies and land owners provided professional military leadership through mercenaries. Notable mercenaries such as John Smith in Virginia and John Mason, John Underhill, Lion Gardiner, Myles Standish, and John Endecott in New England all saw service in the Netherlands during the Eighty Years' War (1568–1648), which taught them the art of soldiering during one of the most brutal wars in European history. These soldiers understood the tenuous foothold their colonies had in America and justified their brutality toward the entire Indian population as a military necessity to ensure their settlements' survival. Second, the need to make the colonies economically viable encouraged the Anglo-Americans to seek ways of making

war profitable. While land acquisitions and control over trade networks helped offset the cost of war over time, Native American captives promised immediate reimbursement at slave auctions. Similar to their practices in Africa, the Anglo-Americans generally did not capture indigenous people themselves; instead, they relied on native people to bring the slaves to them in exchange for goods. Indian slavery became common practice in Virginia by the 1640s and in New England by the 1670s, but nowhere did it assume the importance it had in South Carolina: The historian Alan Gallay has estimated that South Carolina sold between 24,000 and 51,000 slaves to the northern colonies and West Indies between 1670 and 1715.

Cultural differences also pushed colonial conflicts closer to total wars because the adversaries did not understand each other's reasons and rules for fighting. This led to misunderstandings and attempts to enforce alien standards of behavior through terror. Both cultures also exhibited chauvinism, aggressive patriotism that blindly sought military glory, by exempting their new enemies from the traditional restraints placed on combat. The Anglo-Americans considered the Indians cowardly and ill disciplined because of their proclivity to retreat when outnumbered. The Europeans did not comprehend that retreating was part of the Indians' tactical doctrine to achieve victory by minimizing casualties and maximizing spiritual power through captives and booty. Europeans, on the other hand, defined victory in battle by maintaining possession of the field of battle. Their chivalric notions also permitted the parole of prisoners, thoroughly perplexing the Native Americans since they often waged war specifically to obtain captives. These unmanly and confounding behaviors confirmed the belligerents' sense of superiority and led them to dehumanize each other. Another cause of unrestrained violence by Europeans resulted from their inconsistent attitude regarding Native Americans' political sovereignty. Although Anglo-Americans acknowledged Indians' sovereignty by conducting diplomacy with them according to Indian protocols, Anglo-Americans simultaneously began to consider Native Americans as subjects of the British crown due to their refusal to adopt European culture. The consequence of this was that every war became a rebellion by traitors instead of legitimate belligerents; as rebels, the Indians fell outside the protections of the laws of war.

Proxy Wars

During the second phase of colonial warfare (1689–1753), the colonies became embroiled in proxy wars of larger European conflicts. Initially, the militias in North America were created via universal military service; however, changes in the social composition of the colonies and the diminished threat posed by Indians resulted in corresponding institutional modifications to the militia. By the 1660s, Virginia elites excluded slaves, indentured servants, and poor free-men from the militia because of perceived threats to internal stability. These fears proved prescient when Bacon's Rebellion erupted in 1676. These changes transformed the institution into what the historian William Shea calls a "bourgeoisie militia" dedicated to maintaining the status quo. New England and the Mid-Atlantic colonies had less disparity in wealth and a relatively small slave population compared with the South, which made them more socially cohesive and inclusive in their militias. While militia membership became a sociopolitical mark of respectability, the fighting capabilities of these organizations declined dramatically. Not only did they rely on a smaller core group, but their short-term, defensive nature made them useless for offensive campaigns that became increasingly necessary as New York, Massachusetts, and the western frontiers bore the brunt of the Anglo-French imperial struggles. To solve this problem, the colonies raised provincial volunteer armies. According to the historian Fred Anderson, the militia regiments served as the manpower pool for local authorities to raise a quota of troops. Because there were often too few volunteers, authorities encouraged enlistment with hefty bonuses subsidized by the Crown. If that failed, they resorted to drafting militiamen, but wealthy draftees usually hired substitutes to take their place. Although a provincial army captured the fortress of Louisbourg in 1745, their main contribution to Britain's success in the Anglo-French wars was as support troops and auxiliaries to the British Army and Royal Navy.

The third phase of colonial conflict, imperial warfare (1754–1763), witnessed a dramatic increase in the number of professional soldiers employed in the colonies. These "regular" troops made tactical adaptations and introduced hybrid units to cope with the difficulties of campaigning in the wilderness while facing both conventional and irregular

forces. The truly unique challenge posed by the vast North American continent was the incredible distances over which military campaigns took place. The British responded by creating a royally owned wagon corps, standardizing transport ship sizes, building roads, and erecting fortified magazines along the route of march that enhanced both security and speed because they reduced the size of the wagon train with the army and provided a safe fall-back point in case of an ambush. Contrary to popular belief, the historian Peter Russell maintains that European armies had extensive experience with guerrilla warfare by the 1760s. The major tactical innovations reflected the decision to introduce anti-guerrilla tactics to regular troops that concentrated on scouting, skirmishing, and protecting the flanks in addition to arming them with specialized equipment such as carbine rifles. The British also formed a light infantry battalion of regular troops in 1757. Although Virginia created the first ranger unit in 1645, the British military first employed them on a vast scale during the Seven Years' War, thus overcoming their shortage of Native American allies by providing strategic intelligence and a deep-strike capability exemplified by Major Robert Rogers's 1759 assault on the Abenaki Indian village of St. Francis.

Policing an Empire

Constabulary operations characterized the final phase of colonial warfare from 1763 to 1774. Despite previous rebellions against British authority in the American colonies, the revolts by both settlers and Indians that occurred after the conclusion of the Seven Years' War demonstrated Britain's inability to successfully govern its vast conquered territory even with the absence of any imperial rivals. The Anglo-French imperial wars created new group identities that prompted people to challenge imperial authority and ultimately eroded any allegiance they had to the empire. Pontiac's War (1763–1766) and the Stamp Act Riots (1765) demonstrated this trend. Pontiac's War resulted from Britain's failure to honor the Treaty of Easton (1758), which secured the neutrality of the Ohio Valley tribes and forced the French to abandon and destroy Fort Duquesne without a fight, in return for a British promise not to settle in the region. The British government's decision to build Fort Pitt on the site and its failure to

prevent squatters from settling on Indian lands were major sources of contention. The historian Gregory Dowd avers that an “Indian Great Awakening” that fostered a Pan-Indian identity and stressed the need for spiritual purity and united action to turn back the encroaching Anglo-Americans was equally important. Pontiac, an Ottawa chief, led a coalition of Seneca, Mingo, Delaware, Shawnee, Wyandot, Miami, Ottawa, and others that attacked and captured 10 of the 13 British forts in the Ohio River Valley. Despite these initial successes, the war eventually became a stalemate because the Indians lacked artillery to capture vigilant, well-supplied garrisons, while the British suffered from a debt-burdened and dramatically smaller peacetime army that could not bring Pontiac’s warriors to battle on favorable terms. Pontiac’s War led to an accommodation rather than a military defeat for the Indians.

The troubles on the frontier and the diminutive size of the army following the Seven Years’ War also contributed to the Stamp Act Riots. Parliament passed the Stamp Act to raise revenue to offset the cost of the troops in America. When a year of riots and resistance broke out against the measure, the few British troops in the colonies were policing the frontier and were therefore unable to protect the officials charged with enforcing the Stamp Act. The violence directed against royal officials and significant economic impact of the Nonimportation Agreements forced the Grenville Ministry to back down and repeal the act. The ability of the Committees of Correspondence to coordinate resistance throughout the colonies demonstrated the growing recognition of an American identity with interests different from those of Great Britain. When Redcoats garrisoned troublesome cities following the disturbances, they simply exacerbated tensions by competing in tight job markets, quartering themselves on the inhabitants, committing crimes, and serving as a tangible reminder of the arbitrary power of Parliament.

Conclusion

Between 1607 and 1774, Anglo-American colonial warfare went through four distinct stages: (1) proprietary warfare (1607–1688), (2) proxy war (1689–1753), (3) imperial warfare (1754–1763), and (4) constabulary operations (1763–1774). During the course of these phases, warfare between Native Americans and Europeans became more lethal and

persistent as a result of depopulation, competition over trade, new technologies, political power vacuums, and the lack of reciprocity among the military cultures. The crucible of colonial warfare formed Pan-Indian and American nationalist identities that tore the First British Empire asunder by 1783.

John D. Roche

See also Conscription; Guerrilla Warfare; Indian Wars; Just War Tradition; Native Americans; Prisoners of War; Rangers; Religion and War; Surrender; Treason

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COMBAT, PHYSICAL AND PSYCHOLOGICAL IMPACT

Military historians have debated whether those who write of combat should have had experience fighting on the battlefield. The British author John Keegan questioned whether he could write and teach about it, or even make reference to it, since he had never been in combat. So the issue of what it is like to kill with a gun, stab with a bayonet, strangle with hands, or use weapons of great lethality such as artillery and hand grenades has perplexed scholars for many years. This entry explores what we know about the act of killing, how it affects the soldier physically and psychologically, and the costs of such activity on the individual and on the society that sent him or her into combat.

Background

Film, video games, and television present the act of killing in antiseptic and often romantic ways, providing the viewer with a sense of satisfaction that the behavior is easy, methodical, and rational. According to those who have studied and written about organized killing, as in combat, nothing could be further from the truth.

The historian S. L. A. Marshall studied the responses of soldiers being ordered to kill in World War II. His findings, criticized by the military and by those who were familiar with warfare, indicated that only 15% to 20% of soldiers whose job it was to kill actually fired their weapons. Even if his methodology and results were flawed and he was wrong by a factor of 100%, nearly half of all soldiers expected to fight did not fire their weapons. Marshall concluded that teaching men, and more recently women, to kill

is a difficult task, and one that nations struggle to achieve. It is not a natural instinct to kill, although defending oneself from harm is natural.

Marshall's study was based on World War II soldiers, but there is evidence of "non-firers" throughout modern warfare. Once the gun replaced the sword as the primary weapon of the soldier, distance replaced close contact, and secrecy of action became possible. As weaponry changed, allowing more opportunity to avoid accuracy in firing a weapon, soldiers were able not only to avoid killing but also to question whether it was their bullet that killed the enemy. As fire and maneuver replaced linear warfare, which had been the way of combat even into the 20th century, a soldier's failure to fire became more obvious to his "buddies" because he was frequently isolated in his combat role. Military trainers had to change the way they taught killing to allow for this fear.

Physical Impact

Marshall's study was first reported as America prepared to go to war in Korea. While the weaponry did not change significantly from World War II, the way that soldiers were organized to fight changed because psychologists and sociologists had begun to recognize the need for men to not be isolated from their primary group when engaging the enemy. If their operation was platoon-size, then soldiers would be placed into positions where squads had firing lanes assigned to them that kept each unit in constant contact with each other. No soldier ever felt isolated from the primary group, which allowed him to have access to the physical and mental support that he needed to function efficiently.

In preparation for jungle warfare that would be required in Vietnam, the military developed a light, plastic, almost "toylike" weapon—the M-16A1, which seemed to be more comfortable to soldiers who had never fired a gun. It could also be used to lay down a significant amount of firepower when placed on fully automatic, firing 20 rounds in slightly more than 1 second. Subsequent studies on soldiers firing their weapons in Vietnam indicated that more than 95% performed their responsibilities efficiently, unlike those that Marshall purportedly found in World War II studies. Although the weapon was criticized by many soldiers because of its propensity to jam in the humidity and wet climate of Vietnam,

it was easier to teach a soldier to use the M-16A1 than its World War II predecessor, the M-1 Garand.

Military planners have struggled with how to train soldiers for the next war, since asymmetric warfare appears to be more likely in the future. Thus, America's wars will usually be focused on small nations or insurgencies within those nations where the belligerents are not evenly matched, and where the local guerrilla forces use unconventional methods and weapons to achieve their goals. After Korea, there was an attempt to drop bayonet and hand-to-hand combat training from basic training schedules because future wars would be fought from a distance, not requiring the close engagement of the enemy. But in the first major battle of the Vietnam War, the People's Army of Vietnam troops engaged U.S. Army soldiers at the Ia Drang Valley in both bayonet and hand-to-hand combat. Lieutenant Colonel Hal Moore wrote in his after-action report that American soldiers had a distinct advantage over their smaller Vietnamese adversary and that training to take advantage of such a size differential was critical to future success on the battlefield.

Psychological Impact

Physical attributes are important to combat success, and training to maximize the advantages of physical characteristics is a major part of military manuals, but the psychological impact of killing is equally important. Psychologists now agree that the lack of unit cohesion in Vietnam was caused by soldiers being sent to the theater as replacements; thus, combat-experienced soldiers never embraced them as their "buddies." Without individuals feeling responsible for each other's well-being, the unit never functioned as a primary group and was therefore less efficient on the battlefield. The early successes in Vietnam at such battles as the Ia Drang Valley were never replicated because the policy of training as units in the states was eliminated in favor of the more expedient replacement policy. Unit cohesion diminished, and psychological trauma manifested itself at every level.

In the current wars, the military has recognized the mistakes of Vietnam and has improved the efforts toward unit cohesion. Soldiers are sent as replacements before the unit is trained for combat, thus creating a feeling of obligation in each individual prior

to deploying to the theater. However, being dedicated to your buddy can also have deleterious effects when casualties occur. The psychiatrist Jonathon Shay writes about the "berserk state" of soldiers in battle, which often leads to death or injury. When a buddy is wounded, a physiological and psychological event takes place in all of the soldiers who witness the action, and they are changed forever. Their response to this event may be immediate and result in an effective use of force to repel the enemy, or it may linger for years and return in the form of posttraumatic stress disorder (PTSD). How a soldier responds can even be affected by the nature of the death.

An issue that affects soldiers psychologically, which developed in Vietnam and has continued into the wars of the 21st century, involves how soldiers are killed or wounded. During the Vietnam War, more than 30% of all casualties resulted from encountering enemy mines and booby-traps. Thus, soldiers were likely to see their buddies fall without seeing the enemy who had inflicted the wound. The psychological impact of such an event was devastating, because the surviving soldiers had no chance to take action against those who had harmed their fellow soldier. "Payback" or revenge killing is an automatic response in combat, and it can be therapeutic if managed properly by commanders. However, if institutionalized improperly, as evidenced at My Lai in Vietnam, a complete breakdown in military discipline can occur and atrocious behavior can result. In the wars of the 21st century, the number of casualties from what are now referred to as improvised explosive devices is more than 70%. This casualty rate has now affected all military operations because even those who are not combat soldiers are becoming casualties of an unseen enemy. This "killing from a distance" has also created a fear among soldiers that the enemy can inflict harm even when he cannot be seen. The battlefield therefore has no limits, and thus there is no longer a particular Military Occupational Specialty that engages the enemy more often than others. Those who traditionally did so—infantry, armor, artillery—still seek the enemy, but those who provide combat support such as transportation and maintenance are now subjected to combat on the roads of Afghanistan, and previously, Iraq. The enemy is thus anywhere and everywhere, and safe zones are not always available.

Posttraumatic Stress Disorder

Psychological trauma from combat exposure not only affects performance on the battlefield but also is affecting the opportunity to return soldiers to the war. PTSD has been recognized for most of the 20th century, having been recognized after World War I and World War II as “shell-shock.” It was identified after the Vietnam War as caused not only by combat experiences but also by external forces not readily apparent to the soldier and the soldier’s family. Those returning from Vietnam were affected not only by the combat they experienced but by a society that did not understand why they allowed themselves to be drafted. College campuses erupted in riots and Reserve Officer’s Training Corps buildings were fire-bombed in the aftermath of the U.S. escalation into Cambodia in May 1970. Soldiers returning to America during this period were subjected to ridicule and shouts of being “baby-killers” and were criticized for not being more vigilant in avoiding the draft. This attitude by a soldier’s own age-group caused many to shrink into oblivion, avoid large crowds, and to withdraw from society. Many never recovered, and some Vietnam veterans are being diagnosed with PTSD nearly 40 years after having served in combat.

The situation for current veterans has improved, at least from the view of the society to which they are returning, but the needs of the military are now so critical that a new problem exists. In the wars of the 21st century, soldiers are being sent back into combat on multiple tours, on 1-year intervals. Those with diagnosed PTSD are treated while stateside, and then they are often sent back to the combat zone. The soldier will be supported by his or her unit, and the combat experience is considered part of therapy. PTSD is a significant problem in the aftermath of combat experiences, and very few remedies are available. As previously discussed, the work of Dr. Jonathon Shay with PTSD victims of the Vietnam War has been instrumental in addressing these issues.

With only 10% to 20% of soldiers in a war zone ever experiencing combat, what we know about their psychological and physiological problems is challenging. Psychiatrists and psychologists are beginning to study combat trauma more frequently as the battlefield changes in modern wars. Killing through the use of drones, artillery, and aerial bombardment will provide space between the killer and

the target, thus perhaps providing a different degree of concern to the soldier. But societies must still deal with the returning veterans’ behavior that has been affected by their wartime experiences. These issues are as important to a nation’s military preparedness as are training and weaponry.

Ron Milam

See also Keegan, John; Marshall, S. L. A.; Morale; Motivation; My Lai Massacre; Posttraumatic Stress Disorder; Psychiatry, Military

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COMBAT LOAD

By definition, combat load is the minimum gear that a soldier must carry into battle. It includes items that are worn, carried in a rucksack, and/or strapped on a belt or fanny pack. The soldier’s rucksack is filled with rations, water, personal belongings, firearms, and any number of odd items as Tim O’Brien eloquently wrote in his 1990 book “*The Things They Carried*.” Most items are necessities for battle, while others are included because of sentiment or superstition.

History

Soldiers have long been expected to carry a heavy load, whether what they carry is dictated by their

commanding officer or by their own desire to be prepared for extended combat. The historian S. L. A. Marshall observed that soldiers historically have been asked to carry too much and are often overburdened by their load. Combat loads traditionally include everything from extra socks, a ready-to-eat meal, and a blanket, to a gas mask, weaponry, and ammunition. At the same time, soldiers, especially inexperienced ones, often carried an extra unauthorized weapon, as well as extra ammunition for a sense of security. Others carry Bibles, books, or sentimental objects from home that further increase their burden.

Once deployed in battle, soldiers often quickly discarded items from their rucksack to lighten their load. In World War I, soldiers were known to bury their discarded items and carry only their guns, clothes, and an overcoat. Many World War II soldiers who landed in France for the Normandy Invasion struggled to get ashore and risked drowning because of the weight of their packs. On the march, G.I.'s quickly learned to lighten their load by discarding unneeded items; gas masks were among the first items discarded. Loads continued to weigh down soldiers in Korea and in Vietnam, particularly in the latter conflict as troops had the added burden of marching in the damp, musty jungle.

The Contemporary Period

Surprisingly, in the 21st century, loads continue to grow in both size and weight, despite advances in technology and the availability of lighter materials. In fact, because of advances in technology and the advent of smaller and more compact supplies, as well as ergonomically designed packs, soldiers are able to carry more items into battle.

Combat load in the wars in Afghanistan and Iraq refers to the minimum mission-essential equipment a soldier must carry to execute a mission. It includes items a soldier needs to fight and survive. Combat loads fall into three distinct categories—fighting load, approach march load, and emergency load—and are determined by a unit's commanding officer. Fighting load includes weaponry, clothing, load-bearing equipment, and minimal ammunition. The load should be as light as possible to enhance a soldier's ability to move stealthily; the load is currently limited to 48 pounds.

Approach march load can weigh no more than 72 pounds and includes clothing, weaponry, assault pack, and enough equipment and munitions for fighting until resupply is available. These limits are often exceeded during an emergency approach. In this circumstance, soldiers must carry additional items if the approach is impassable to vehicles. A soldier can carry loads of 120 to 150 pounds, but such a burden is not feasible for more than a day or two and can often cause fatigue and injury.

The U.S. military has designed a special rucksack, the Modular Lightweight Load Carrying Equipment pack, better known as a MOLLE (pronounced Molly) to help lighten soldiers' loads. It is designed with modular webbing that allows the soldier to attach compatible pouches and accessories. Soldiers typically carry items they would need to survive for 72 hours in the wilderness. These items include food (MREs—meals ready to eat), snacks, and extra water (a hydration bladder) in addition to their water canteens. They also carry sunscreen, first aid kits, medication, fire suppression and fire starters, extra socks, sunglasses, a flashlight, and a sleeping bag. A soldier must also carry personal protective equipment, whether in his sack or on his back. In addition, the MOLLE contains a claymore antipersonnel mine, a bandolier of ammunition, and a knife. Other survival items include a tactical radio, a Global Positioning Systems unit, a satellite phone, a cellular phone, and possibly even a laptop. Depending on their position, every soldier or marine carries a different load based on the equipment needed for his job. Of course, a soldier often chooses to carry personal items, including photographs, reading material, Bible, mementos, and many other items.

Both the army and the marines recommend that rucksacks weigh no more than 48 pounds; most soldiers, however, routinely carry 95 pounds or more. World War I and World War II soldiers were burdened with packs weighing 70 pounds and more, weighing them down and slowing them down. Vietnam soldiers saw no relief, and the military in Afghanistan and Iraq are carrying packs up to 140 pounds. Military leaders continue to create lighter weight items and containers, offering better comfort with more ergonomic load capacity, but even these innovations have not lightened the load of the "grunt."



Marines with Charlie Company, 7th Engineer Support Battalion, 1st Marine Logistics Group, hike at Camp Pendleton, California, November 15. The marines hiked 6 miles with their combat gear in an effort to keep themselves prepared for any future combat operations.

Source: Photo by Corporal Kenneth Jasik, U.S. Marine Corps.

A combat load for a rifle squad leader in Afghanistan may include the following:

Equipment Common to Rifle Squad Leaders

A. Equipment Worn on the Body or Uniform

M4 carbine with PEQ-2 laser/PAQ-4 laser, ACOG/CCO, and 30 rounds of 5.56-mm ball ammunition

Desert camouflage uniform with infrared tape on left sleeve (1 inch × 1 inch)

Desert combat boots

Dog tags

ID card

Undershirt

Socks

Tactical gloves

Interceptor body armor with two small arms protective inserts

Advanced combat helmet with night vision mounting plate

Rigger belt

Notebook and pen

Watch

Knee and elbow pads

Sun, sand, and dust type goggles or Wiley-X goggles

Folding knife/multi-tool

B. Equipment Worn on Fighting Load Carrier/Interceptor Body Armor

MOLLE Fighting Load Carrier with modular MOLLE pouches
 180 rounds of 5.56-millimeter ball ammunition
 Bayonet
 Fragmentation grenade
 64 ounces of water in two 1-quart canteens
 100 ounces of water in a hydration bladder
 Casualty and witness cards
 Flex cuffs for personnel under custody
 Night vision equipment (PVS-14/PVS-7)
 Iodine tablets
 Lensatic compass
 Flashlight
 Chemlight
 First aid dressing and pouch
 Canteen cup
 Earplugs
 Internal communications radio

C. Carried in Assault Rucksack

MOLLE assault rucksack or commercial assault rucksack, with MOLLE attachments
 500-milliliter intravenous fluids bag with starter kit
 70 ounces of water in a second hydration bladder
 Two meals, ready to eat (MREs)
 Poncho and/or bivy sack
 Poncho liner
 Undershirt
 Spare batteries
 Two pairs of socks
 Polypropylene or silk long sleeve undershirt
 M4/M16 rifle cleaning kit
 Personal hygiene kit
 Rubber gloves
 Sling rope with two snap links

D. Carried in Main Rucksack

MOLLE main rucksack with sleeping bag carrier or Large ALICE rucksack
 Modular sleeping bag (one bag per two men)
 Long polypropylene underwear of fleece jacket and bibs
 Two undershirts
 Two pairs of socks
 Cold weather gloves
 Knit/fleece cap
 Additional ammunition
 Two meals, ready to eat (MREs)
 Sleeping pad

Special Equipment (Letters indicate where items are carried and refer to the lists above)

Map (A)
 Aerial photographs (A)
 Whistle (B)
 Concussion grenade (B)
 Smoke grenade (B)
 Incendiary grenade (B)
 Global positioning system (B)
 Lock pick (B)
 Collapsible riot baton (B)
 Infrared strobe light (B)
 Bolt cutters (C or D)
 Metal detecting wand (C or D)
 60mm mortar round (C or D)
 Star cluster (C or D)
 VS-17 panel (C or D)
 Ground control laser pointer

Average Mission Duration = 48 to 72 hours

Resupply Items: Soldiers were resupplied with 2 to 3 MREs per day and up to 8 liters of water per day.

Table 1 Average Rifle Squad Leader Statistics

	Average Load (Pounds)	Average % Body Weight
Fighting load (A, B) ¹	62.43	34.90
Approach march load (A, B, C)	94.98	52.59
Emergency approach march load (A, B, C, D)	128.35	73.62

Source: From <http://www.thedonovan.com/archives/modernwarriorload/ModernWarriorsCombatLoadReport.pdf>.

¹A, B, C, and D refer to the above lists of equipment carried.

When under fire, soldiers could expect a resupply of their basic load of ammunition each day.

Susan G. Contente

See also Combat, Physical and Psychological Impact

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COMBAT POWER

The concept of combat power is as old as war, though its meaning and purpose have varied somewhat through time. Generally, combat power is the abstract measurement of the destructive power a unit is capable of generating at a given time and place, against a specific enemy in a specific environment. In other words, combat power cannot be

measured in absolute terms but is an assessment of the relative capabilities of opposing forces.

Elements of Combat Power

Combat power contains several key elements, the most important of which is leadership. Does a unit or army have competent officers and noncommissioned officers who not only possess the will to win, but who can provide encouragement and purposeful direction in combat? Without effective leadership on the battlefield and behind the scenes, superior weaponry, technology, and manpower resources will not be used to their best advantage. Additionally, these leaders must continuously monitor the combat forces of their own and opposing units to inform decision making. Napoleon Bonaparte's actions at the Battle of Rivoli provide an excellent example of leadership enhancing combat power. There, he asked a subordinate commander defending one avenue of the enemy's approach to provide him with an estimate of the enemy's numbers so that he could determine whether or not a main attack was imminent and if so at what point on the line it might occur. By determining his foe's combat power and potential plans, Napoleon increased his own combat power by making adjustments to the placement of his own troops.

Effective maneuver is another significant aspect of combat power. The effective maneuvering of guns and men can both enhance the advantages of a particular force and help minimize its disadvantages in combat. By making use of the topography and terrain, such as staking out the high ground or incorporating natural barriers into its defense, and positioning weapons to deliver a maximum of destructiveness to the enemy, a smaller force might effectively fight a much larger one. Also, by employing the elements of surprise and psychological shock, units can increase

their combat power. The marines caught at Chosin Reservoir in Korea in late fall 1950 demonstrate the use of effective maneuver. Surrounded and greatly outnumbered by Chinese troops, the marine commander O. P. Smith, in stark contrast to the army leader General Edward Almond, managed to implement an orderly withdrawal of both marines and equipment by carefully positioning battalions so that they could leapfrog southward to safety.

Firepower necessarily also contributes to combat power by providing the main source of destructive force. Consisting of both weaponry designed to kill the enemy and smoke to obscure movements and cause disruption, firepower gives combatants the means to destroy enemy troops and materiel as well as to defeat the enemy's desire to fight.

The last component of combat power is protection. To maintain efficiency, morale, and unit cohesion, military leaders must strive to provide and maintain the protection of both the operation and the troops. This protection consists of everything from providing operational security whereby reconnaissance and counterreconnaissance prevent the enemy from locating and harming units and headquarters to keeping soldiers healthy in both body and morale through both training and combat to preventing incidents of friendly fire.

Combat Power in the Contemporary Period

While the general meaning of combat power has changed little throughout the years, the U.S. military has altered its specific definitions of the term. During the Cold War years, the United States Military Academy taught future army officers that combat power could only be measured in relation to a specific enemy and that combat power could be increased by finding more effective means to employ it, such as surprise attacks or using geographical advantages. After 9/11, however, in the wake of army and marine counterinsurgency operations in Iraq and Afghanistan, the military began to reassess the meaning of combat power, determining that a broader interpretation better suited current circumstances. Thus, in response to this new operational environment, a new meaning evolved, essentially redefining combat power as the total capability of a military unit to apply force, whether through destructive, constructive, or informational means. In other words, the military began to attempt to measure the total power of a unit or

formation, its ability to convert potential power to effective action without regard to a specific enemy's combat power.

This more recent definition of combat power reflects the understanding that destroying the enemy is not always enough to achieve political objectives in foreign lands. It is sometimes necessary to gain and maintain the support of the populace. Construction and information operations are thus mission essential tasks in counterinsurgency operations. FM 3-0, *Operations 2008*, a Joint Publication of the army and marines, devotes an entire chapter to the subject of combat power, largely focusing on the aforementioned key elements as well as information operations, intelligence, logistics, sustainment, and command and control. Yet this definition is incomplete and deeply flawed.

Combat power is not simply an operational and tactical concept. It is also a strategic concept. At the strategic level, the objectives are not simply the destruction of the enemy's forces but can also include the elimination of ideologies such as Nazism, communism, and Islamic fundamentalism. To this end, combat power can include the establishment of stable, democratic governments, such as the objectives of the United States in Operations Iraqi Freedom and Enduring Freedom in Afghanistan. It can be the establishment of sustainable economic systems. To achieve these types of strategic objectives, combat units may not be the most important types of units. Engineer units, medical units, transportation units, and other governmental and nongovernmental organizations and agencies can be more effective at generating the specific types of combat power necessary to achieve political objectives. An engineer unit that constructs a bridge or power plant, or a provincial reconstruction team that stabilizes and advances the economy in a developing, war-torn country can produce the specific type of combat power necessary to destroy an ideology. Without these, insurgents or terrorists hold on to the power of the people. Thus, noncombat units and civilian organizations produce and maintain "constructive" combat power, an element not recognized by the more recent definition of combat power. Broadly understood, then, combat power is not just generated by combat units. The words of a ground force commander or a president or the actions of noncombat units can, under the right circumstances, generate more combat power than an armor division. In the modern world, combat power

is not merely the ability to decimate an enemy, but it is the power required to achieve political objectives.

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See also Asymmetric Warfare; Counterinsurgency; Peacekeeping; Strategy, Ground War; Tactics, Ground Forces; War, Principles of

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COMBAT SERVICE SUPPORT

See Logistics

COMBINED ARMS

Combined arms is the summoning of and coordination of all military, kinetic means at a commander's disposal to inflict damage and destruction on an enemy force in the field. Such close coordination of arms—which may include force applied from the air, land, and sea—provides maximum destructive effect at the time and place of a commander's choosing. This combined arms effort is a tactical-level exercise of arms to achieve theater-level goals in pursuit of a national strategic endstate.

Combined arms can make a relatively light and small force more powerful than would shock and mass otherwise and does so by inflicting damage at points of enemy weakness. Such coordinated effects are a basis for maximizing the kinetic effects of warfare and serve as a foundation for battles as small as one man versus another up to engagements involving millions under arms. This entry discusses the three levels of warfare, innovations in technology

that led to more effective warfare, and the close coordination and integration of all available assets.

Tactics Follow Technology

Through the history of warfare, military units have used all means at their disposal to accomplish the mission they have at hand and to further achieve the endstate of the government that fields them. Tactics follow technology, and as technology advances, so does the destructive power of a military force and the ways in which that technology is employed. Military technology moves mostly in a stepwise and incremental fashion but then can make sudden leaps that in turn drive changes in combined arms application.

Warfare exists at three levels. The highest level is the strategic level, at which nations move against one another. The goal for this level will be the national strategic endstate: the overarching goal to which all aspects of national power are brought to bear. Next is the operational level, which can be thought of as the theater level of war with a three- or four-star commander. The lowest level is that of tactics, where the application of arms is employed down to the individual. Combined arms is a coordination and a synthesis of military techniques and weapons at the tactical level.

The basic element of warfare is the infantry. Infantry are ground force fighters sent to kill other ground force combatants. Combat between early men consisted of hand-to-hand fights to the death and at its most basic has not changed. The advent of weaponry was with whatever was at hand, such as stones and clubs, and proceeded to spears and shields. Thrown spears beget arrows and the bows to propel them. The handheld bow in turn evolved to crossbows, longbows, and footbows, allowing a force to inflict violence from ever-greater and safer distances.

It also led to two changes in tactics. First, rather than man-to-man battles at hand-to-hand distances, leaders could employ archers from “stand-off” distance, well behind their infantry ranks. These archers could stand off at a distance and loft arrows in an arc across the battlefield, over the heads of men in hand-to-hand combat and deep into the enemy's rear. This is the dawn of what is now called “indirect fire,” referring to ballistic weapons propelled into the sky that fly in an arc and land well in front of advancing friendly forces. The Battle of Crecy in 1346 is

regarded as the inflection point, at which point the longbow became dominant over the crossbow and forces in conflict could begin to move apart.

A second innovation was the stirrup, which allowed a man to stand while his horse was at full gallop and to deliver an arrow from this moving platform. Thus were two new tactics merged: the advent of the bow and the stirrup led to the beginnings of cavalry forces. Speed, range, shock, and tempo were introduced to the battlefield as variables that a commander could leverage; no longer did he simply have to have more people than did his opponent.

Genghis Khan, the legendary leader of the Mongols, grew his nomadic tribe into a 13th-century empire through precise application of military force where it was needed and savvy combined use of the weapons and tactics at his disposal. Using combined arms and emphasizing speed, shock, and tempo over raw numbers, the Mongols changed the face of war. Their horses, for example, were bred to run all day with a stiff, short gallop and eat very little and drink even less. Such an animal was the perfect transportation—the “vehicle” technology of the day—for swift-moving cavalry on the dry steppes of northern Asia. Employing composite bows and heavy cavalry, the Mongols dominated the warfare of the time. At the height of the Mongols’ power and reach, the mere appearance of their horsemen on the horizon was often enough to compel a city’s surrender.

Fires

As people moved forward in industrial technology, warfare followed suit. With the advent of iron and gunpowder came the cannon, big guns by which to propel ordnance forward across great distances. Cannon first deployed simple iron balls, which though hugely destructive were inaccurate due to uncertain ballistics. Innovation then led to explosives that could be packaged inside these balls and yield greater destructive power from the same weapon.

Gunpowder also enabled the musket, the original firearm. A musket is considered a “direct-fire” weapon, one that is aimed directly at a target and fires a very small round (a bullet) in a straight line at very high speed. Direct-fire weapons quickly became the weapon of choice for arming individuals to kill other individuals, known as “point targets.” For “area targets”—that is, groups of people or materiel spread across a large area—indirect-fire weapons

lofted large and deadly ordnance high into the air, up and over infantry forces in the same way arrows had been employed centuries before.

Alloys came next, with steel the metal of choice in weapons development. Precision machining then led to rifling of barrels for both cannon and musket, the next leap in technology. Rifling means carving inside a barrel a set of spiraled grooves that, when the projectile is propelled by a charge and gains speed through the barrel, impart a spin to the round. This spin, through gyroscopic physics, makes that round vastly more accurate. Now men could hit what they were aiming at.

This rotation of the projectile also led to projectiles’ elongations into what is now the common teardrop bullet shape. New barrels, new rounds, and more powerful powder led to a dramatic leap in distance and accuracy of rounds. This accuracy extended to direct-fire weapons, as muskets evolved into rifles, and to indirect-fire cannon (which became known as field artillery) and mortars, which are simply smaller indirect fire pieces.

At the turn of the 20th century, the increased lethality of rounds, combined with Richard Gatling’s and Hiram Maxim’s invention of machine guns after the American Civil War, introduced the era of modern, mechanized warfare. The First World War is a crystalline example of what happens when tactics do not follow technology, as human waves of men, attacking as if against musket-loading foes of the U.S. Civil War, ran headlong across open fields into modern machine guns and were slaughtered by the millions. This is the opposite of combined arms and is called attrition warfare, wherein a larger force simply grinds down a smaller force. Attrition warfare is contrasted with maneuver warfare, wherein a military force uses combined arms and speed, surprise, deception, shock, and battlefield tempo to defeat a foe with minimal casualties.

Tactics in World War I did not keep pace with advances in technology, and rather than *coordinating* and *combining* indirect fire and direct fire, commanders used each *individually* and *in sequence*, leading to massive casualties on both sides and to battlefield stalemate.

Fires From the Sky

The advent of the airplane in the early 1900s had immediate military implications. Biplanes were

used during World War I for not only observation and spotting for indirect-fire weapons but actually as primitive offensive weapons, with pilots shooting or dropping ordnance from their cockpits. Aircraft technology moved swiftly from the 1920s to the 1940s and World War II: Aircraft propulsion evolved from small reciprocating engines to powerful rotary engines, though aircraft were still powered by propellers, and then made the leap to the jet age in the late 1940s. Senior leaders, many veterans of the horrors of the World War I trenches, for the first time coordinated aircraft attacks with ground movement, and when these two were combined with indirect fire, these became true combined arms.

The Korean War signaled the dawn of the helicopter, first used as a method of moving personnel and equipment around the battlefield. The commander now had another tool in his combined arms kit. Korea also marked the intersection of the jet age with military campaigning, as a quantum leap in jet speed, range, altitude, and carrying capacity changed the face of war. Now to direct and indirect fire was added air-delivered fires. Such fires include strafing, or shooting bullets from a moving aircraft; bombing, which is generally conducted from higher altitudes and involves dropping gravity-guided munitions; and attacking with high-speed forward-firing ordnance, guided or unguided, including rockets and missiles.

The coordination of such aircraft is called “close air support,” defined as the terminal guidance of aircraft-delivered weaponry in coordination with friendly forces. The goal of close air support is to protect friendly forces from air-delivered fire while maximizing fire effects on the enemy. Air-delivered fires can come from jets or helicopters, at altitudes from a few dozen feet to many miles in the air. Combined arms includes these fires.

Coordination and Control

It is the close coordination of these disparate means of violence—a man carrying a rifle, the mortar firing next to him, the artillery piece far to his rear shooting over his head, the airplane circling and ready to drop a bomb in front of him, the ship lobbing in rounds from offshore—that is the crux of combined arms. The battlefield commander combines his assets for the execution of a coordinated goal. He must have close control over all these means of

destruction to apply them to his enemy while protecting his forces. Artillery rounds must explode at the right place and time. The pilot needs to know where that round is in the sky. The leader on the ground needs to know when and where that round will land, to move up an attacking force or to capitalize on a dazed or wounded enemy force.

Training of and communication between those employing these weapons are critically important to combined arms success. Combined arms relies on a coordinator on the ground, moving with ground forces, who has a close look at the battlefield and is invested in the ground commander’s scheme of maneuver, immediate mission, and long-term commander’s intent. Together they work toward goals handed down from the theater and strategic levels.

The summoning and application of fires—indirect or direct; air or ground delivered—is the responsibility of a fire support coordinator. He may be assisted by a forward air controller, an aviation liaison officer, or a joint tactical air controller, or some combination of these. Together with infantry force commanders, these officers provide minute-by-minute combined arms coordination, ensuring that fires are synthesized and deconflicted between and among friendly units.

Robust close air support combined with tight integration of direct and indirect fires can protect even an overmatched ground force, can extricate a losing army from destruction, and can generate a high-tempo operation to which an enemy cannot react. The tight and smooth integration of this lethality, known as combined arms, is the hallmark of the sophisticated modern field army.

Modern War

The wars in Iraq and Afghanistan have proven the necessity of a thorough grounding of force’s in the art of combined arms. The 2003–2011 war in Iraq, Operation Iraqi Freedom, matched large American units against, first, large Iraqi units and, later, against Iraqi insurgent forces. This most modern warfare required American and allied forces to be nimble and flexible and to be prepared to operate in any environment from wide-open desert to very narrow and confined city defiles.

The war in Afghanistan, Operation Enduring Freedom, has never presented Western forces with large enemy units, forcing them instead into giving

battle often at the time and place of the enemy force's choosing. This enemy force—usually Taliban, al Qaeda, foreign jihadi fighters, or a combination of these—coalesces and disperses seemingly at random and has often forced U.S. forces to improvise and execute their operations down at the very smallest unit levels.

As part of this sort of warfare in these two countries, U.S. commanders have had to master all the supporting arms at their disposal. Whether fighting Iraqi line units in the open desert or in cities, or fighting insurgent forces in Afghanistan or Iraq, combat took place at the tactical level with implications upward to the operational and strategic levels. The precision and lethality of modern weaponry presented a double-edged sword: U.S. controllers could kill enemy forces very quickly and efficiently, but the weapons delivered by indirect or airborne means were often exceptionally powerful and in exploding could easily injure or kill innocents. Winning an insurgency means controlling both military initiative and political power, and killing Afghan or Iraqi civilians meant playing into the enemies' narrative. Combined arms can negate this problem, as by summoning and controlling with precision the kinetic means at his disposal, the ground commander can both eliminate threats to his force and preserve innocent life.

In the vast and wide-open spaces of the battlefield of Afghanistan, combined arms are even more important. Western forces in Enduring Freedom are by necessity dispersed, operating from forward operating bases and often pursuing enemy fighters into the mountains. These dispersed forces often cannot mass infantry power or small arms quickly enough to defeat a light, quick-moving insurgent force but can summon fires from the air or from indirect means to destroy such a force once it is pinpointed.

An insurgency by its nature does not present a large target, so combined arms in modern warfare often means maximizing the precision and destructive force of airborne or indirect means: a kinetic event to produce a psychological result. Killing an enemy leader without harming innocents behind whom he hides, and killing him seemingly by magic at night or in bad weather and with no American forces nearby, gives the American ground commander a tactical and operational—as well as psychological—advantage. He regains the initiative from an insurgent force through the use of all the

means at his disposal. This is the essence of the art of combined arms.

Stanton S. Coerr

See also Aircraft, Attack; Aircraft, Bomber; Arms, Small; Artillery; Close Air Support; Command and Control; Direct Fire; Indirect Fire; Infantry; Tactics, Ground Forces; World War I; World War II

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COMMAND AND CONTROL

All organizations require some form of direction and focus to achieve their goals and fulfill their purpose. The reason for this is straightforward; organizations are composed of people, and people have their own ideas about what they ought to do. Direction and focus within the organization's structure avoid the chaos of individual agendas within an organization. *Someone* or some entity in the organization needs to decide what to do, when to do it, where to do it, and how to do it. Thus, musical orchestras need conductors; schools need principals or superintendents; corporations need chief executive officers. That entity, whether identified as a person or a group, uses information to make the direction and focus real. Generally, the function of direction is called leadership, an exquisitely human idea; the function of focus is called control. Leaders can be understood to manage or structure the *flow* of information in organizations in pursuit of organizational goals and to focus individuals within the organization to effectively work toward those goals. This entry discusses the development and forms of command and control.

In the military, the activities that leaders do are consolidated under the term *command and control* (often referred to as C2). *Command* refers to the

provision of leadership direction of armed forces' behaviors; *control* refers to the provision of focus to those behaviors. The various advanced technological and/or organizational means to assist military leaders perform command and control are referred to as *command and control systems*. For example, the leader in charge of an army battalion is called, as one expects, a commander; the battalion staff, serving the commander, manage and provide the command and control systems necessary to make the battalion work. The commander directs the battalion's work through *orders* that capture what the commander wants done, when, where, and how. The staff publish the orders, see that they are implemented (executed), and assess how well the battalion has performed. Together, a commander and a staff of a military organization can be understood to provide *organizational command and control*. Military organizations such as battalions can be combined to form larger formations. In armies, combined battalions become brigades or regiments, combined brigades and regiments become divisions, combined divisions become corps, and combined corps become armies. In navies, squadrons merge into task groups, which merge into task forces, which in turn merge into fleets. For air forces, the relevant organizational building blocks typically are squadrons, groups, wings, and air forces. All the levels of military organizations, regardless of specific military service, are referred to in a general nomenclature called *units*. Each level of command and control has its own commander and staff, as well as armed forces members who do the work in the units.

In most nation-states, the military is the largest public organization; command and control thus becomes not only a necessary function but a vital one for the future well-being of the nation and the military organization. Major command and control tasks are design, plan, direct, manipulate, communicate, coordinate, learn and adapt, monitor, and evaluate. There are many ways a military organization can execute these tasks. They can be accomplished in *centralized* or *decentralized* fashion. Centralized command and control means all flows of information within the organization go through the highest level commander and staff; decentralized command and control enables lower level units to manage their own flows of information and perform their tasks in their own way as long as the higher level orders are accomplished. There is a range of

possible centralization-decentralization command and control options. Historically, the Prussians/Germans have opted for a decentralized command and control approach; the Soviets/Russians chose a highly centralized approach. Americans, British, and French armed forces' command and control traditionally have fallen somewhere in the middle of these two extremes. To have effective centralized command and control, military organizations must have highly reliable and capable communications systems that carry the flows of information, typically orders and related documents, to all units. To have effective decentralized command and control, military organizations must have highly trained commanders and staffs at all levels, and the overall commander must have a clearly stated and understood direction and focus.

Command and control tasks also can be accomplished through a *hierarchal* or *flat chain of command*. A chain of command is said to exist if there is an authority to publish orders from the highest level of the military command and control organizational leadership to the lowest level of organizational leadership. If orders must travel through many levels of command and control to reach the lowest level, the chain of command is strongly hierarchal; if there are few levels, the chain of command is strongly flat. Military organizations choose hierarchal chains of command when the focus of military actions is most important; in this case, all units are subject to strict control parameters from the topmost leadership. Conversely, military units choose flat chains of command when the direction of military actions is most important; that is, the units need to accomplish the directions quickly.

The method of command and control, whether using a centralization/decentralization or hierarchal/flat chain-of-command approach, depends on the cultural predispositions of the particular military organization and the situation in which the military organization must work. For example, in the American military, the navy has a cultural tradition of flat chains of command coupled with relatively decentralized command and control. The U.S. Air Force also has a cultural tradition of flat chains of command but uses highly centralized command and control. Both the navy and the air force have had to adjust these approaches to meet the requirements of the situation. In Operation Iraqi Freedom, the navy had to adapt to a more hierarchal chain of

command called for by the joint (all the services) and combined (international) nature of the operation. In the early months of Operation Enduring Freedom, the air force had to decentralize its air operations more than it was accustomed to in order to meet the needs of fast-changing situations on the ground in Afghanistan.

In short, there are no “best” or “optimal” methods of command and control. There are only successful and unsuccessful examples.

History

Small armed forces conducted the very oldest of humankind's wars. In these cases, such as tribal war, command most likely was direct and centralized; there was only one warrior leader, and that warrior likely executed all tasks attendant to the function. As armed forces grew in size and diversification, indirect methods of execution developed: Subordinate commanders and liaisons appear in early historical texts from Greece and China that mention the coordination of subordinate commanders to achieve operational goals and objectives. These were the first command and control systems, and mostly they were organizational solutions. For example, Herodotus writes of the role of Themistocles in coordinating land and naval defenses with leaders of the Greek city-states against the Persian threat (also mentioned by Herodotus as an extremely large force with subcommanders answering to the great Persian king Xerxes).

As armed forces grew in size and their areas of operation expanded, direction and focus became more difficult to conduct and coordinate by leaders. To help them command and control their units, leaders increasingly turned to technology to facilitate the flow of information among their units. Signal communications of many types appeared: signal fires and flares (fire arrows), flags, and musical sounds (e.g., bugles and trumpets) appear in all early military histories. Napoleon even used mirrors placed on hilltops to relay coded messages to his marshals during his many campaigns. These technological command and control systems seemed to effectively support the command and control function as long as the speeds at which armed forces moved remained relatively constant, that is, at the speed of a horse and a man.

As the Industrial Revolution progressed in the 19th century, technologies developed that quickened

the pace and increased the lethality of military operations and campaigns far beyond that of horses and men. These advances included railroads, telegraphs, rapid-fire and long-range artillery, repeating rifles, telephones, and finally machine guns. Command and control methods and command and control systems initially could not keep pace with the technological advance. The ancient command and control approach of a centralized chieftain, assisted by a group of subordinate chieftains, doing most of the command and control tasks had only modestly changed when World War I happened. Suddenly, amid the carnage of a high-intensity modern battlefield, commanders lost their ability to command and to control, as well as their ability to communicate with their subordinate units in a timely manner. For example, during the Battle of the Somme in 1916, frontline British infantry units routinely could not tell their artillery support to shift targets because communications were disrupted by German artillery cutting telephone and telegraph lines; flags couldn't be seen through the smoke of the battlefield; human messengers were too slow and too vulnerable to the German artillery. Even homing pigeons became lost in the din and smoke of battle. The result was a slaughter of British forces on scales that beggar the imagination: 25,000 killed on the first day and 250,000 killed over the course of the battle. British high-level commanders did not visit the frontlines for weeks, under the flawed assumption that information flows were working (their staffs continued to publish orders that were received by dead subordinates and dead units).

Only after almost 4 years of incredible bloodshed in World War I did a truly significant and revolutionary change in command and control happen. In the desperate situation facing them in the last year of the war, the Germans found a command and control method—more accurately a rediscovery of an approach from the early-19th-century Prussian army—that almost gave them the decision they sought. The alternative, often referred to as *Auftragstaktik* or mission-based tactics, decentralized both command and control to the lowest level tactical units. This straightforward principle called for the overall commander to provide an idea or command intent for an operation—this was the “what” of the operation; subordinate commanders filled in the blanks to achieve the “how” of the operation. Low-level commanders developed their own specific

command and control tasks and executed them on the spot, without waiting for orders from higher headquarters. The resulting military actions sped up, with forces practicing this system quickly adapting to the rigors of the battlefield and attacking gaps in the enemy forces, like water pouring into crevasses in rocks. The enemy forces were paralyzed by the speed and demoralized by the attacks from all directions, not just the front. During Operation Michael in the spring of 1918, German forces achieved the operational breakthrough of Allied lines that they had tried so long to gain; however, they lacked the reserves and the necessary clear direction from their highest commander (Lundendorff) to complete the breakout of their forces into the Allied rear that would have proved decisive. British forces in the late summer of 1918, adopting the same German command and control method for their own forces, repaid the favor and with adequate reserves were about to break out into the German rear when the November 1918 Armistice halted all activity along the Western Front and elsewhere.

Curiously, during World War II, only the Germans practiced *auftragstaktik* command and control methods. All other military forces, with the exception of all the naval forces practicing essentially decentralized command and control, used the older, centralized command planning and mission control with decentralized execution. Analysis of the continuation of older, slower practices of command and control indicates that technological advances between the two wars perversely reinforced the use and utility of the older system. Reliable and portable radio communications, especially multichannel radio communications, was the major command and control technological innovation. Radio communications no longer limited overall command oversight of operations to relatively short distances of signals and wire communications. From far away, overall commanders now could reach down to the lowest echelons of maneuver to control their own operations. Subordinate commanders, particularly in the Allied forces, became tools for overall command to manipulate based on the information provided by radios. In truth it may be said that the Allied forces succeeded in winning World War II depending far more on ponderous mass than on speed.

With the advent of the information age in the 1950s, and the extremely powerful technologies that have developed within the age, the tendency of

overall command to insist on detailed control of low-echelon units has expanded to include all dimensions of the battlespace (land, aerospace, maritime, and virtual). Global access to information all the time has accelerated this tendency. Even though there has developed a strong advocacy of mission command methods throughout most developed nations' military, military thinkers and writers now observe that militaries exhibit a "zero-defects" mentality that aims more toward information media damage control than toward effectiveness in the demanding operating environments of the 21st century. In effect, command and control technology trumped command and control organization and process in terms of budgets and leadership attention.

Recent Developments in Command and Control

A common way to discuss modern command and control is to address the topic in terms of method or process, organization, and technology. The latest developments in the command and control method originate from the U.S. Command and Control Research Program. This ongoing research entity has sponsored much research on all facets of command and control, but its most interesting contribution is the Command and Control Approach Space, a three-dimensional matrix that describes the complete range of possible command and control methods within one visual conception. Three general variables make up this approach: (1) the pattern of interaction among the relevant subunits, or entities, of the organization, including the headquarters; (2) the distribution of information among these subunits; and (3) the allocation of who gets to decide among those subunits. The most recent version is shown in Figure 1.

According to Command and Control Research Program researchers, command and control methods in the lower left and back area, described as Conflicted Command and Control, have the least ability to adapt to rapid changes in situations. This was the case of the British command and control at the battle of the Somme (and subsequent battles until 1918) mentioned earlier. Those command and control methods in the upper right and front, Edge Command and Control, have the most agility; this is the region that describes high-performing organizations. For example, General Heinz Guderian's

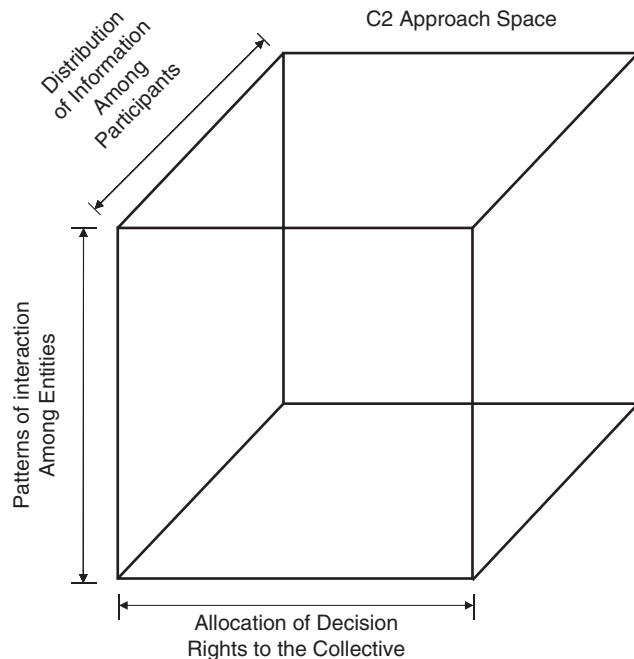


Figure 1 Command and Control Research Program
Command and Control Approach Space

(German) combined arms assault on the French lines at Sedan in May 1940 exemplifies Edge Command and Control organizational behavior. In that instance, German units acted so quickly with such focus on their objectives, shifting their movements as local situations required, that the French forces simply became unable to effectively respond and collapsed into a hasty and prolonged retreat. The German units did not require a constant flow of information, orders, from their headquarters; they knew what their leader (Guderian) wanted, and they were provided the authority to do whatever was needed to accomplish their mission.

With respect to modern command and control technologies, two developments stand out with particular distinction: satellite communications and computers. Satellites remove the tyranny of terrain from affecting the communications necessary for effective command and control. They provide a wide range of information, from orders to real-time visuals of relevant battlefields to navigation aids. Satellites have become indispensable to military commanders, and their potential is limited only by the human imagination and the bandwidth available to communicate. It can be argued that *all* satellites,

being communication devices, are command and control systems; their variety constitutes an alphabet soup of names that is beyond the purpose of the present entry. One historical example of the application of satellite technologies suffices to illustrate the power of satellite command and control technology. Operation Desert Storm, in early 1991, provided the operational debut of the Joint Surveillance Target Attack Radar System. Using satellite sensors' information downloaded to an aerial platform, a modified Boeing 707, Joint Surveillance Target Attack Radar System was able to track more than 2,000 distinct potential targets simultaneously and instantly forward that information to military command and control centers for action. This integration of technology into organizational procedures gave the U.S.-led coalition an unprecedented situational awareness of the Kuwaiti and Iraqi battlefield, which significantly contributed to the decisive defeat of Saddam Hussein's Iraqi forces. However, as vital as satellites are to command and control, they are and will be only as effective as the second major development in command and control technology, the computer.

In the short span of time from the 1960s to the 1990s, computers migrated from a few very large, cumbersome and slow machines located in centralized areas not conducive to fluid battlefield situations to many small, agile, and fast machines located everywhere and with everyone (think of cell phones as a form of computer). Computers provide the information power that makes modern command and control able to work in near real time over great distances. The difference that computers have wrought on command and control is breathtaking.

For example, in 1944, General Dwight Eisenhower struggled to command and control his multi-million-soldier army in France from his headquarters in England with a handful of radio and telephonic channels that required legions of communications specialists for support, and even then he maintained a time-lapsed and incomplete idea of what both his own forces and the enemy forces were doing at any given time. Contrast Eisenhower's experience with General Tommy Franks in 2003 during Operation Iraqi Freedom. Franks, located at Central Command in Florida, was able to exert command and control over his forces almost 10,000 miles away, using near-real-time audio and visual information that monitored both what his and the enemy forces were

doing at any given time. The difference between the command and control capabilities of these two leaders was the availability of cheap, omnipresent, and highly capable computers at all command and control levels of the latter operation.

The future of command and control technologies centers on the further developments of the computer. Since those developments are driven by Moore's law, a predictive rule that shows that computing power increases at a geometric rate, it is safe to state that the role of computers in command and control approaches will accelerate. Consider this one case: Military research facilities are experimenting with implanting microprocessing chips (tiny computers) into individual soldiers. These chips can record movements both in audio and in visual modes, receive orders, and retain vital records in case the soldier recipients become casualties.

The third and final aspect of command and control developments concerns the organizational structures that enable leaders to practice command and control. Curiously, these structures have changed the least, despite the process and technology changes that have previously been described. Referring to the comparison of Eisenhower's and Franks's experiences described above, Eisenhower would find the command and control organization of Franks's Central Command very familiar to him. The staff structures and hierarchical nature of the headquarters have remained relatively constant since their emergence from the ashes of World War I. Nonetheless, there are subtle changes that only very recently (post-2005) are starting to organizationally affect the way command and control is practiced. These changes are captured by the phrase "ad hoc-ism," or by the acronym B2C2WG (boards, bureaus, cells, centers, working groups). In the face of the organizational stovepipes that traditional staff structures impose on command and control activities (traditional staffs are Personnel, Intelligence, Operations, Logistics, Plans, and Communications), and to take advantage of the speed and power of combined satellite and computer-generated information, leaders and their staff have invented on-the-fly temporary collaborative groups to quicken the pace of command and control and to make it more effective in the direction and focus of operations. One can observe the expansion of this concept in command and control organizational doctrine. Typically, such doctrine is

expressed in organization charts (often referred to as "wiring diagrams"). Increasingly, traditional staff structures are being supplanted by "task forces," such as the Joint Special Operations Task Force, the Joint Civil Military Operations Task Force, the Joint Psychological Operations Task Force, and the Joint Interagency Action Coordinating Group. These entities break down the stovepipes of traditional staff organizations and enable leaders and staff to practice "Edge C2"-like command and control methods.

Concluding Observations

Researchers of military operations consistently note that success on the battlefield primarily is due to the confluence of excellent individual and unit training, advanced technology integrated with trained forces, and effective leadership, all wrapped up with robust information sharing (shared awareness and shared understanding). The command and control function now can take advantage of unprecedented information and communications technology enabling clear definition of operating environments; distinction of relevant combatants and noncombatants; integration and concentration of precisely guided and applied force, energy, and mass; coverage of literally global spaces and times; and communication of all the preceding information to all relevant stakeholders in military operations. Most recently, these enabling capabilities now have become accessible not only to leaders but to individuals under their command.

Command and control technologies allow even miniscule forces in remote places to access the information networks of the entire globe. As an illustration of this phenomenon, consider how al Qaeda's leaders, burrowed in caves somewhere in the northeast Hindu Kush, can regularly send messages to their followers on the Internet.

The critical problem for present and future overall command is highlighted by the use of the terms *efficient* and *manage*. Warren Bennis, an acclaimed student of leadership, has explained the conundrum: To manage is to do things right (efficiency), and to lead is to do the right things (effectiveness). Putting this in the context of the military, the late Colonel D. Michael Malone, an architect of the U.S. Army's organizational and leadership transformation in the wake of the Vietnam War, has

written that no one ever managed soldiers across a battlefield; they had to lead them. At the heart of the current evolution of the command function is the human, not the machine. The key indicator for the success or failure of the command function and related tasks is trust—shared among the participants in military operations. Where the trust is high and symmetric (from leader to follower and the reverse, and across all relevant unit levels), the command function likely will lead to successful military operations. Where such trust is found wanting, the command function likely will fail in effectiveness.

The command and control function has dramatically changed over the ages, particularly recently with respect to technology. Yet this function remains human at its core. There one finds that the evolution has been more psychological and sociological than technological. Commanders must be competent in both to best apply the function to operations.

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See also Communication; Leadership

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COMMAND AND GENERAL STAFF COLLEGE

The Command and General Staff College (CGSC) is a graduate school that functions as part of the Leader Development and Education organization at the U.S. Army Combined Arms Center in Fort Leavenworth, Kansas. The CGSC was founded in 1881 as the School of Application for Infantry and Cavalry and is composed of four individual schools that provide professional education for military officers, including some from foreign allied nations. The four schools that constitute the CGSC are the Command and General Staff School (CGSS), the School of Advanced Military Studies (SAMS), the School for Command Preparation (SCP), and the School for Advanced Leadership and Tactics (SALT). As of 2012, the commandant of the CGSC is Lieutenant General David G. Perkins. The CGSC's mission is to "[educate and develop] leaders for full spectrum joint, interagency and multinational operations; [act] as lead agent for the Army's leader development program; and [advance] the art and science of the profession of arms in support of Army operational requirements."

History

Although it was founded in 1881, the major development of CGSC took place during the interwar years and World War II. Many of the Leavenworth faculties were instrumental in the intellectual development of army leadership from 1919 to 1940 and in the creation of the 1940 *Staff Officers' Field Manual*. After World War I, downsizing of the army left the institution in poor shape, and debate raged over the kind of officer education the U.S. Army should embrace.

The army's emphasis on continuing education after World War I would eventually prove vital to Allied victory in the Second World War. After the hard-learned lessons of World War I trench warfare, the officer corps was trained in preparation for a large-scale conventional war based on modern tactics and supported by a fully mobilized nation. Despite additions to doctrine regarding airborne troops and armored divisions, the army's doctrine on artillery teamwork, combined arms, and the necessity of offensives remained the primary focus of officer education leading into World War II.

In the interwar years, students at Leavenworth were taught a curriculum focused on problem solving and "learning how to learn" according to George C. Marshall's principles. Future officers and commanders were taught to adjust quickly to new situations and to strategies for employing their men in a variety of tactical scenarios. Instrumental to the mission of CGSC at the time was the concept that command and staff training worked together as complementary skills rather than opposing approaches, though leadership and mobilization received less focus in the classroom. Course duration often varied from 2 years to 1 year and back again throughout the 1930s, and student input was widely sought by faculty members, though students rarely made recommendations for change.

Marshall objected, however, to what he saw as CGSC's neglect of command officer preparation in favor of staff training instead. He hoped to bring new ideas and leadership to Leavenworth and wanted more attention to be paid to large-scale maneuvers. In 1939, students responding to a survey described a lack of focus on divisions, corps, and tactical principles in their education. Despite changes in Leavenworth's curriculum, there was a notable lack of training for the Army Air Forces and Supply Operations. The experiences of the early years of World War II indicated that prewar preparations had significantly underestimated how high the demand for well-trained officers would be, as well as how great the necessity for large command structures would become in the post-1941 war.

The Command and General Staff courses eventually produced the officer corps that won World War II and influenced army command structure through the Cold War years. Several major tactical realizations were key to these officers' success. First, that the German Blitzkrieg was not a novel or even consistently effective tactic, and resembled the Allied breakthrough tactics from World War I. American officers realized this and harnessed enormous, mobilized resources to pursue this strategy, securing a major component of Allied victory in World War II.

Further lessons from World War I's stable front were utilized at Normandy and in the subsequent breakout. Mobile front tactics, particularly in artillery, as well as the combined arms strategy emphasized at Leavenworth, were all key to American victory. The lessons of World War I colored the

education of the officer corps in the interwar years, despite significant failings in mobilization, air power training, and large-unit readiness (particularly in the Western Pacific). After the 30-fold increase in army officers during World War II, the United States rose to the challenge of educating its leadership for command, staff, and combat duties. Thanks to officer education at Leavenworth, the United States emerged as a superpower from World War II, with a modern, intellectually prepared force to secure Allied victory on a global scale.

CGSC Today

Of the four schools in the CGSC at Leavenworth, the CGSS is the largest and the most well known. As a graduate school, the CGSS provides both Intermediate Level Education to officers as well as the opportunity to earn a Master's of Military Arts and Sciences. There are six departments within the CGSS: the Department of Army Tactics; the Department of Command and Leadership; the Department of Distance Education; the Department of Joint, Interagency, and Multinational Operations; the Department of Logistics and Resource Operations; and the Department of Military History.

The SAMS provides graduate-level training to officers at the strategic and operational levels to develop leadership ability. SAMS graduated its first class in 1984, and its leadership training provided General Norman Schwarzkopf's "Jedi Knights" during the Persian Gulf War. Like the CGSS, SAMS offers two programs: Advanced Military Studies, in the second year of Intermediate Level Education, and the Senior Service College Fellowship.

The SCP not only serves as an educational program for Army Command Teams but provides support for the spouses and families of officers as well. The focus of courses at the SCP is command tactics and the preparation of joint-enabled command teams across a range of military operations.

Finally, the SALT provides branch-specific continuing officer education to obtain mastery of technical and tactical skills. The goal of SALT is to develop the Leavenworth Scholar-Warrior-Leader from First Lieutenant to Major, and SALT's focus also includes direct-command competencies, staff process in battalions and brigades, and other broadening opportunities.

Conclusion

The CGSC's ability to meet the challenges of modern warfare owes heavily to the development of doctrine and tactics during the interwar years and to the hard-learned lessons of World War I. Thanks to the expansion of officer education, the U.S. Army was able to emerge post-1945 as an intellectually driven, well-educated, and well-trained force. Through the Cold War years and into the modern requirements of officer training today, Leavenworth has functioned as the center for world-class strategic, operational, and command and staff preparation for the army's leadership.

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See also Commissioned Officers; Training, Army Officers

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Website

Command and General Staff College: <http://www.cgsc.edu>

COMMISSIONED OFFICERS

Commissioned officers make up the top of the U.S. military hierarchy within each branch of the service. Among commissioned officers are various ranks that further separate them by level of authority. Serving beneath commissioned officers are enlisted personnel. The enlisted ranks have a system of leaders within them called noncommissioned officers (NCOs). The NCO ranks lead personnel on the smallest levels of organization, as well as at the highest levels alongside commissioned officers. Outside the officer and enlisted ranks are warrant officers. Typically trained in a focused specialty or trade, warrant officers often act as the commanding officer of a military unit or fall directly under a commissioned officer. Commissioned officers lead military

units and serve in support roles essential to maintaining the combat effectiveness of the force. This entry describes how to earn a commission, the benefits available to an officer, and the responsibilities of an officer.

Earning a commission as an officer in the U.S. military can be done in a number of ways. U.S. service academies are universities that grant degrees to their students while simultaneously training them to become commissioned officers on graduation. When students' commissions are received, they earn the rank of second lieutenant in the army, air force, and Marine Corps, or ensign in the navy. Nonmilitary colleges and universities also offer an equivalent to the service academy path to commissioning. The Reserve Officers' Training Corps allows traditional college students to earn a commission as an officer on graduation as well. A third option is Officer Candidate School. In these accelerated schools, candidates train full time to earn their commissions in only a few months. These options are all open to both prior service enlisted personnel and civilians. Noncommissioned officers found to have extensive experience and superior leadership abilities occasionally receive commissions directly into the officer ranks after evaluation and without additional training. Enlisted soldiers (mainly NCOs) during past wars have been granted a small number of "battlefield" commissions based entirely on their demonstrated leadership in combat. While direct commissions do occur, they are the rarest of the commissioning paths. It is important to note that these commissioning programs are open to all Americans who meet the physical and academic standards for enrollment. Throughout American history, officers have largely received their commissions and appointments to service academies through social or political status as opposed to their credentials. This changed significantly over the course of the 20th century. Candidates desiring to become officers in today's military are selected without regard for race, ethnicity, or financial background.

On receiving a commission, officers are afforded a number of courtesies by the enlisted ranks. The hand salute is rendered outdoors by enlisted ranks when the officer passes as well as when reporting to a commissioned officer. A room containing enlisted soldiers is called to attention when an officer enters, and again each time a higher ranking officer enters. An officer is addressed by rank or as "Sir"

or "Ma'am" by his or her subordinates. Officers receive higher pay and are billeted in quarters separate from the enlisted ranks as well.

The benefits afforded to officers have always been a source of contempt from the enlisted ranks. The military's firm bar on fraternization between enlisted and officer ranks, combined with the material perks of holding a commission, have created a barrier that often causes friction between the two sides. The historian Gerald F. Linderman and literary scholar Paul Fussell have both written at length about discontent arising from the exclusivity of officers' clubs and officers' alleged willingness to exert their authority on enlisted personnel through punishments, often for no more than sadistic, personal satisfaction. Enlisted personnel have frequently expressed these feelings, often justifiably so, but the segregated atmosphere also promotes effectiveness within the ranks. Officers must carry out orders and make decisions that are not always favorable to their subordinates, making the need for separation essential. The courtesies and benefits that accompany being an officer, however plentiful from the enlisted perspective, come with a variety of additional responsibilities that offset their appeal.

A commissioned officer is most often placed in a role where he or she is in direct command of other service members. The leadership of commissioned officers is essential to the successful completion of their units' missions. A 1942 manual for officers attributes the entirety of an officer's success to his physical strength, mental fortitude, moral character, and technical proficiency. Those qualities would, in turn, inspire subordinates and lead to victory.

An officer is expected to be a leader in all forms. Effective commanding of a unit during combat operations and training exercises, while perhaps the most practical trait of a good officer, is only a fragment of what is expected of officers. The officer should lead by example with regard to personal grooming, uniform wear, physical fitness, values, and professional development—all sharing a part of the makeup of effective and influential officers.

In today's military, officers also act as a source for guidance and support for their personnel. During combat operations, officers are responsible for the mental and physical well-being of all personnel under their command. The spectrum of support ranges from combat stress to family affairs at home. When stateside, an officer intervenes with his or her

personnel with regard to domestic issues, substance abuse, and legal affairs, or any issues affecting physical or mental well-being.

Earning a commission as an officer in the U.S. military is a challenging and often lengthy process, but it is only the first, and ultimately the simplest, of the tasks that officers encounter. When the nation is at war, service members are deployed continuously in support of combat operations overseas and therefore carry a great deal of responsibility with regard to both their military and their personal lives. Commissioned officers share those responsibilities with their subordinates, taking responsibility for the well-being of those they lead as well as themselves. In combat, their guidance and leadership are the ultimate factors that determine the success of the mission and the security of those involved in the execution of the mission. Outside of combat operations, the lives and stresses of every soldier under an officer's command become the lives and stresses of that officer. As the ultimate authority in the U.S. military, the responsibilities accompanying commissioned officers are ever present and multifaceted.

K. P. Bracken

See also Leadership; Noncommissioned Officers; Training, Army Officers; Training, Coast Guard Officers; Training; Marine Corps Officers; Training, Naval Officers

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mere part of the background. The capacity to collect and transmit messages has, however, been a key part of military decision making and has often proved decisive in winning wars. Access to better real-time communication technologies (e.g., telegraph, telephone, radio, computer, satellite, network, etc.) has been improving and transforming command and control (C2). Today, communication is a bedrock of the Western, and in particular the U.S., conduct of military operations. Networked and digitalized armed forces and their high-tech precision weapons are greatly dependent on the uninterrupted, real-time and constant flow of huge volumes of data. This has been, however, a relatively new development. This entry discusses the history and technology of communications within the military, focusing on the U.S. armed forces.

Military Communications Before the 1850s

Communication technology did not significantly improve until about 1850. From ancient times, signaling modes included the following: (a) human signaling (the use of hands and devices such as hats and handkerchiefs); (b) music (trumpets, horns, and drums announced orders to attack or retreat); (c) fire, flame, and smoke (for ages, fire was the only technique for sending messages at night, while in the daytime covering flames with a blanket produced puffs of smoke—a simple means of visual communication); (d) flags (patterned or colored pieces of cloth allowed for the sending of messages at sea and on land); (e) couriers (men—on foot and horseback—and animals—pigeons and dogs—carried messages over great distances; pigeons were used, e.g., by Genghis Khan, who set up one of the first networks of strategic communication—a system of pigeon messenger posts); and (f) elements of architecture (signal towers were key parts of some grand constructions, e.g., the Great Wall of China, Hadrian's Wall).

Medieval, Renaissance, and early-modern signaling remained similar to the modes of ancient times. Only in the 18th century did a significant innovation in sending messages arrive, breaking for the first time the physical bond between message and the messenger. During the Napoleonic Wars, Paris was already linked to the major French, and some European, cities through a network of mechanical semaphore (optical telegraph) stations built in 1794.

COMMUNICATION

Throughout history, communication has been central to the conduct of military campaigns. Nevertheless, until recently it has not been a significant theme in the discourse on war; rather, it has been seen as a

The system, which allowed for the relatively quick transmission of military messages, heralded future technological developments.

From Telegraph and Telephone to Radio: The Two Communication Revolutions

The first technological breakthrough came with the invention of the electric telegraph in the 1830s and the Morse system of coding, which simplified and sped up the transmission of messages. The military quickly recognized the potential of telegraphy. The first conflict in which the new technology was extensively used was the Crimean War (1853–1856), during which a network of telegraphic lines enabled the governments in London, Paris, and St. Petersburg to send memos and orders to their field commanders. The telegraph reports from the front line could also quickly affect public opinion, and the first war correspondents appeared. During the wars between France and Austria (1859), Prussia and Austria (1866), and France and Prussia (1870–1871) and in the American Civil War (1861–1865), telegraphy proved to be the crucial military technology. Apart from the railroads, the machine gun, and the bureaucratic organization it had become one of the emblematic features of modern warfare and remained, until World War II, the most common means of military communication.

The telephone, invented in the late 1870s, was initially more slowly adopted by the military than its wired predecessor. The U.S. Army Signal Corps set up an experimental telephone line in 1878, and the first military telephone switchboard in Britain was installed in 1896. At first, the telephone became popular at headquarters, while its strategic and tactical use was made possible only by the advancements that allowed for the production of smaller and lighter devices. The British during the Boer War (1899–1902) and the Americans during the Spanish-American War (1898) made considerable use of telephones. During World War I, the telephone was already in widespread use, and in World War II, it carried a significant volume of communications.

Nevertheless, both the telegraph and the telephone were still of limited use for faster moving divisions and units. The groundbreaking invention came with the radio (wireless telegraphy), developed at the end of the 19th century, which demonstrated its military benefits with the Japanese victory over

the Russian fleet at Tsushima in 1905. Radio made possible the “remote” C2 of naval and land forces. In World War I, radio was still crude, breakable, and bulky, and it proved much more effective at sea than on land. It was during World War II that smaller and more efficient equipment came fully into use. Portable devices, such as tactical two-way radios (walkie-talkie and handie-talkie), made radio highly valuable on the front line: It could keep the infantry in constant contact with its field headquarters. Radio facilitated the growth of genuinely mobile military communications—forces could move but still be able to communicate without being bound by wires. First the telegraph, then the radio took military communication a giant step forward; the next watershed would arrive with the digital era.

The Third Revolution: Computers, Satellites, and Networks

During World War II, code breaking of enemy radio transmissions was of strategic importance for the Allied war effort, and it was for this task that the first calculating machines (analog computers) were developed by Alan Turing and others. Computers were introduced to the military to deal with the huge volume of information needed for the management of modern warfare. Paradoxically, however, their existence and improvements have resulted in the further growth in the amount of data to be processed. The miniaturization of electronics, which began in 1947 with the development of the transistor, has been a key trend in transforming communications. Electronic Numerical Integrator and Computer, one of the first computing machines, constructed in 1946, was not only about 17,000 times heavier and a billion times less powerful than our contemporary laptops, it was also extremely power consuming. The solid-state electronics revolution in communications was taken further in 1958–1959 with the invention of the integrated circuit and the packing of transistors, connections, and other electronic devices onto one silicon chip. The next major step was the 1971 Intel 4004 chip microprocessor, which squeezed all of the computer’s working parts onto a single chip. An additional improvement was made with the introduction of fiber optics, which considerably enhanced communication systems. With the arrival of the first military communication satellites in 1958–1959, instant and real-time communication

between central and theater military commands and units in remote parts of the globe became possible. The true birth of military satellite communication (SATCOM) began in the mid-1960s, and the successive generations of satellites have been regularly increasing the capacity and speed of the information flow. Miniaturization allowed for more portability and mobility—the two features crucial for the progress in military communications. Electronics has been developing according to “Moore’s law”: The capability of a microchip processor doubles every 12–18 months without an increase in cost. Thus, every year computers can make more calculations, and greater amounts of information can be processed. The power of computers has been growing, resulting not only from the advancements in microelectronics but also due to their integration into networks. The coming of the Internet (which originated in the military Advanced Research Projects Agency Network, developed in 1967 as part of the search for a hardened C2 communication architecture that would survive a Soviet nuclear strike) and Wi-Fi routers has greatly multiplied the amount and speed of data flow. According to “Gilder’s law,” the speed of transmission, that is, the capacity of data links, doubles every 12 months. Therefore, the tempo of military communication constantly increases, which subsequently allows for the speeding up of the conduct of military operations.

The contemporary networked systems of military communication allow for the rapid transmission of an enormous amount of data, text messages, pictures, videos, and voice messages. The information revolution brought about the new American information war capabilities, which were collectively put to the battlefield test in 1991.

The Persian Gulf War: The Harbinger of Things to Come

The Persian Gulf War (1990–1991) was not only the first information-age conflict but also the first war of the space age. Information and space communications played a central role in its conduct, especially in the successful use of high-tech weapons, for example, precision-guided munitions (PGMs), unmanned aerial vehicles, and stealth fighters. The effectiveness of strikes with PGMs against Iraqi targets depended on the accuracy of information and the speed of its transmission. Thus, SATCOM became vital for the

whole campaign against Iraq. The coalition used as many as 60 satellites, utilizing the two basic systems: Defense Satellite Communication System, which provided telephone and telegraphic communication, and Air Force Satellite Communications System, which secured communication of command over strategic forces. Defense Support Program early-warning satellites, in service since 1970, were used for tracking Iraqi launches of Scud missiles. A Global Positioning System (GPS), developed since the 1970s and based on the NAVSTAR (Navigation Satellite Timing and Ranging) collection of satellites, enabled, for the first time in war, U.S. Army units to determine their position in the Iraqi desert.

The air space over the Persian Gulf was monitored by Airborne Warning and Control System aircraft, which gave early warning of Iraqi air force movements, thereby supporting the coalition strikes. By sending data to ground communication centers, which in turn linked the information to air force planes, the Airborne Warning and Control System greatly supported the C2 of the air battle. The navy relied on E-2C Hawkeye radar surveillance aircraft. A secure communication channel between the air force’s Airborne Warning and Control System and the navy’s E-2C was provided by Link-11 (a high-speed, radio data link communication system).

U.S. Central Command established the largest theater communication system in military history. The extent of the information flow made frequency management a vital task. Operation Desert Storm Network, the management center for which was located at Fort Huachuca (Arizona), was the “megsystem” created especially for the campaign. It linked thousands of computers through satellites and lines. The war marked the evolution of the role of mobile communication (a phenomenon dating back to the first mobile telegraph units) from merely supporting military operations to being an integral element of the military force, able to keep pace with the instantaneously changing combat environment. At the end of the war, the coalition communication architecture was imposing: 2,300 personnel, 7,000 radio frequencies, and 59 communication centers. During the war, the coalition forces made 29 million phone calls. Command was profoundly dependent on civilian SATCOM, and much data traveled over landlines to a commercial satellite terminal in Kuwait City, from which it was sent to the continental United States for analysis and, after

processing, was transmitted back to the command posts in the area of operations. While in the Gulf War 80% of SATCOM was provided by military satellites and 20% by commercial, during Operation Iraqi Freedom (OIF, 2003) this ratio was reversed. Thus, the extensive use of civilian satellite infrastructure by the Department of Defense has become a permanent feature of U.S. military operations.

Wars in Afghanistan and Iraq: Welcome to the Digitalized Battlefield

After the Persian Gulf War, the new high-tech weapon and communication systems were significantly improved and were applied en masse during Operation Enduring Freedom (OEF, 2001) and OIF. The American way of war has become fully digitalized, dependent on information and its means of transmission.

OEF was challenging in terms of providing military communications—for a number of reasons. First, the terrain was rugged and mountainous. Second, it was probably the most heavily mined area in the world, with approximately 10 million hidden land mines, according to the United Nations. Third, setting up three command headquarters vastly increased the communication requirements (the U.S. Central Command headquarters and planning staff in Florida; General Tommy Franks, his staff, and the Army Central Command in Kuwait; and the Combined Forces Land Component Commander Forward in Uzbekistan). It is no wonder that the SATCOM bandwidth exceeded that used in the Gulf War by a factor of 7.

At the height of the OIF, 60% of all communications went through almost 100 satellites of various types; 15 times more satellite bandwidth was available than during the Persian Gulf War. While in 1991, the U.S. forces numbered 542,000 and the military had at its disposal a bandwidth of 99 megabits per second, in 2003, the forces were downgraded to 350,000 but the bandwidth grew to 783 megabits per second. When analyzed “per 5,000 military members,” the bandwidth increase was 50-fold.

Joint command at the U.S. Central Command level was conducted via the Global Command and Control System, which provided a God’s-eye view of the battlefield as never before. Gradually developed since its introduction in 1996, the Global Command

and Control System is an automated network system of global reach providing information for strategic C2. It is a single, predominant metasystem allowing for great service interoperability. In OIF, 80 aircraft carried out intelligence, surveillance, and reconnaissance missions, flying 1,000 sorties and collecting 42,000 battlefield images, 3,200 hours of streaming video, and 2,400 hours of signals intelligence coverage. A great portion of this tremendous amount of raw data was passed on to the continental United States through satellite communication networks, processed and analyzed, and then disseminated back as processed information across command posts and fighting units.

The intelligence, surveillance, and reconnaissance missions of the Predator and Global Hawk unmanned aerial vehicles provided real-time intelligence on remote targets waiting to be eliminated by PGMs. The data collected by the unmanned aerial vehicles were processed by intelligence analysts working 7,000 miles away at sites in Nevada, California, and Virginia and reported back to OEF’s Army Central Command, to OIF’s Combined Air Operations Center in Saudi Arabia, and to theater commanders in Afghanistan and Iraq. Precise and instantaneous communication over great distances became crucial for the efficiency of smart bombs. The improvement in GPS theater accuracy of more than 20% since the 1990s increased the effectiveness of the thousands of GPS-guided munitions used during OEF and OIF. GPS and its more accurate military version, the Precise Positioning System, played a critical role not only in directing smart weapons to their targets but also in troop orientation in the terrain (during the OIF, the army was supplied with more than 100,000 Precision Lightweight GPS Receivers and the Marine Corps with 5,400).

In Iraq, digital communications and networks gave the United States unprecedented air-land-naval operations coordination and near-perfect battle space awareness. This, in turn, led to an increase in maneuvering speed. During World War I, the fastest telegraph could send 30 words a minute. In the 21st century, using the Military Strategic and Tactical Relay satellites, it takes 0.16 seconds to send updated target data to the in-flight Tomahawk missile and 2.07 minutes to transmit 23 megabytes of image data. During OIF, the United States used the Global Broadcast Service, developed after the Persian Gulf War, which allows for one-way broadcast of data

to many small receivers simultaneously. With the Global Broadcast Service, sending target data takes only 0.01 seconds, while 23 megabytes of image data are transferred in 8.4 seconds. Thus, the capacity of data dissemination is breathtaking. Never before was the time lag between a target's identification and its destruction (the "sensor-to-shooter gap") shorter—sometimes less than 15 minutes.

To enhance the speed and effectiveness of C2 during the OIF, the U.S. Navy used more than 500 chat rooms on the Pentagon's largest C2 data network: Secret Internet Protocol Router Network. A counterpart of the civilian World Wide Web, the Secret Internet Protocol Router Network became the vital communication channel for all services. It provided a medium for sending classified information from the Strategic Tactical Entry Point (which gives forces access to strategic communications architecture worldwide) into the Defense Information Systems Network.

The U.S. Army fighting in the OEF and OIF was an information-age army. The Army Battle Command System, which secured digital C2, enabled commanders to pass on orders, intelligence, logistics information, and other useful data. A new component of the Army Battle Command System was the Blue Force Tracking system for identifying friendly forces. It gave a real-time operational picture of the battlefield. For the OIF's purposes, the technology was installed on more than 1,200 ground and aviation platforms. Blue Force Tracking contributed to the enhancement of integration between the U.S. Army, the U.S. Marine Corps, and British forces and helped reduce incidents of blue-on-blue fire (also called friendly fire).

Both in Afghanistan and in Iraq, the forces commonly used "closed loop" operations, based on a mechanism of feedback between the commander and the units in the field, so the information ran in both directions. The soldiers received C4ISR (command, control, communication, computers, intelligence, surveillance, and reconnaissance) data, which provided them with current-situation awareness, and commanders, after receiving feedback on the results of combat operations, could direct further military actions.

A fairly new pattern of military communication was the TeleEngineering Kit. Units in the field could contact experts at the Vicksburg Center back home to get advice and solutions to complex

technical problems, such as repairs to damaged bridges, by sending information and images. The TeleEngineering Kit used a mobile communication system of a small satellite terminal, a laptop, a camcorder, and a videoconferencing unit. Technical solutions were provided within about 4 hours. TeleEngineering Kit is a good example of sharing information and knowledge during combat and also of the extent to which modern digital technology overcomes distance and geography.

U.S. and coalition forces used the new forms of communication, which in the contemporary civilian world are taken for granted, that is, secure e-mail, chat, satellite phones, video teleconferencing, and digital transmission of text, voice, videos, images, and maps. The Afghan and Iraq wars marked a new phase in the evolution of military communications. They proved the power of information and the novel ways of its transmission both for achieving decisive and rapid dominance and for tactical victory in postmodern warfare.

Conclusion: Challenges and Opportunities

There are, however, some challenges to the high-tech, networked, and digitalized U.S. military communication, infrastructure, and capabilities. First, there are problems with the vulnerability and security of the whole communications architecture. A complex and encompassing system is greatly susceptible to hostile cyber or electromagnetic pulse attack, a mere breakdown, information noise, or overload. Because information has become both the weapon and the target, protection of the communications infrastructure has grown to be more vital than ever before. For example, the Secret Internet Protocol Router Network was the main source of documents allegedly leaked by the U.S. Army soldier Bradley Manning and published online by the website WikiLeaks because too many people had been granted access to the secret levels of information. Second, the greater the communications capabilities, the more data the military transmits and the more capacities it demands to transmit even more data. Information technology development creates an information addiction trap. Third, China—a would-be peer competitor—has been carefully following American developments and investing immensely in the digitalization of its own troops, as well as developing the most up-to-date communication systems, including satellites. It

is preparing for future information warfare. Fourth, civilian technologies associated with globalization have been used by terrorists in planning and carrying out coordinated attacks. Computers, modems, the Internet, satellite and cell phones, handheld radios, and GPS have increased the abilities of many illicit groups to communicate, plan, and coordinate their actions, while sophisticated encryption software keeps their communication highly clandestine. For example, the Lashkar-e-Taiba attackers in Mumbai (2008) were, through cell and satellite phones, in constant contact with their handlers in Pakistan, who watched the live coverage of the rescue combat operation, issued instructions, and provided updated information. Paradoxically, while widely exploiting the products of the globalized world (especially information technologies), postmodern terrorism denounces globalization as such.

Until the mid-19th century, military communication was essentially limited to human-to-human signaling. Based on the experience of the Afghan and Iraq wars, military communications today appear to be more about communication among machines (computers, platforms, weapons, and networks) than among humans. Communication has become real time, automatic, digitalized, networked, multilevel, multiservice, and interoperational. Communication is now important not only for sending orders but also for learning the location of friendly and enemy forces, for coordinating joint (multiservice) operations, for sustaining interoperability, and for the successful use of new high-tech weapons systems (mainly PGMs and unmanned vehicles, including drones). In sum, for the Western world it has become decisive for the very conduct of military operations.

The technological progress after 1945 has spanned numerous vital advancements in military communication: Signal quality has greatly improved, the variety of delivery modes has been boosted, the speed of communication has increased enormously, power consumption and power requirements have declined remarkably, the capacity of digitalized devices and transmission channels has multiplied immensely, and the size of military equipment has been drastically reduced. For example, today's technologies enable near-real-time video from soldiers in fighting positions to be sent to the Pentagon. These dramatic improvements have made possible the achievement of real-time dominant battle space

knowledge and allow for the waging of network-centric warfare.

However, despite the enormous technological advancements in military communications, both the Afghan and the Iraq operations demonstrated that the greatest challenge of information technology is still to supply an army with systems capable of on-the-move communications, backed up with high-bandwidth satellites. The two wars revealed the need for solutions to enhance interservice compatibility (communication integration). The Pentagon has thus intensified the development of a number of systems that together make up the U.S. metasystem of strategic communication. These are, for example, Global Command and Control System, the Global Information Grid (which interconnects communications at strategic, operational, and tactical levels and integrates all defense information systems); the Joint Tactical Distribution System (a secure system linking the army, navy, air force, and Marine Corps); the Joint Tactical Radio System (a software-based gateway for the interoperability of different radio devices); Warfighter Information Network-Tactical (the army's tactical telecommunications system, providing high-speed communications, on-the-move and real-time voice, video, and data, which will be fully fielded probably by 2016); the Weapons Data Link Network (which allows for two-way communication links between air crews, ground personnel, and weapons in-flight); and "C4I for the Warrior" (which aims to merge all major elements of C4ISR in a single grand communications network encompassing all the existing communication systems in the U.S. military).

Current research and development indicate the future trends in military communication technologies: the search for a mind-machine interface that would allow for direct, "power of thought" communication between brain and computer. Experiments (with electrodes and chips implanted into the brain or attached to the head) funded by the Defense Advanced Research Projects Agency have proven the feasibility of this. The idea is to be able to operate weapons and platforms in dangerous battlefield environments merely through brain signals transmitted over huge distances via the Internet. The fourth great communication revolution may well be on the horizon.

Łukasz Kamiński

See also Airborne Warning and Control System (AWACS) Aircraft; Bombs, Smart; Command and Control; Global Positioning System; Internet; Iraq War (2003); OODA (Observe, Orient, Decide, and Act); Persian Gulf War; Space; Targeting Systems; Warfare, Electronic

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the senior enlisted advisor. The exact size and composition of a company varies by the type of organization to which it belongs. For example, a typical light infantry company consists of a headquarters, three maneuver platoons, and a heavy weapons platoon, while a logistics company may consist of up to seven specialty platoons to handle vehicle maintenance, cooking, fuel, and small arms repair. The composition of a company is determined by a table of organization and equipment issued by the Pentagon. This entry describes the organization and employment of the company.

The company has been a unit of organization in the U.S. armed forces structure since its inception in the Revolutionary War. Historically, the company has consisted of approximately 100 soldiers under the command of a captain, subdivided into platoons of about 30 soldiers each under the command of a lieutenant. A company is under the control of a battalion, usually commanded by a lieutenant colonel. The battalion typically consists of between three and five companies. Companies are also called troops or batteries in cavalry and field artillery organizations, respectively. This structure is recognizable in any of the conflicts that the United States has been involved in throughout its history.

Companies are used in a variety of ways across the spectrum of operations. Maneuver companies of infantry, armor, and field artillery are the formations closest to the enemy in conventional warfare. These companies accomplish tactical tasks assigned to them within the battalion scheme of maneuver. A company is typically used in offense or defense, or as a tactical reserve during conventional conflict. Support companies trail behind maneuver units to provide the necessary services that allow maneuver companies to accomplish their tactical missions. These services may include vehicle repair, personnel replacement, supply, and other administrative functions. The organization and utilization of companies in this manner are essentially the same in both the army and the Marine Corps.

Company commanders have had to expand their traditional missions to include stability and civil support operations as a result of their experience in the Iraq and Afghanistan wars. Current army doctrine includes these two broad categories to help prepare companies for the variety of challenges they will face in the current operating environment. Stability operations are intended to favorably influence the

COMPANY

The company is a unit of military organization that consists of between three and five platoons. A captain usually commands a company, with a first sergeant as

political situation within a country, other than the United States, that is in crisis. Typical tasks for companies involved in stability operations include providing security at voting stations or high-level political meetings, maintaining order within a designated area, deterring aggression, or providing humanitarian relief. Company commanders usually employ their platoons separately in this type of non-linear operating environment to accomplish these tasks. Stabilizing an area is a long-term operation that requires the accomplishment of many smaller tasks to win the support of an area's population over time. Platoons are best suited to accomplish these smaller tasks, allowing the company commander to coordinate the larger effort.

Civil support is similar to stability operations, except that civil support missions are conducted inside the United States. Companies are committed to civil support operations in times of crisis, such as Hurricane Katrina or the cleanup of the Gulf of Mexico shores following the British Petroleum *Deepwater Horizon* oil spill in 2010. Typical tasks for a maneuver unit in civil support operations include police augmentation, search and rescue, food distribution, and medical triage, among others. Like stability operations, platoons are best suited to accomplish these smaller tasks in order to allow the company commander to coordinate the larger effort. Company commanders are also likely to work with other government agencies, such as the Federal Emergency Management Agency or Homeland Security, to meet the goals of civil support operations.

Prior to the attacks of September 11, 2001, companies trained primarily to accomplish offensive and defensive tasks in conventional conflict. Since that time, companies have been employed in a much broader scope of operations. Recent doctrinal updates and changes to the training curriculum at the combined training centers have incorporated this reality. The current operating environment is much more complex than was the Cold War environment, but companies are still expected to remain proficient in conventional warfare tasks. The need to do both has greatly increased the demands of company command.

Successful company commanders firmly grasp the fundamentals of doctrinal tactical employment while maintaining the mental flexibility to meet a variety of challenges that they may not have been

specifically trained for. Companies are often given tasks that require additional assets beyond what they normally have, such as satellite communication equipment, forced-entry tools, or digital recording devices. Personnel and equipment are task organized to the company in this situation, adding additional training requirements prior to executing the mission. Interpreters are a key asset to any mission in the current operating environment. Predeployment training often includes working with an interpreter. An often overlooked task of company commanders is the need to train their formation in cultural sensitivity, since interpreters typically come from the local population.

Companies are the key link between the ground reality and the higher echelons to which they belong. Company commanders must be technologically and culturally adept and must be able to synthesize many pieces of information into a coherent picture of the battle space for the battalion commander. As the complexity of the operating environment continues to grow, as does the need to cover more geographic area with fewer soldiers, the company will remain an extremely important unit of organization within the military.

David Glenn Williams

See also Asymmetric Warfare; Military Organization, Air Force; Military Organization, Army; Military Organization, Marine Corps; Military Organization, Navy; Tactics, Air; Tactics, Covert; Tactics, Ground Forces; Tactics, Naval

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CONGRESS, U.S.

The U.S. Congress is the legislative branch of the federal government and plays a crucial role in the formation of national security policy. It is a bicameral legislature composed of two separate bodies, the House of Representatives and the Senate. Created

by Article I of the U.S. Constitution, Congress has a set of written responsibilities and powers, although courts and elected officials have interpreted them differently as the United States developed into a modern democracy. This entry describes how the U.S. Congress is organized, its powers, and its role in shaping U.S. security policy. Some of the defining features of Congress's impact on the military and national defense policy are (1) its central role in appropriations; (2) the Senate's confirmation of military officers and presidential appointees; (3) oversight of diplomacy, the military, and the intelligence community; (4) ratification of treaties; and (5) the power to declare war. A consistent theme in the history of Congress has been a tension with the executive branch over defense policy-making powers. In the post-Cold War era, Congress has played a prominent role in the closure of bases both at home and abroad, the Persian Gulf War, the expansion of the North Atlantic Treaty Organization, Operation Enduring Freedom, the Iraq War, U.S.-Israeli relations, and negotiations with Iran over its nuclear program. Although it is by nature deliberative, the future role of congressional defense policy making will depend on its ability to make timely and effective decisions in a world in which information travels across the globe instantaneously.

As authorized by Article I of the Constitution, Congress is organized into the House of Representatives, commonly referred to as the House, and the Senate. The House is the lower chamber and is composed of 435 members, each of them elected by voters in single member districts. The upper chamber is the Senate, which is composed of two senators from each of the 50 states. Each senator is elected directly by the state's voters. The House and the Senate have differing powers and responsibilities, although agreement among them is required to pass most resolutions and all legislation. Much of the work of Congress is conducted in House and Senate committees.

Power of the Purse

The U.S. Congress has been a pivotal institution in the development of foreign policy, defense policy, and the military since its inception. With regard to the military, foremost among Congress's policy-making roles is the power and responsibility to appropriate funds used for various purposes, for example, the

armed forces, warfighting, diplomacy, foreign aid, and intelligence. Bills that authorize spending originate in the House Appropriations Committee, the largest and most influential committee in the House of Representatives. Although the Senate must pass spending bills for them to become law, they must originate in the House. The House, therefore, has an advantageous position in the federal government regarding fiscal policy making and the funding of the armed forces—the “power of the purse.” The House Appropriations Committee is organized into several subcommittees, some of which are highly relevant to foreign and defense policy, for example, the Defense; Military Construction, Veterans Affairs and Related Agencies; and State, Foreign Operations, and Related Programs subcommittees.

Four beneficiaries of congressional appropriations are highly salient to national security matters: war funding, the development of future weapons systems, foreign aid, and military bases. War funding is the most obvious of these; while the executive branch is responsible for commanding the armed forces, Congress has the ability to shape national war strategy on the margins by funding or defunding certain aspects of a military conflict. Congress can influence grand strategy and the capabilities of the armed forces by allowing the development of new weapons systems or eliminating current ones.

Foreign aid, the domain of the House Appropriations Subcommittee on State, Foreign Operations, and Related Programs, is a prominent part of Congress's foreign policy-making influence. Spending bills for programs such as the Peace Corps, UN dues, and direct foreign aid to states such as Israel are first drafted and considered by select members of the House. Here, debates over the merits of particular foreign policies are routine.

The process of appropriating new and closing old military bases is also the domain of Congress. At the end of the Cold War, this was a politically charged issue as the Department of Defense sought to scale back expenses for its strategic adjustment. Due to the individual interests of many members of Congress, the process of base closures was heavily politicized, and the final result strayed from what the Clinton administration defined as the national interest. Some Congress members fought to keep bases open in their home districts to protect the jobs of constituents, which effectively distracted the House and Senate from the larger goal of cutting costs and

reallocating resources to more vital security interests. The placement, repurposing, and merging of military bases remain volatile issues in Congress.

Power of Confirmation

Congress has a role in the nonfiscal aspects of national security as well. The Senate has the power and responsibility to confirm presidential appointments in executive- and cabinet-level positions. Accordingly, the president must select key foreign and defense policymakers who are amenable to at least 60 senators because of the Senate cloture rule, which is a formal procedure for ending a debate and calling for a final vote on confirmation. In times of a split government, where one party controls the Senate and another is in the White House, the Senate can use the confirmation process as leverage to force the president to appoint more centrist candidates. The Senate is also responsible for confirming military officers with presidential commissions (usually at the rank of O-2 and above, depending on the branch). Senate confirmation of commissioned officers is routinely handled in an omnibus fashion; it is common to have more than 600 officers confirmed by one Senate resolution.

Oversight Powers

Congress also plays a pivotal role in the oversight of the executive branch and its civilian administration of the military, intelligence operations, and diplomacy. The House and the Senate Armed Services Committees oversee the Department of Defense and the departments of the branches of the armed forces; Senate and House Intelligence Committees oversee the entire intelligence community; and Senate and House Foreign Affairs Committees oversee the Department of State. The style and intensity of oversight depend on a host of factors, including the current committee leadership. Oversight always includes the routine testimony of department heads, sometimes held in private to protect confidential and privileged information. Pursuant to acts of Congress, the president offers periodic reports on the status of the military, grand strategy, and foreign threats through various publications, for example, the *Quadrennial Defense Review*, the *National Security Strategy*, the *National Military Strategy*, and the *National Intelligence Estimate*. More active forms of oversight include the use of legislation to

amend bureaucratic procedures and the creation of congressional investigations.

Treaties

The Senate has the power and responsibility to ratify treaties with foreign countries and must do so by a two-thirds majority vote. This puts the president in the position of bargaining with both the foreign countries and the Senate to ratify a treaty. Considering that the motivation of each senator might deviate from the president's, this congressional power can hinder international negotiations. An example is the Treaty of Versailles, which formally ended World War I and created the League of Nations. The Senate's overwhelming opposition to American membership in the League of Nations led to its refusal to ratify the treaty, thus altering American foreign policy in a significant way and potentially contributing to the cause of World War II. A more contemporary example is the Senate's refusal to ratify the Kyoto Protocol on Climate Change, which the Clinton administration signed in 1998. The unwillingness of the U.S. government to fully adopt the Kyoto Protocol contributed to increased tensions with U.S. allies in the following decade.

Declare War

By virtue of the Constitution, Congress has the power to declare war, which requires consent of the Senate and the House. There were five formal declarations of war between 1812 and 1941, although Congress has informally authorized the use of military force against foreign enemies as early as 1798 and as recently as 2002, during the approach to the Iraq War. The power and necessity to authorize the use of military force is one of the points of contention between the executive and legislative branches in the creation of foreign and defense policies.

Current members of Congress have the ability and responsibility to recommend students to the service academies, thus giving individual legislators the power to influence the composition of the armed forces' future commissioned officer corps. With the rise of the importance of Reserve Officers' Training Corps programs for supplying new officers, this reserved power is less influential than it used to be.

Finally, Congress has the ability to influence foreign and defense policy making through legislation.

One of the most influential congressional acts of the 20th century was the National Security Act (1947), which reorganized the civilian control of the military and the intelligence community and created the National Security Council. In more recent times, the Intelligence Reform and Terrorism Prevention Act of 2004 amended elements of the National Security Act and created the Office of the Director of National Intelligence. Occasionally, Congress passes legislation that alters foreign policy directly and constrains the president's options in making future foreign policy. One example is the Taiwan Relations Act of 1979, which requires the federal government to sell defensive weapons to the Republic of China (Taiwan). There are occasions when actions taken by members of Congress, apart from legislation, can influence foreign and defense policy. A 2010 non-binding resolution of the House Foreign Relations Committee that condemned the Armenian Genocide of 1911 jeopardized U.S.-Turkish cooperation on sensitive security matters in the Middle East.

As previously mentioned, the tension between the president and Congress over constitutional ambiguities largely defines their national security relationship. Chiefly, modern precedents taken by the president and by Congress have amended congressional policy-making abilities in a few substantial ways. Foremost among them is the use of the armed forces without the initial consent and authorization of Congress. Previous administrations have cited the constitutional role of the president as the commander in chief of the armed forces and the responsibility to maintain the security of the United States and its citizens. In the 21st century, it is likely that Congress's ability to declare war will be unnecessary for making war or for defending the United States and its interests. In 1973, over the veto of Richard Nixon, Congress passed the War Powers Act, a resolution that placed restraints on the president's unilateral ability to deploy armed forces and make war. Subsequent presidents have declared the War Powers Act to be unconstitutional and have challenged it in various ways.

Executive-Congressional Conflict

War making is only one way in which the executive branch has come into conflict with Congress over foreign and defense policy making. By virtue of the Constitution, executive agencies must

comply with congressional oversight requests, including responding to subpoenas and testifying under oath. At the same time, administrations have found ways to escape congressional oversight of foreign and defense policy. The assistant to the president for national security affairs (more commonly called the national security advisor) is a member of the Executive Office of the President and is therefore excluded from oversight due to the principle of executive privilege, which stems from the separation of powers principle in the Constitution. Since the mid-20th century, presidents have relied on national security advisors as confidants, defense planners, and interlocutors and emissaries to avoid having to report to Congress, thus bypassing the traditional roles held by the secretaries of state and defense. The Case Act (1972) was an effort by Congress to address this problem and requires presidents to disclose all executive agreements with foreign countries to Congress in a timely manner.

The tension between the president and Congress has multiple explanations. The dominant one is offered by the political scientist Richard Neustadt, who argued in 1960 that activist presidents since Franklin Delano Roosevelt have encroached on congressional powers because they are institutionally positioned to effectively persuade the public and have exercised strong leadership. Aaron Wildavsky's 1966 "two presidencies thesis" maintains that the president is institutionally unable to lead in domestic policy; therefore, he is overactive in foreign policy to accumulate political victories and increase his political capital. Another commonly accepted explanation for the president's successful encroachment on congressional powers is the executive's first-mover advantage; since the president has first access to intelligence, he may make policy and set a precedent before Congress has the time to act. Regardless of explanation, it is clear that the institution of the presidency has increased its ability to shape foreign and defense policy at the expense of congressional power.

Politics and National Security

While the tension between the president and Congress has been evident in one form or another since the founding of the republic, two recent trends inform the status of Congress in foreign and defense policy making since the end of the Cold War. First,

congressional elections are increasingly based on national issues instead of local issues and incumbent-constituent relations. Second, Congress's overall approval rating is at a historic low, and it continues to be blamed for many of the federal government's failings.

The dominant understanding of how members of Congress behave is best described in seminal books by David Mayhew (1974) and Richard Fenno (1978). Mayhew writes that the primary motivation of members of Congress is reelection; thus, all decisions are judged according to this singular goal. Fenno adds to this wisdom by observing that members of Congress behave differently in Congress and in their home districts. Subsequently, Fenno argues that the "home style" of members' behavior centers on serving constituents and dealing with local issues, while the "Hill style" is more amenable to national policy making. When considered together, this leads one to believe that members of Congress are most motivated to serve constituents and to solve local issues. In prior decades, this certainly was true, as constituents voted according to how well an incumbent served the local district's needs and members placed local needs before national needs. The impact that this behavior had on national security policy was clear; members of Congress would place local and parochial interests ahead of national interests, including national security.

An emerging trend in congressional elections, however, is the increased salience of national issues among voters. In 1994, Republican challengers across the country defeated well-entrenched Democratic incumbents because of voter dissatisfaction with elements of national policy. This trend has continued into the 21st century and may continue in the future. If this is the case, and if national issues are increasingly important to voters in congressional elections, then the possibility exists that members of Congress will be more respondent to the national interest and less sensitive to local constituency needs when making and amending national security policy.

The second significant trend in congressional politics is Congress's declining approval rating. Since 1975, approval ratings for the entire Congress have been low, reaching a new depth of 8% in 2009. Interestingly, this contrasts with individual members' approval ratings, which are often much higher. This trend of decreasing satisfaction with Congress indicates a general blame assigned to Congress for national problems, not just local ones. Congress is

increasingly viewed as ineffective, slow to act, and saddled with parochial interests and quid pro quo politics that cause the institution to deviate from the general good and welfare of the American people. This intense disapproval manifests itself in many ways, most notably in the public's preference for expedient presidential action on national security matters.

Congress has played a critical role in transforming national security policy in the post-Cold War era. In particular, congressional leadership was key in transforming the American military to a post-Cold War force; in authorizing the use of military force in the Persian Gulf War and other military operations; in negotiating with allies, strategic partners, and strategic rivals; in creating a new homeland security paradigm after the 9/11 attacks on the United States; in designing and authorizing Operation Enduring Freedom; and in altering the strategy of and sustaining the effort for the Iraq War.

The Post-Cold War World

The strategic adjustment of the U.S. military in the 1990s would not have been possible without the intervention of Congress. The changing threat environment, effectively a transition from a Soviet threat to a rogue state threat, required a massive shift in force posture that included the realignment of military bases and the reprioritization of weapons research, development, and funding. In the post-Cold War era, members of Congress have become more active in foreign delegations and in visits to foreign countries. Congress was a partner with the Bush administration in the creation of a new homeland security paradigm following 9/11. Landmark legislation included the creation of the Department of Homeland Security, the USA PATRIOT Act, and the authorization and funding of Operation Enduring Freedom.

Finally, the Iraq War provides multiple illustrations of Congress's role in policy making in the current era. In October 2002, it overwhelmingly authorized the president to use any means necessary to enforce the terms of UN Security Council Resolution 687, including military force. This *carte blanche* did not prove to be effective in bargaining with the Iraqi regime, but nonetheless it enabled George W. Bush to resort to a military solution to the crisis over alleged Iraqi weapons of mass destruction. In 2005, the Republican-majority 109th

Congress lacked sensitivity to public dissatisfaction over the war and continued to authorize spending bills for the war and support President Bush's policies. Consequently, the Republican Party's support for the Iraq War was cited as one of the top reasons for the success of Democratic congressional candidates in the 2006 midterm elections, thus illustrating the impact that national security issues now have on congressional elections. The 110th Congress, with a Democratic majority, had a mandate to curtail the war effort but did not, partly due to its weak institutional position relative to the Office of the President. Despite opposition from the Democratic Congress, the Bush administration's troop surge in 2007 added more than 27,000 military personnel, thus striking a blow to the legislative branch's perceived authority on national security issues.

The 112th Congress, which was divided between a Democratic Senate and a Republican House, faced renewed policy-making challenges that reflected the trends seen in recent decades. In a climate of renewed fiscal austerity, it has pursued a reduction in programs that have the potential to shift defense policy in the long term. Foremost among these developments are significant reductions in foreign aid and deep cuts to the Department of Defense budget.

The 113th Congress faces a variety of classic and newly emerging challenges in the realm of foreign and defense policy. Among those issues inherited from the previous Congress include a climate of renewed fiscal austerity and a severe lack of bipartisanship. A lack of agreement between Republicans and Democrats over the future of the government's fiscal policy threatens existing programs and suppresses new policy initiatives. Foreign aid spending is a routine target of budget hawks. Obama administration officials have warned that deep cuts to the defense budget will jeopardize current and future military readiness. In the long term, the cancellation of key weapons systems like the F-35 Joint Strike Fighter may affect force projection and necessitate a change in grand strategy.

While budget battles are nothing new to the Congress, the protean landscape of threats to national security presents a host of newly emerging challenges. Skeptics from both parties are concerned that the Obama administration's increased reliance on drone strikes and the lack of transparency therein is eroding Congress's ability to oversee the conduct of the Global War on Terror. Legislators are divided over the

president's "Asia Pivot" strategy, which remains more of an idea than an actual policy. After recent attacks on public and private sector systems, cyber security has become a high priority, yet funding and oversight plans have not been fully developed. The new century presents a rapidly changing strategic environment that the Congress must react to in a timely and efficient manner. The alternative is to abdicate more of its foreign and defense policy-making powers and responsibilities to the executive branch.

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See also Appropriations, Military; Armed Services Committee, House; Armed Services Committee, Senate; Constitution, U.S.; Foreign Relations Committee, House; Foreign Relations Committee, Senate; President as Commander in Chief

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CONGRESSIONAL RELATIONS, MILITARY

This entry discusses the constitutional and statutory complexities associated with free exchange of information and appropriation requests between the military and members of Congress. "Congressional relations in the military" is an abstract term that is neither constitutionally nor statutorily defined. To compound matters, the Anti-Lobbying Act of 1919, codified at 18 U.S.C. 1913, creates a dichotomy where the military is prohibited from lobbying members of Congress and is also under a duty to provide timely information to Congress related to military programs and corresponding appropriations requests. As stated in 18 U.S.C. 1913,

No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress.

This language prevents federal agencies, including the military, from using their employees, resources, or appropriated funds to lobby any federal, state, or local government official with respect to military programs or appropriations. In fact, the act initially criminalized lobbying of Congress by federal agencies but was revised in 2002 to merely prohibit such lobbying activities.

However, 18 U.S.C. 1913 seems to contradict the antilobbying provision by providing that this section

shall not prevent officers or employees of the United States or of its departments or agencies from communicating to any such Member or official, at his request, or to Congress or such official, through the proper official channels, requests for any legislation, law, ratification, policy, or appropriations which they deem necessary for the efficient conduct of the public business.

Indeed, members of the military are mandated by the act to respond in a timely fashion to any inquiries or requests by members of Congress that might be related to legislation, appropriations, or other military programs. Understandably, the prohibitory and mandatory language is contradictory. How can members of the military avoid the appearance of lobbying, either formal or informal, while responding to congressional inquiries related to military programs and corresponding appropriations without actively supporting their requests? The act by its very nature creates an environment where members of the military are under a duty to explain and even advocate support for military operations and corresponding appropriations.

Further complicating this dichotomy is the fact that military operations are often cloaked in secrecy. Fully explaining the military's budget to members of Congress could easily violate matters of national security. Some top secret military projects may even avoid the scrutiny of an Open Records Act subpoena.

In addition, educating all members on all extremely complicated and highly scientific military projects would be virtually impossible. As a partial remedy, classified documents are revealed only to key members of Congress who have top secret clearances and sit on select congressional committees. Even with committee access, full disclosure and complete transparency are unreasonable in that military projects are massive. Explaining in detail the combined military budget for 2012, a budget in excess of \$600 billion, to members of Congress would be virtually impossible.

Even so, Congress ultimately holds the purse strings for military appropriations and demands transparency when approving requests for appropriations. Constituents demand accountability and want to know why a hammer or screwdriver might cost much more than \$100. Anticipating reelection, members of Congress request transparency, justification, and supporting information from military leaders to enable them to approve, cut, or increase military budgets. Frequently, this natural flow of information and congressional oversight create congressional relations with the military that are difficult, if not impossible, to distinguish from an aggressive lobbying campaign.

Congress not only condones but also demands information, services, and assistance. Replies to congressional inquiries are expected in a timely fashion. Over time, members of Congress build relationships and trust with key members of the military. This statutorily mandated interaction and exchange of information naturally create a rich opportunity for members of the military to lobby for military operations and corresponding budget requests. Thus, the dichotomy created by the act's language is difficult to differentiate. There is no clear-cut line of demarcation between military lobbying and the military's duty to provide timely information to Congress.

Brief History

To better understand the current state of congressional relations with the military, one must first examine the "separation of powers" provision established by the U.S. Constitution. Article I, Section 8 of the U.S. Constitution requires the legislature "to raise and support armies" and "to make rules for the government and regulation of land and naval forces." This clause clearly establishes the authority

of Congress to regulate and fund military programs. In addition, it creates the authority of Congress to exercise oversight of military affairs and corresponding appropriations requests.

To create balance and separate powers, Article II of the U.S. Constitution establishes the executive branch of government and vests full executive power in the president of the United States. Article II, Section 2 of the U.S. Constitution provides that “the President shall be Commander in Chief of the Army and Navy of the United States, and of the militia of the several States, when called into the actual Service of the United States.” Equally clear, the president is in charge of the military.

As such, another dichotomy is created. The president is empowered with authority over and responsibility for the military, while Congress is empowered with the authority to raise, support, and regulate the military. In accordance with the Budget and Accounting Act of 1921, the president is authorized to submit a budget with supporting justification to Congress each year. In turn, Congress is vested with the power to investigate budget requests and corresponding justification for related military spending. Through such checks and balances, the framers of the Constitution provided for a national military defense while minimizing the possibility of the national military becoming uncontrollable. The president commands the military, but without Congress there is no funding of the military.

This bifurcated system naturally creates an opportunity, if not a duty, for Congress to investigate and ultimately micromanage military operations through the approval or denial of requested appropriations. Understandably, such bifurcation often creates a deep frustration in military leaders. Military leaders tend to view their needs from a national or even global perspective, with virtually no ties to their home state. In contrast, members of Congress are tied to their home state, realizing that the constituents who vote them into office can also vote them out of office. These electoral ties frequently lead to pork barrel legislation geared toward bringing money, jobs, and military bases into their representative economy—thereby solidifying reelection—when, in fact, some of these initiatives are not requested or even desired by members of the military.

Similarly, money, jobs, and military bases attract the attention of political action committees (PACs). The defense portion of the federal budget consumes

25% of the nation’s tax dollars. As a consequence, defense contractors actively use the intricate political machinery of PACs to gain the attention of the appropriate legislator necessary to secure funding of operations. In turn, PACs contribute almost one third of all the money raised by congressional representatives. Their influence on congressional representatives, and ultimately military appropriations, cannot be understated.

PACs also generate relationships with key members of the military. Although all branches of the military report to the president as commander in chief and all branches of the military are coordinated by the secretary of defense, each branch of service actively competes for its share of declining defense budgets. Each branch of the military has a vested interest in providing PACs and Congress with information related to current and future expenditures for military operations. This fragmentation creates competing interests and makes a full overview of congressional relations with the military somewhat difficult to imagine. To fully understand the term *congressional relations in the military*, one must examine the organizational design of the military.

Organizational Design

As enumerated in Article II of the U.S. Constitution, the president as commander in chief of the military ultimately dictates military operations and congressional relations with the military. Supporting the president, the secretary of defense is responsible for coordinating the combined needs of the competing branches of the military. The secretary, through the general counsel for the Department of Defense (DOD), submits and sponsors the authorizations bill and the defense appropriations bill to Congress. This legislation represents the DOD’s coordinated funding and program requirements for the military. Forwarded to the Speaker of the House, bills are submitted to the scrutiny of the House Committee on National Security (HCNS); the Senate Committee on Armed Services (SASC); the House Committee on Appropriations, the National Security Subcommittee (HAC/NS); and the Senate Committee on Appropriations, Defense Subcommittee (SAC/D). These committees hold posture hearings for a “State of the Union” for each branch of the military and specific-purpose hearings for various military projects. In accordance with the differing committee

requests, the secretary of defense, the chairman of the Joint Chiefs of Staff (JCS), commanders in chief of the Unified Commands, and other witnesses testify to explain and justify the combined requests and needs of the branches of the military.

In addition, DOD Directive 5132.1 (July 1982) charges the assistant secretary of defense with the responsibility of being the “principal staff assistant to the Secretary of Defense for DOD relations with Congress.” In accordance with DOD Directive 5400.4 (January 1978), this individual serves as the key legislative liaison charged with the duty to ensure that members of Congress “receive adequate information concerning all Government programs and operations” and that all DOD components “make maximum information available to and cooperate fully with, members of Congress and congressional committees and their staffs.”

Through such positive relationships and open communications, members of Congress are able to gain a greater understanding and appreciation of military appropriations and corresponding programs. The underlying demand for national security dictates a nonpartisan view of the legislation, but as stated earlier, constituent interests often cloud congressional judgment. One such example was the \$3 billion earmarked for an alternate engine for the Joint Strike Fighter Program in 2010. Although the Pentagon never fully sanctioned the project, it was approved by Congress because fighter jet engines create jobs and stimulate the economy, thereby satisfying PAC dollars and easing reelection concerns.

In contrast, the JCS attempt to arm the president and the nation with information related to the needs of the military. The JCS advise the president and Congress of military operations and corresponding budget requests; however, according to the Goldwater-Nichols Act of 1986, they do not have operational command of U.S. military forces. Responsibility for conducting military operations is vested by Article II of the U.S. Constitution in the President of the United States, who coordinates military operations through the secretary of defense, who, in turn, directs the commanders of the Unified Combatant Commands, thus bypassing the JCS.

However, the JCS has enormous influence on the president, the secretary of defense, and the legislature. In accordance with 10 U.S.C. 151, the JCS is statutorily composed of the chairman and vice chairman (appointed by the president), the chief of

staff of the army, the commandant of the Marine Corps, the chief of naval operations, and the chief of staff of the air force. Within this structure, the JCS acts in a military advisory capacity for the president, the secretary of defense, and the legislature. Understandably, this advisory capacity allows the JCS to play a major role in influencing existing and future programs in the military.

Even more powerful than PACs or the JCS is the contingent of approximately 100 career military officers who work inside Congress. Paid by the Pentagon, these individuals are loaned through fellowship and staff programs. They provide *timely information* to members of Congress, thus sidestepping what could easily be called a lobbying effort. They also assist in writing bills that allocate billions of dollars for military needs each year. Although their service is not considered lobbying, these military leaders who are *detailed to Congress* provide *timely information to members of Congress*. Frequently, this information flow includes “fact sheets” that outline the military programs, include justification for the programs, and include accompanying budget requests. Working on 7- to 12-month fellowships, these military leaders lubricate on a daily basis the congressional machinery that ultimately results in approval of military programs and budgetary needs.

Moreover, some of the most influential military leaders are assigned to House committees. In this position, the “detailees” build personal relationships, are trusted, and even become friends who interact with close family members. As such, their formal and informal authority in drafting and supporting military needs is insurmountable. Unlike lobbyists, these fellows and detailees have continual and immediate access to members of Congress.

Conclusion

Due to constitutional and statutory constraints, *congressional relations in the military* is a very elusive term. The appearance of lobbying on behalf of the military is sidestepped by fancy terms such as *congressional liaison*, *legislative service*, *fellowship*, or *detailee*. But the ultimate outcome is the same. Direct contacts between members of the military and members of Congress are established, and support for military programs and accompanying budgets is obtained.

Truly, Articles 1 and 2 of the U.S. Constitution create an uneasy dichotomy whereby Congress

“co-manages” the military and the military has a duty to provide timely information and responses to congressional inquiries. Certainly, this places the military in the awkward position of selling their programs and respective budgets without being biased or violating the Anti-Lobbying Act of 1919. Because Congress requests the special knowledge and expertise of seasoned military leaders to explain their views on pending proposals, there is virtually no way to distinguish dissemination of information and responsiveness to congressional inquiry from lobbying. As a consequence, members of the military are flummoxed by the diametrically opposite dictates created by the Anti-Lobbying Act of 1919 to provide timely information to Congress regarding military programs and appropriations without creating the appearance of lobbying.

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See also Congress, U.S.; Defense Intelligence Agency; Gates, Robert; OODA (Observe, Orient, Decide, and Act); Staff Relationships

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CONSCIENTIOUS OBJECTION

Throughout U.S. history, there have been those who, on principle, refused to bear arms when faced with compulsory military training or service. This entry discusses conscientious objectors (COs) in the United States, from the 1600s to the present.

The Colonial Era to the Civil War: Religious Objectors

The Religious Society of Friends, or Quakers, who came to America in the late 1600s and established the colony of Pennsylvania, was the first group to

practice conscientious objection in the New World. These religious sectarians, firmly dedicated to traditional Christian beliefs and characterized by the desire to remain apart from governmental authority, established in the British colonies a social commitment to the importance of organized peace and nonviolence. During the Revolutionary War, conscientious objection was widely practiced by Quakers and other religious pacifist sects, such as the Mennonites and Brethren, who also settled in the Middle Colonies in the early 18th century. When, for the first time, Pennsylvania enacted a compulsory draft in March 1777, there was no region under the new government's rule where conscription was not enforced. Quakers were unqualified in their opposition to compulsory service, and even if they had the money to pay for their exemption, they refused to do so. The authorities seized property from resisters who chose not to pay. By the conclusion of the war, the core of conscientious nonresistance centered in what came to be called the Historic Peace Churches—the Pennsylvania Anabaptist remnants (Mennonites and Church of the Brethren) and the 50,000 Quakers who were scattered in nearly 80 meetinghouses throughout the colonies. In 1790, James Madison proposed protection for religious objectors in the Bill of Rights, but the Senate rejected the measure.

The Civil War presented the next serious challenge to COs. Both the Union and the Confederacy provided limited exemption from military service for religious objectors from traditionally pacifist sects. Union congressional action permitted exemption to Quakers and other Peace Church members for a \$300 fee. Yet most northern war objectors considered these concessions insufficient. Consequently, some were jailed for refusing to serve or to obey military orders when forcibly inducted into the army. In February 1864, however, the Lincoln administration permitted religious pacifists to do hospital work as an acceptable alternative to bearing arms. In the South, because of lobbying by Quakers, Mennonites, and Brethren, the government eventually agreed to exempt religious objectors on the condition that they pay \$500 for this privilege. A small number refused to take this way out and, after induction into the army, suffered hardships, including the application of torture that was more brutal than that meted out to northern COs. The Confederacy's urgency for more soldiers resulted in stiffer measures.

World Wars I and II: Noncombatant Roles

In World War I, the Selective Draft Act of 1917 officially recognized only members of the Historic Peace Churches as COs. However, they were required to serve in noncombatant military roles. Apart from the 4,000 classified as COs, and eventually furloughed into agricultural work, approximately 20,873 were granted noncombatant classification by their local draft boards. Some 450 “absolutists,” however, refused to cooperate with the government and were convicted and sent to military prisons, where they endured various forms of brutal punishment. When COs arrived at an army camp, the general practice was to get as many of them as possible to accept combatant duty. Labeling them as cowards and shirkers, military officials used all kinds of pressures to break the convictions of the objectors. After receiving a scathing report regarding the treatment of many of the absolutists, President Woodrow Wilson issued an executive order banning all forms of physical punishment.

The harsh and often brutal treatment meted out to COs during World War I led to a more liberal policy during the Second World War. The Selective Service Act of 1940 permitted CO status for all religious nonresisters. A choice was provided, which entailed non-arms-bearing military service or working in Civilian Public Service camps. From 1940 to 1945, some 50,000 eligible draftees received CO classification, and most served in the military medical corps. However, close to 12,000 opted for alternative service—doing construction jobs, working in state hospitals, reforestation, and agricultural experimentation—in the 70 Civilian Public Service camps scattered throughout the country. These camps were operated by the Historic Peace Churches on behalf of the Selective Service System. However, some 5,000 absolutists, mainly Jehovah’s Witnesses, were sent to federal prison.

The Cold War and Beyond: Antiwar Organizations

The early years of the Cold War kept the draft in effect, which witnessed the largest peacetime military in U.S. history. During the Korean War (1950–1953), 4,300 were classified as COs. In the 1960s, during the Vietnam War, massive numbers of secular and religious men applied for CO status. Antiwar organizations, such as the War Resisters League

(founded in 1923), the Fellowship of Reconciliation (originally founded in Great Britain in 1914 and then an American branch established at a conference in Garden City, New York, the following year), the National Interreligious Service Board for Conscientious Objectors (1940), and the Central Committee for Conscientious Objectors (1948), were successful in challenging the government to grant wider latitude with respect to refusal to bear arms. This was due, in part, to the larger number of well-to-do and college-educated males willing to challenge the constitutionality of conscription in connection with this war. Consequently, Supreme Court cases such as *United States v. Seeger* in 1965, *United States v. O’Brien* in 1968, and *Welsh v. United States* in 1970 changed the criteria for CO status to include secular or moral beliefs, not just religious. Between 1965 and 1970, some 170,000 draft registrants were classified as COs. In-service applications for CO status, moreover, increased from 829 in 1967 to 4,381 in 1971. Throughout the course of U.S. military involvement in Southeast Asia, from 1965 to 1973, close to 17,500 service members applied for noncombatant status or discharge as COs.

The end of the Vietnam War also saw elimination of the draft. However, compulsory male registration was reenacted in 1980. When close to 500,000 failed to register between 1982 and 1984, the Reagan administration chose to prosecute some who publicly refused to register. This approach was not very successful and was replaced by the Solomon Amendment, which denied students financial assistance from federal funds for failing to register for the draft on reaching the age of 18.

The 1990s to the Present: COs in an All-Volunteer Force

The creation of an all-volunteer military was designed in part to address the problems associated with compulsory conscription. In 1990–1991, however, the Persian Gulf War reignited the issue of conscientious objection for those serving in the armed forces. From 1988 to 1991, according to Department of Defense statistics, the army processed a total of 408 applications and approved 298, for a 73% approval rating. The largest increase took place during the Persian Gulf War, with 229 applications and 140 approved. The Marine Corps



World War II Civilian Public Service camp (Coshocton, Pennsylvania).

Source: Courtesy of Swarthmore College Peace Collection.



A 1946 protest calling for amnesty for imprisoned war objectors.

Source: Courtesy of Swarthmore College Peace Collection.

processed 178 applications with 59% approved. The Persian Gulf War witnessed 92 processed and 43 approved. The air force had a total of 158 processed and a 78% approval rate. The Persian Gulf War saw 48 applicants with 31 approved. Navy applications were 264 with 79 approved, excluding officer applications (8 officer applications were approved during this 4-year period). During the Persian Gulf War, 78 applications were processed and 59 approved. The navy had the highest approval rate during the Persian Gulf War. Despite the shortness of this conflict, 648 persons in regular and reserve military units sought discharge as COs during Operations Desert Shield and Desert Storm. The army either reassigned or released many, while the Marine Corps court-martialed and imprisoned almost 50%. Overall, during this 4-year period, the military processed a total of 1,008 applications for CO status and approved 736.

During the Persian Gulf War itself, 447 applications were processed and 273 approved. The short duration of the conflict cut short the number of applications, which more than likely would have increased otherwise. This accounted for a 61% approval rating, down from the overall 73% approval rating during the period from 1988 to 1991. During the Gulf War, those applying for CO status had two options: 1-0, requesting full discharge, and 1-A-0, seeking assignment in a noncombatant role. During the Persian Gulf War, the basic steps for processing CO applications included the appointment of an investigating officer, interviews with a chaplain and a psychiatrist, a hearing, preparation of a report by the investigating officer, and submission of the report with recommendations through a chain of command. Army regulations do not permit discharging applicants willing to serve out their remaining obligated service in a noncombatant status; the navy permits enlisted personnel to serve out their remaining obligated service in noncombatant status; the air force and marines routinely discharge such personnel. The processing of applications ranged from a few months to more than 4 years. Approximately 88% of the applicants were in the 21- to 25-year-old age-group. Approval for enlisted personnel was significantly higher than for officers.

The war in Iraq, which saw the last American troops withdraw in December 2011, and the ongoing conflict in Afghanistan have resulted in service personnel applying for exemption based on conscience. Presently, slightly more than 25,000 soldiers

have deserted the military since 2003, and 225 have fled to Canada. However, those applying for CO status are a far smaller number. In 2006, for instance, the army reported only 42 applications, of which 33 were approved. Critics argue that these numbers are artificially low because they reflect only those soldiers who actually completed the arduous application process. Nevertheless, there have been a number of highly publicized cases of combat veterans who sought CO status, some involving court-martial and imprisonment as well as desertion to Canada. Among them were Army Lieutenant Ebran Watada; Army Staff Sergeant Camilo Mejia, the first public Iraq War resister and now a pacifist, who spent 9 months in prison at Fort Sill, Oklahoma; Brandon Hughly of the 1st Cavalry; Marine Staff Sergeant Jimmy Massey; and Jeremy Hinzman, an 82nd Airborne Ranger who served in Afghanistan. According to the latest Government Accountability Office report released in 2007, from 2002 to 2006, the military processed 425 CO applications from active and reserve components. Of that number, 224 (53%) were approved; 188 (44%) were denied; and 13 (3%) were pending, withdrawn, or closed, or no information was made available. The actual numbers of applicants is probably underreported, however, due to the difficult application process itself as well as due to peer pressure within the military discouraging personnel from applying. While the most current statistics related to war resisters in Afghanistan are yet to be updated (the only available accounting by the Department of Defense remains a 2007 report for both conflicts), various news and online reports have noted that as of July 2009, some 28 publicized cases of war resisters residing in Canada were soldiers who had served in both Iraq and Afghanistan. There are 2 other cases highlighting resistance to the Afghan War that have recently received media attention. One is a 2011 case, still pending, involving Private First Class Naser Abdo, a Muslim soldier from Texas. Abdo, assigned to the 101st Airborne at Fort Campbell, Kentucky, has refused to be deployed to Afghanistan and is seeking CO status on religious grounds because of his Muslim faith. In February 2012, U.S. Army Specialist Dan Birmingham successfully won his appeal as a CO and received an honorable discharge. When notified that he would be redeployed to Afghanistan after having served previously in combat in the Middle East, he applied for his discharge from the military as a CO.

Furthermore, the issue of female COs has surfaced during the nation's current wars in the Middle East. One case involved Kimberly Rivera, who served in Iraq in 2006 and then fled to Canada with her family after refusing redeployment. Another case is that of Army National Guard Specialist Katherine Jashinski, who received a Bad Conduct Discharge and 120 days' confinement for refusing deployment to Afghanistan in 2006.

While the number of military personnel applying for CO status remains in flux and is not fully documented due to the ongoing nature of the Global War on Terror, nongovernmental organizations like G.I. Rights are working with the Center for Conscience and War advising service members regarding military discharge and complaint procedures. Those seeking CO status are requested to complete a 22-question form and undergo an interview with a military chaplain, a psychologist, and an investigating officer. To receive CO status, they must demonstrate how their beliefs have changed since entering the military, a slight revision since Operation Desert Storm. Military recruitment of poor youths in urban areas—"poverty draft"—constitutes the fastest growing contingent applying for CO status.

The evolution of conscientious objection from strictly religious principles to secular and moral considerations marked a turning point in political and ethical thought in 20th-century U.S. history. Nevertheless, the establishment of an all-volunteer force has not diminished the struggle between freedom of conscience and obligation to the state. The present wars in Iraq and Afghanistan are merely a prelude for future military personnel who will grapple with the conflict between their duties as a soldier in time of war and matters of individual conscience.

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See also American Revolution; Civil War, American; Iraq War (2003); Korean War (1950–1953); Peace Movements; Persian Gulf War; Vietnam War; War in Afghanistan; World War I; World War II

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CONSCRIPTION

Conscription is the authority of government to compel people, usually free adult male citizens, to serve in the military. The U.S. Constitution authorized Congress to maintain an army and a navy, and assumed states would maintain militia. The federal government was empowered to assume control of the militia to repel invasions, enforce laws, or suppress insurrections. The federal government relied on voluntary enlistment for the Regular Army and Navy, while the Militia Act of 1792 called for states to enroll most free adult men in geographically

organized militia companies for training. In practice, the Militia Act was ignored, and states instead depended on volunteer companies for traditional militia functions or to augment the federal military during wartime. This entry discusses the history of conscription in the United States.

Federal Conscription

Conscription, also called the *draft*, first appeared in the United States during the Civil War, when the Confederate government (1862), followed by the Union government (1863), passed laws that allowed their armies to force individuals to serve, although conscripted men could purchase a substitute if they could afford it. States that raised enough volunteers through incentives were spared conscription. The use of soldiers with the authority to compel military service ran counter to American emphasis on civilian control and volunteerism. The results were poor, with only a small minority of soldiers on both sides entering the military through conscription, and those who did become objects of contempt for volunteers. The Civil War experiment with conscription did not raise constitutional issues as the use of conscripted soldiers to suppress insurrection fell within the constitutionally sanctioned use of the federal militia. During the Spanish-American War (1898), Congress declared that all men 18 to 45 years of age were subject to military service, but the large numbers of volunteers and short duration of the war made such a provision unnecessary.

When the United States entered World War I, the government decided to use conscription to greatly expand the small Regular Army and the National Guard into the mass army required for the war. After studying the failure of conscription during the Civil War, the government created the Selective Service System, which was run by civilians at the community level. Constitutionally, the new conscription was based on two premises. First, the Constitution gave Congress specific authority to “raise and support armies,” without restrictions on how those armies were raised. Second, a declaration of war by Congress had the force of law, and thus using conscripts in a declared war fell within the bounds of the constitutionally sanctioned role of the federal militia in enforcing laws. Selective Service committees, informally called *Draft Boards*, considered the health, number of dependents, and role in the

economy of a potential selectee before placing him in a category. In the summer of 1917, the government ended all voluntary enlistments and depended entirely on conscription. Conscription ended with the Armistice in November 1918, and the American military again depended on individual volunteers.

In November 1940, in response to the growing wars in Asia and Europe, Congress passed the Selective Training and Service Act, the nation’s first peacetime conscription. The new Selective Service System was almost identical to that used in World War I, although voluntary enlistment was also allowed. Men between the ages of 21 and 35 were eligible for conscription. Before the United States entered World War II, selectees were to train for 1 year and were not to serve outside the Western Hemisphere or American possessions in the Pacific. The length of service was later extended to 18 months, but the United States entered the war before the selectees were discharged, and all selectees were ordered to serve as long as they were needed. In 1943, the minimum age was lowered to 18. During World War II, some 12 million men entered the military through Selective Service.

The Cold War

After World War II, the United States relied on a mixture of volunteers and conscripts to fill its military. The 1940 Selective Service Act expired in January 1947, but Congress passed a new act in March 1948, subjecting men 19 to 26 years of age to fill the undermanned army. President Lyndon Johnson’s desire to maintain middle-class support for the war in Vietnam led to a number of programs that allowed wealthy and better educated men to avoid conscription. As a result, disproportionate numbers of poor, minority, and young men were drafted. Widespread opposition to conscription during the Vietnam War ended the national consensus on compulsory military service. In 1972, conscription ended, although congressional authority for it remained into 1973. Since 1972, the United States has depended on the all-volunteer force. In 1980, President Jimmy Carter reinstated registration with Selective Service for men between 18 and 25 years of age, although no conscription took place. Congress has continued to fund Selective Service at a basic level in order to preserve the mechanism for a draft.

Global War on Terrorism

Following the terrorist attacks on the United States on September 11, 2001, the United States began a long war in Afghanistan and, later, Iraq. The war was fought using the all-volunteer force, with heavy involvement by the reserves and the National Guard. Additionally, the U.S. military increasingly depended on private contractors to perform traditional military functions from food service to providing security. Despite rare and isolated calls from pundits for a new draft, the Department of Defense, Congress, and major political parties have shown no inclination to abandon the all-volunteer force. The utility of a revived draft is questionable. The 20th-century draft answered a need for a mass, infantry-based army of citizen-soldiers, serving largely for the straightforward goal of defeating the armed forces of enemy nation-states. Post-Cold War military operations are more nuanced, calling for smaller armies of long-term professionals. Any modern draft would either be so massive as to absorb an inordinate amount of military resources to house, equip, and train these reluctant short-term soldiers or be so patently unfair as to make it politically unsustainable. Most serious proposals for some sort of mandatory service include nonmilitary service options.

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See also All-Volunteer Force

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CONSTITUTION, U.S.

The U.S. Constitution outlines the structure of the U.S. government and describes its powers and limits. The 55 delegates who framed the document in

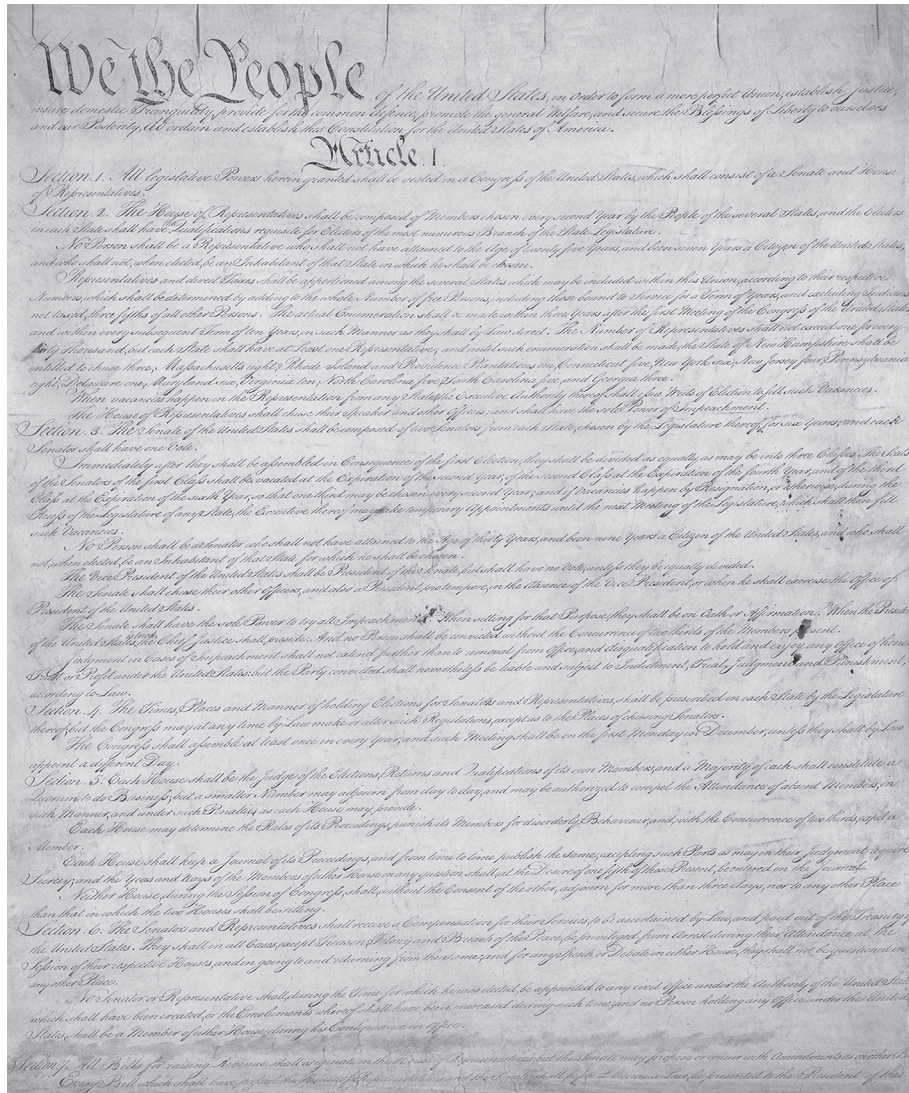
Philadelphia in the summer of 1787 sought to overcome the failures of the Articles of Confederation. It had not provided for an independent executive, and it vested primary power in the states, which acted in some matters as independent nations. George Washington, the president of the Constitutional Convention and the first president of the United States, had set a great example of civil-military relations by subordinating his command over U.S. forces during the Revolutionary War to Congress and by resigning his command at the end of the conflict. This entry outlines the Constitution, discusses the powers that the Constitution delegates to the three branches of the national government, and examines the U.S. Supreme Court cases that pertain to the U.S. military and to congressional and presidential powers relative to foreign affairs.

The Constitutional Principles and Outline

The Preamble to the Constitution lists providing “for the common defense” as one of its primary goals. The document established a system of checks and balances designed to safeguard liberty by dividing power vertically between national and state authorities (federalism) and horizontally among the legislative, executive, and judicial branches (separation of powers). The people elect the legislative and executive branches, and the president appoints members of the judiciary with Senate consent.

The Constitution vests the national government with exclusive power over foreign affairs. Even the strongest advocates of states’ rights emphasize matters such as property, welfare, education, and policing. After the Constitution lists the powers of Congress in Article I, Section 8, it limits these powers in Article I, Section 9. Article I, Section 10, in turn, lists limits on the states. The first 10 amendments, known as the Bill of Rights, subsequently limited the powers of Congress, and the Fourteenth and other amendments limited the states’ powers.

Many of Article I, Section 10’s limits on the states focus specifically on matters involving foreign affairs. The Constitution prohibits states from signing treaties, entering into foreign alliances, levying imposts or duties, or engaging unilaterally in war unless invaded or facing imminent danger. *Crosby, Secretary of Administration and Finance of Massachusetts v. National Foreign Trade Council* (2000) confirmed that state laws restricting trade



First page of the U.S. Constitution, 1787.

Source: National Archives and Records Administration.

with Burma were subordinate to congressional legislation.

Powers of the Three Branches

The first three articles of the U.S. Constitution respectively outline the powers of the legislative, executive, and judicial branches. The Constitution divides powers relative to military affairs between Congress and the president. The judiciary polices the boundary between them by exercising the power, called judicial review, to declare laws and governmental actions to be unconstitutional.

Many of the powers that the Constitution delegates to Congress in Article I, Section 8 deal with military matters. These include the power to “define and punish Piracies” and “Offenses against the Law of Nations,” the power “to declare War,” the power to raise and govern armies and navies (the basis for the Code of Military Justice), and the power to call out the militia and to organize, arm, and discipline it. The Constitutional Convention decided to grant Congress the power to “declare” war rather than to “make” it, but congressional “powers of the purse,” which include the power to tax, spend, and borrow, give it additional control. Article I, Section 9 allows for the

suspension of the writ of habeas corpus (requiring the government to specify charges against incarcerated individuals) in times of “Rebellion or Invasion” when the public safety so requires. Congress helps oversee military matters through its implied power to conduct investigations. The two houses of Congress share most powers, but as a smaller body whose members had longer terms, the Founders expected the U.S. Senate to play a special role in foreign affairs, and the Constitution specifically granted it the power to confirm presidential appointments and to ratify treaties.

In listing presidential powers, the Constitution begins with an office and names the president as “commander in chief” of U.S. forces. This power is often called “the power of the sword.” Most of the president’s power over military affairs stems from this single power, although others are listed. The Constitution thus vests the president with the power to execute the law and to make treaties with the approval of two-thirds of the Senate. The president also appoints members of the cabinet, including heads of the Departments of Defense and of State, and foreign ambassadors. *Myers v. United States* (1926) and other decisions have confirmed that this includes the right to fire such officials without Senate approval. This power extends to military officers, as President Harry S. Truman confirmed when he fired General Douglas MacArthur during the Korean War.

Whereas some nations have separate heads of state and heads of government, the U.S. Constitution merges both functions in the office of the president. Article II, Section 3 thus specifically recognizes that the president “shall receive Ambassadors and other public Ministers.” The president’s role in receiving ambassadors, representing the U.S. on trips abroad, and performing symbolic functions enhances the power of this office.

The Constitution grants the judiciary oversight over all cases that arise under the Constitution, its laws, or treaties made under its authority, including cases of “admiralty and maritime Jurisdiction.” The U.S. Supreme Court hears most of its cases, including cases from the U.S. Court of Military Appeals on appeal. However, the Constitution specifically vests the Court with original jurisdiction over cases “affecting Ambassadors, other public Ministers and Consuls.”

Military Powers Directed Abroad

Congress has the power to declare war, but it is a much more complex and unwieldy institution than

the presidency. Although it has authorized the use of force in other situations, such as the two recent wars in Iraq, Congress has only officially declared war on five occasions—the War of 1812, the Mexican-American War, the Spanish-American War, World War I, and World War II. Moreover, the president’s actions as commander in chief can provoke war or otherwise influence its progress. President Truman justified sending U.S. troops to oppose North Korea’s invasion of South Korea under a UN mandate, and treaties served in part (along with the Gulf of Tonkin Resolution of 1964) to justify U.S. intervention in Vietnam.

The Court sometimes declares the question of which branch has the requisite authority in matters of foreign affairs to be a “political question” for the branches to resolve between themselves. Notably, four justices took this stance in *Goldwater v. Carter* (1979), which refused to grant standing to members of Congress challenging President Jimmy Carter’s decision to terminate a treaty with Taiwan unilaterally. Similarly, in *Luther v. Borden* (1849), the Court refused to second-guess a decision by President John Tyler as to which side he would aid in a conflict between two rival governments in Rhode Island. During the Civil War, a majority of the Court in the *Prize Cases* (1863) approved President Abraham Lincoln’s blockade of southern ports in the absence of a declared war, although the decision was muddled by Congress’s retrospective approval of the blockade.

The Court has often deferred to presidential exercises of war powers. In *J. W. Hampton and Co. v. United States* (1928), the Court upheld a congressional law granting the president the power to alter tariff rates in certain circumstances. In *United States v. Curtiss-Wright Export Corp.* (1936), Justice George Sutherland’s majority decision, quoting an earlier speech by John Marshall, declared the president to be the “sole organ” of American foreign policy and ruled that the president could, with congressional preapproval, impose embargoes, even though the Court had invalidated similar delegations of congressional powers in domestic affairs.

In upholding a treaty with Britain over migratory birds in *Missouri v. Holland* (1920), the Court suggested that it might ascertain the constitutionality of treaties differently than other laws, but subsequent decisions have subjected such treaties to constitutional restraints. Presidents sometimes bypass the need for two thirds of the Senate to approve treaties by entering into executive agreements with foreign countries. Both *United States v. Belmont* (1937) and

Dames and Moore v. Regan (1981) upheld the constitutionality of such agreements, which are often sanctioned by laws or treaties.

Congress attempted to restrain presidential powers in the War Powers Resolution of 1973. This law required the president to consult with congressional leaders when introducing troops into harm's way, gave him or her 48 hours to notify the full Congress of such actions, and limited the deployment of new troops without congressional authorization to 60 days (with another 30-day emergency clause). The law may have increased transparency, but no president has fully embraced it, and the Supreme Court has never ruled on its constitutionality.

Military Powers Directed Inward

The Supreme Court has been more willing to intervene in cases where exercises of military powers affect domestic life. Acting as a circuit judge, Chief Justice Roger Taney sought to limit President Lincoln's suspension of the writ of habeas corpus during the Civil War. Invoking constitutional provisions for jury trials, in *Ex Parte Milligan* (1866), the Court invalidated the conviction of a civilian Confederate sympathizer by a military court. In *Arver v. United States* (1918), however, the Court ruled that the congressional power to raise armies included the power to use a draft; in *Hamilton v. Kentucky Distilleries & Warehouse Co.* (1919), the Court used the war powers provisions to allow for the continuing imposition of the War Time Prohibition Act; and in *Rostker v. Goldberg* (1981), it permitted Congress to restrict compulsory registration to males.

In *Ex Parte Quirin* (1942), the Supreme Court upheld the conviction by a military tribunal of Nazi saboteurs who had landed in the United States. Similarly, in *Hirabayashi v. United States* (1943), the Court validated curfews for Japanese Americans during World War II, and in *Korematsu v. United States* (1944), it deferred to questionable military judgment and approved their exclusion from U.S. military zones on the West Coast, from where they were carried to detention camps. In *New York Times Co. v. United States* (1971), the Court cited First Amendment press freedom to deny the president the power to block publication of the Pentagon Papers, which delineated the sometimes unsavory history of U.S. involvement in Vietnam. When limiting a

president's executive privilege to withhold information involving possible domestic criminal matters in *United States v. Nixon* (1974), however, the Court indicated that it would have been more deferential if military secrets had been involved.

When President Truman seized U.S. steel mills to avert a strike that he thought threatened the production of arms for the Korean War, the Court invalidated his action in *Youngstown Sheet & Tube Company Co. v. Sawyer* (1952). The Court majority said that this was too far from the theater of war to be justified under his power as commander in chief. In a notable concurring opinion, Justice Robert Jackson argued that presidents had the greatest power in foreign affairs when acting with congressional authorization, they had the least power when acting against it, and they were in a "twilight zone" when acting without either authorization or disapproval—in the case at hand, Congress had specifically refused to give confiscatory power to the president.

The developments since the terrorist attacks of September 11, 2001, the adoption of the USA PATRIOT Act, and the subsequent wars in Iraq and Afghanistan have prompted a number of Court decisions focusing on the rights of individuals. These included *Hamdi v. Rumsfeld* (2004), granting various rights to a U.S. citizen captured in Afghanistan; *Rasul v. Bush* (2004), allowing foreign nationals held by the United States at its naval base in Guantanamo Bay, Cuba, to seek a hearing; *Hamdan v. Rumsfeld* (2006), ruling that a military commission violated both the Code of Military Justice and the Geneva Conventions; and *Boumediene v. Bush* (2008), allowing a foreign citizen to seek a writ of habeas corpus challenging his captivity in Guantanamo Bay.

Defenders of presidential power over foreign affairs emphasize the unitary nature of the president and his power to act quickly and decisively. Advocates of congressional power focus on its accountability to the people and its power to declare war. Both sides recognize that a democratic republic requires the supremacy of civilian authorities over the military.

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See also Civil War, American; 9/11 (2001); President as Commander in Chief; U.S. Supreme Court; USA PATRIOT Act; Vietnam War; War Powers Act

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CONSTITUTIONAL RIGHTS, PERSONNEL

Constitutional rights stand secure for military personnel, and for the most part, they have “equal protection and due process” under the laws of the United States. For example, the well-known Miranda warning, given by law enforcement to persons being taken into police custody under civilian criminal procedure, which concerns the right to remain silent and the right to counsel, has direct application in military law. Military personnel have protections under Article 31(b) of the Uniform Code of Military Justice (UCMJ) and also under *United States v. Tempia* (1967), which provides the military version of the Miranda rights. The *Tempia* additional warnings extended by Rule 305 of the Military Rules of Evidence allow the right to a military or civilian attorney, or both.

However, military discipline and the UCMJ may affect other legal and constitutional protections. The most obvious UCMJ concern remains the First Amendment’s constitutional right of free speech, and related political ramifications. The Fourth Amendment and the protection against unreasonable searches and seizures is another constitutional concern. This entry describes the rights afforded by the U.S. Constitution to military personnel.

First Amendment Rights

The constitutional conflict between the First Amendment and military status provides one glaring example of the dichotomy between military and civilian legal standards. The balancing act between free speech and Article 88 of the UCMJ can place military personnel in direct conflict with the law. An officer can be held for violation of Article 88, which makes it a violation of military law for a commissioned officer to use contemptuous words against the president, vice president, Congress, and other government officials.

For example, a lieutenant participated in an antiwar demonstration carrying a sign critical of President Lyndon B. Johnson. He was off duty and wearing civilian clothes. Charges under Article 88

followed his participation in the demonstration. The lieutenant's actions were in direct conflict with his role as military officer, demonstrating disloyalty and insubordination to the commander in chief.

This same restraint of free speech would violate the First Amendment's protections if the lieutenant did not hold a commissioned officer status. The appointment under the power of the president of the United States alters a commissioned officer's otherwise civilian right of political free speech. The lieutenant appealed his conviction without success. Challenges to Article 88 of the UCMJ have not succeeded on appeal in the past, nor will they likely prevail in the future.

Religious Freedom and Constitutional Rights

The U.S. chaplaincy is under attack from those who would challenge and dispute its legitimacy under the U.S. Constitution. A scholarly discourse emerged that gave rise to an appellate court case, *Katcoff v. Marsh* (1985). This court upheld the Military Chaplain System as an acceptable support structure for service members. It upheld the First Amendment right of members of the military community to exercise their religious freedom. On the other hand, opponents argue that the chaplaincy violates the government's legal mandate to maintain neutrality in religious matters and the separation of state.

Goldman v. Weinberger (1986) represents a more restrictive ruling. Goldman, an Orthodox Jew and ordained rabbi, served at a base mental health clinic as a U.S. Air Force clinical psychologist. Military regulations prohibited the wearing of a yarmulke or any other headgear inside the building. The only exception to this regulation is for armed security police in the performance of their duties. Goldman was allowed to wear his yarmulke under his hat when in otherwise acceptable locations. However, Goldman was warned that he would face disciplinary action if was caught wearing his yarmulke inside restricted areas.

The Supreme Court upheld the military provision with a 5–4 vote. The Court asserted that deference should be given to the professional judgment of military authorities. These officials are not constitutionally required to abandon their professional judgment. The military is a “specialized society separate from civilian society” and “to accomplish its mission the military must foster instinctive obedience,

unity, commitment, and esprit de corps.” Rather than give priority to their own beliefs, individuals in the military are to subordinate their own desires to the needs of the service. One of the ways the military creates this cohesiveness is by requiring servicemen to maintain uniform visibility. The First Amendment does not require the military to accommodate all religious views, nor does it preclude the uniform regulation.

Fourth Amendment Rights

Another example involves the rights of military personnel to privacy. Military personnel have less expectation of privacy and protection concerning Fourth Amendment rights involving search and seizure. Soldiers living in military barracks have fewer rights and are subject to the unit commander's authority to conduct searches. Soldiers relinquish those rights when they move into the barracks.

The unit commander “owns the barracks” because of government authority and representation. Commander searches must include all soldiers who live in the barracks. The commander must have a dual authority over the person(s) and the location to search and seize contraband or evidence. Searches that target a particular service member require a probable cause. Items seized without the proper authority are invalid and would not be admissible in a trial by court-martial if objected to by defense counsel.

Commander inspections, often referred to as health and welfare inspections, can require military personnel living in barracks to open their wall lockers and footlockers. The commander can delve into personal property lawfully to search and seize contraband or evidence of crimes committed in violation of the UCMJ. Search warrants are not necessary because of the commander's authority to protect military personnel and property.

Once a military member enters a command area, private properties are subject to lawful search and seizure. For example, such government property may include ships, airplanes, and vehicles. A soldier may be transporting drugs or contraband in a suitcase, vehicle, or motorcycle. This soldier is subject to search and seizure because of location, military status, and the probable cause quantum of proof. Only the commander of the military unit has the authority to perform such a search; the delegation of that command power to a junior officer is illegal.

Legal Foundations

The U.S. Congress has established its authority over the military justice system through the power of the “Equal Protection” and “Due Process” clauses of the U.S. Constitution. While not specifically mentioned, this authority flows logically from two constitutional mandates.

Article I, Section 8 states the congressional authority and power “to define penalties for piracy and felonies on the high seas, and for violations of the law of nations, power to declare war, power to raise armies and navies.” Moreover, Article I, Section 8 authorizes Congress with the power to make rules for the government and for regulation of the land and naval forces. Article II, Section 2 describes the president’s authority over the military; the president is the commander in chief.

Legal Appeals

In *United States v. Stuckey* (1981), the Court of Military Appeals, renamed the U.S. Court of Appeals for the Armed Forces, held that the “Bill of Rights applies with full force to the men and women in the military service.” While Congress has the authority to regulate the military forces, the Supreme Court requires that Congress must act in accordance with the U.S. Constitution when it enacts legislation that concerns the armed forces.

The U.S. Court of Appeals has five civilian judges appointed by the president with the advice and consent of the U.S. Senate. The court has worldwide appellate jurisdiction over military personnel on active duty. In addition, it has authority over those individuals who come under the authority of the UCMJ. The court’s appellate legal decisions come under direct appellate review by the U.S. Supreme Court.

The U.S. Court of Appeals for the Armed Forces has a difficult balancing act concerning military readiness of the armed forces and the rights of military personnel under Article I of the Constitution. The court’s role concerns the broad interpretation of federal statutes, executive orders, and departmental regulations. Most important, the court determines the application of constitutional law to service members. These are cherished constitutional and legal rights, not technicalities. They protect the members of the armed forces against arbitrary and capricious acts of the military and government.

Conclusion

Members of the armed forces benefit from many of the same constitutional rights civilian citizens have, with some exceptions for good order and military discipline. Military personnel have the protections afforded by the U.S. Constitution set forth by the founding fathers and stated in the Bill of Rights. Some conflicts concerning the Constitution and military law may affect military personnel; however, consistent with the UCMJ, the judges of the U.S. Court of Appeals for the Armed Forces serve as first-line guardians of the constitutional rights of military personnel. The Supreme Court and the U.S. Constitution serve as the ultimate protectors of those who serve and protect this great nation.

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See also Court-Martial; Uniform Code of Military Justice

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CONTRACTORS, PRIVATE

Scholars and the general public alike associate private contractors with the word *mercenary*, a term that conjures up images of African coups in the 1960s or, to take a longer view, the condottieri that wreaked havoc in Renaissance Italy. While soldiers

of this type certainly existed in many past incarnations, “mercenary” does not do adequate justice to the complex role private contractors played in the history of warfare.

Private contractors have plied their trades as highly organized entities for centuries. The joint stock companies that explored and conquered the New World were not always motley collections of soldiers for hire but impressive conglomerations of military and logistical expertise. Young nation-states lacking the means to defend their sovereignty frequently relied on this expertise by granting contractors the status of legal proxies. Perhaps the best known example is in Article I of the U.S. Constitution, which gave Congress the power to issue “Letters of Marque and Reprisal” in order to hire private contractors, or “privateers,” as they were known at sea.

The advent of the Industrial Revolution proved to be a key turning point in the relationship between the modern state and military contractors. It combined the compelling need for national security with the scientific and productive capacity of capitalism, a relationship Dwight D. Eisenhower later described as the “military-industrial complex.” Today, the private military corporation (PMC) is as much a part of modern warfare as the conventional military. In reality, as proven in Iraq and Afghanistan, the latter cannot function without the private sector’s active participation. This relationship has created new opportunities, but also significant problems in international law and human rights, for modern nations interested in acquiring their services. This entry discusses the development of PMCs, their relationship with the Department of Defense, the role of private military contractors in operations in Iraq and Afghanistan, and the advantages and controversies of outsourcing.

The Rise of the Modern Military Corporation

The contemporary relationship between PMCs and the state can be traced back to the Industrial Revolution and the growing complexity of modern warfare. As weapons systems and logistical support evolved and became increasingly elaborate, nations became more reliant on the private sector. When the United States created a “blue water” (high seas capable) navy in the 1880s, it did so through a well-funded partnership with the steel industry.

Subsequent mobilization efforts in both world wars reinforced the relationship between national governments and corporations. The very scope and scale of 20th-century conflict, incorporating millions of citizens in campaigns that spanned the globe, mandated cooperation between the private and public sectors. Qualitative factors played perhaps an even more important role in forging this alliance. Technological breakthroughs such as radar, synthetic materials, and atomic weapons proved to be decisive advancements and were fostered by heavily subsidized partnerships between the military and its civilian counterparts.

After 1945, the American and Soviet national security establishment invested enormous sums in their respective defense industries. Whole new fields in telecommunications, transportation, and computers, among others, appeared and were developed at the behest of the bipolar struggle for power. The seeming permanence of national security demands hardened the symbiosis between governments and defense corporations.

Ironically, the end of the Cold War extended this relationship even further. P. W. Singer estimates that a vast reservoir of military expertise—as many as 7 million personnel—was demobilized in the decade following the destruction of the Berlin Wall. Many of these individuals found work in companies that provided intelligence collection and analysis, physical security, or military training. In terms of quality, PMCs ran the gamut from loosely run organizations little removed from organized crime to full-scale corporate structures overtly promoted by their host governments.

In the United States, cooperation between PMCs and the defense establishment grew significantly during the Reagan administration. During Reagan’s first term, it was the result of massive defense spending. After 1987, the Defense Department’s relationship with the private sector drew even closer, prompted by budget cuts and a new federal penchant for privatizing government functions for the sake of fiscal responsibility. When the Clinton administration arrived, it championed the same concept. In the 1990s, Vice President Al Gore trumpeted “reinventing government” as a means toward a more streamlined and efficient federal system.

This policy eventually extended to the Pentagon, where officials argued that outsourcing military logistics translated into a more effective “core competency” of waging war. In 2000, various

sources estimated that for every dollar the Defense Department spent, approximately 30% went to “tooth” (or combat capabilities) while 70% went to “tail” (or logistics). The conventional wisdom saw as unnecessary the requirements of maintaining outdated bases or antiquated housing, medical care, and food service.

Consequently, the period saw a rapid increase in the number of corporate personnel employed by the U.S. military. During the Persian Gulf War in 1991, 1 out of every 50 personnel deployed was a private contractor. By the time the U.S. forces were deployed to Bosnia-Herzegovina in the late 1990s, the ratio was 1 in 10. In the new decade, expenditures on military contractors accelerated significantly. Between 1994 and 2002, the historian Deborah Avant estimates, the Defense Department signed some 3,000 contracts worth an estimated \$300 billion.

But what value did private military contractors offer besides additional economy? One key feature was operational flexibility. PMCs were, according to one author, “more innovative, more flexible, and more pragmatic” than conventional military organizations. In practice, individual military corporations did not have to concern themselves with the Pentagon’s labyrinthine command structure or the cumbersome reporting process mandated by civilian lawmakers. This translated into the ability to deploy to global hotspots rapidly if and when a U.S. presence was necessary.

Military contractors also offered U.S. policymakers an attractive exception to federal laws limiting military deployments. The War Powers Act (1973) makes no mention of this type of military force, leaving a useful loophole in existing policy. Contractors recently have allowed the White House to sidestep more specific proscriptions on U.S. assistance abroad. In the late 1990s, when Congress imposed a 400-man limit on American military advisors serving in Colombia, it was initially undone by hiring private corporations to train local military and police units.

Private Contractors and the Global War on Terrorism

Operation Enduring Freedom and Operation Iraqi Freedom both saw a quantum leap in private security firms contracted to provide “boots on the ground.” One of the consequences of General Tommy Franks’s “running start” plan for the invasion of Iraq was the absolute shortage of person-

nel for security duties once major combat operations were over. These involved protecting basic infrastructure—power plants, oil pipelines, and electric power lines—as well as “force protection” of coalition military units and civilians stationed in forward-operating bases and larger facilities. PMCs quickly became responsible for checkpoints, base perimeter security, patrols, and a host of other missions. By some early estimates, civilian contractors became responsible for between 20% and 30% of essential military services in Iraq after 2003. These numbers increased as the war grew in intensity.

Problems came with this perceived utility, however. Operations in Afghanistan and Iraq have highlighted the fact that private contractors are poorly integrated into war planning. Even when their missions overlap, most companies do not coordinate their activities in any comprehensive fashion. The American military assigns contract officers to monitor compliance with individual agreements, but the system breaks down with respect to the hundreds, if not thousands, of separate tasks performed by private firms operating in a war zone. Actual cooperation is left to local initiative.

More important, the United States initially failed to provide clear “rules of engagement” or a consistent policy governing PMCs. In the past decade or more, the absence of a coherent system has produced problems ranging from poor coordination (mentioned above) to instances of blatant illegal activity.

Since the coalition forces invaded Iraq in 2003, the country has become a magnet for private military companies and subsequent controversy. When the scandal involving the abuse of prisoners in Abu Ghraib became public a year after the invasion, contractors working for the Titan Corporation and CACI were quickly implicated for their direct involvement. In May 2005, contractors employed by Zapata Engineering allegedly opened fire on U.S. Marine positions in Fallujah, an act that resulted in their brief arrest and expulsion from the country. Blackwater, a firm that provided bodyguards for both key military and civilian officials, was the cause for numerous complaints and investigations until its final expulsion from Iraq in 2009.

Private Contractors in the Future

Individual countries and the world community have struggled with regulating private contractors.

Unfortunately, the modernized definition of a “mercenary” has produced little legal clarity. In 1989, the United Nations produced the “Convention Against the Recruitment, Use, Financing and Training of Mercenaries” but failed to ratify the measure. In the meantime, many UN documents retain the traditional definition of private contractors as individuals who fight for profit.

U.S. policy proved equally ineffective. For much of Operation Iraqi Freedom, the Coalition Provisional Authority stipulated that contractors fell under American and not Iraqi law. However, there was little agreement regarding legal jurisdiction. The State Department Office of Defense Trade Controls was tasked with monitoring U.S. firms for compliance with law concerning the training of foreign militaries or providing military services. According to the 2000 Military Extraterritorial Jurisdiction Act, the secretary of Defense was responsible for prosecuting violations of law. American policymakers reconciled some of this confusion when Senator Lindsay Graham (R-SC) offered an amendment to a 2007 defense spending bill that placed all civilian and military contractors working for the federal government under the jurisdiction of the Uniform Code of Military Justice. More recently, the United States officially surrendered control of contractors working in Iraq as part of the December 2008 Status of Forces Agreement with Iraq. Under its provisions, contractors providing special protective services for American officials, such as Blackwater, lost the limited immunity previously granted by the U.S. government in exchange for their services.

In early 2013, PMCs were in the process of what one scholar calls “re-regulation.” Some of this activity is voluntary and reflective of a sense within the security industry that self-regulation is useful for the sake of market credibility as well as a useful device to preempt external sanctions. Christopher Spearin in 2001 described the trend as “self-taming of the dog of war for the sake of reputation and repeat clients” (p. 30).

Conclusions

PMCs have repeatedly demonstrated their utility throughout history. They have served as proxies and providers of critical expertise for monarchies and democratic republics alike. This value makes the military contractor a persistent feature of contemporary

war. For much of the current generation of conflict, the premium has shifted from overly expensive weapons systems to armed intervention augmented by intellectual capital, some of which is available for purchase.

While this system is useful, it has limits. A major problem within the private security industry is a function of time. Age has begun to diminish the available pool of current and potential contractors. Men in their prime at the end of the Cold War are now in their 40s and 50s. Simple tasks that were once routine are now subject to the unpredictable physical infirmity that is a reality of middle age. A new stream of combat veterans is replenishing the vast reservoir of talent, but it will never return to its past glory.

A second limiting factor is the law. PMCs today face mushrooming constraints on the use of force. A successively increasing array of national and international laws have caught up with the private security industry in the past decade. Contractors no longer enjoy the discretion that the early stages of the Afghanistan and Iraq Wars created and tolerated. Thus, while the potential for profit remains formidable, the overall scrutiny PMCs now must endure is equally significant and a necessary price for doing the business of war.

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See also Abu Ghraib; Blackwater; Iraq War (2003); Laws of War

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COUNTERINSURGENCY

Counterinsurgency is a form of warfare in which a national government, with or without outside assistance, seeks to defeat an armed internal challenge to its legitimacy using a mix of military, paramilitary, political, economic, psychological, and civic means. The objective in counterinsurgency is the civilian population, which the government must reassert control over to defeat the insurgency. This entry examines counterinsurgency as (a) the analytic category best able to explain the most common form of warfare in the early 21st century and (b) the current operational doctrine for U.S. military personnel opposing contemporary insurgent movements. It emphasizes developments that culminated in the December 2006 release of Field Manual 3-24, *Counterinsurgency*, which guided the conduct of the 2007–2008 troop “surge” in Iraq. The shift to an integrated counterinsurgency plan, executed by an enthusiastic practitioner, General David Petraeus, neutralized two simultaneous and distinct Sunni and Shia insurgencies, suppressed sectarian ethnic cleansing, and provided the Government of Iraq an opportunity to pursue a political resolution of the conflict.

Definitions

Counterinsurgency is fundamentally different from conventional maneuver warfare. In maneuver warfare, the militaries of sovereign nation-states exploit high-technology weapons systems (tanks, self-propelled artillery, and attack helicopters) to achieve strategic war aims through decisive battle-field victories. The quintessential maneuver war was World War II, and the quintessential maneuver battle took place near the Russian city of Kursk in July–August 1943, in which a combined total of slightly more than 1 million German and Soviet soldiers and airmen became casualties. The terrain on

which maneuver warfare unfolds is precisely the surface of the earth on which the armies collide. The intensity of maneuver warfare and the violence it visits on military personnel and civilian populations are limited by international agreements rooted in the just war doctrines of late Medieval Europe. In counterinsurgency, a sovereign state, which may or may not be assisted by another power or powers, confronts a threat within its territory mounted by elements of its own population, perhaps sponsored by another hostile nation or nations (in that case, a “proxy” conflict). Insurgents can be motivated by numerous factors, including one or more of the following: ethnic nationalism, ideology, religion, or culturally unacceptable levels of income centralization and corruption. It is possible that the process of globalization has become sufficiently disruptive of traditional cultures as to regularly produce insurgent movements motivated by a combination of nostalgia for a traditional past and a demand for social justice beyond that available through classical liberalism and capitalist market relations. Both insurgents and counterinsurgents employ a range of military, paramilitary, political, economic, civic, psychological, and cultural means to achieve their aims. The terrain of both insurgency and counterinsurgency is the human population the insurgents seek to dominate and the counterinsurgents seek to secure from insurgent subversion and control. The concepts of insurgency and counterinsurgency have largely replaced the older, less precise categories of “guerrilla warfare” and “unconventional warfare,” which are no longer used in doctrinal publications. In many struggles, the violence generated by insurgents can appear to outsiders to be totally indiscriminate, while counterinsurgent forces historically chafe against the limits on counterviolence inherited from maneuver warfare. However, success in counterinsurgency usually accrues to the more patient opponent best able to practice an economy of violence during a protracted struggle.

Basic Principles of Counterinsurgency

The following principles of counterinsurgency have been derived primarily from the lessons learned by the British in Malaya, the French in Algeria, and the United States in South Vietnam. They appear in a slightly different form and order in FM 3-24. In the context of both Iraq and Afghanistan, the phrase

“the government” includes both the governing institutions of the host nation against whom the insurgency is targeted and the Western counterinsurgent forces occupying the targeted nation and supporting the client regime to achieve the larger strategic objectives of the United States and the North Atlantic Treaty Organization alliance.

1. Counterinsurgencies must be *protracted efforts*; populations being protected from insurgent coercion must be confident of the government’s long-term commitment to their physical defense and their future social and economic well-being.
2. Defense or reestablishment of *governmental legitimacy* is the primary task in counterinsurgency; all elements of national power must be directed toward that objective.
3. No insurgency can be defeated without a political solution to the popular grievances from which it draws its strength; *political factors are paramount*; military tasks are secondary.
4. Insurgents must be isolated from the larger population and their cause delegitimized; this means that the government must establish population security under the *rule of law*.
5. Unity of effort is essential among all military-civil organizations and all echelons of military command—everyone, from the theater commander to the soldier searching a house, must “get it.”
6. Counterinsurgents must understand all aspects of the human and cultural environment in which they will operate.
7. Military counterinsurgency missions must only be executed on the basis of timely, specific, and reliable intelligence.

In addition to the above basic principles, FM 3-24 identifies a number of “imperatives” or touchstones to guide the individual behavior and decision making of counterinsurgent soldiers. Soldiers must manage the flow of information and control expectations for short-term success, always use the minimum level of force, learn from experience and adapt operations to changing circumstances, reward initiative by decentralizing decision-making authority to the lowest possible command echelon in contact with insurgents and the local population, and take

every opportunity to strengthen the military and civil institutions and personnel of the host nation.

Conspicuously missing from the above principles and imperatives is any emphasis on the central concept of maneuver warfare: the “decision.” Decisive victories that “reset” the struggle’s political calculus are uncommon in counterinsurgency. Very long insurgencies are the rule, and the party that can best exploit protraction generally achieves success through the exhaustion of its opponent. Either the insurgency collapses from a gradual loss of popular support and a stubborn refusal of the government to overreact (e.g., the Philippine Hukbalahap Rebellion) or the government decides that, notwithstanding the operational and tactical success it has achieved, the insurgency has placed it in a strategic position where liquidation of the struggle on the insurgency’s terms is less costly than its indefinite continuation (e.g., French Indo-China, Algeria, Vietnam).

Insurgency Versus Terrorism

No firm theoretical distinction is possible between insurgency and terrorism. Insurgents frequently target noncombatants and civil employees of the government, and counterinsurgents frequently overrespond with acts of counterterror, which violate internationally sanctioned laws of state-directed armed conflict and only serve to legitimize the insurgency. However, terrorists and insurgents, while equally ruthless, have different primary objectives: The terrorist’s goal is committing future terrorist acts with regional or global political impact, while the insurgent is a member of an organization (however decentralized) seeking to destroy an existing government’s control over all or a portion of that nation’s sovereign territory. Terrorist organizations can be so decentralized as to be virtually franchise operations without central direction, whereas insurgent groups are usually hierarchically organized in a cellular structure. To survive, both terrorists and insurgents must become highly observant of their opponents, adaptive, and quick to exploit short-window vulnerabilities left open by the government under attack. Terrorists and insurgents may cooperate when their immediate goals are congruent, as did al Qaeda and the disaffected Sunni sheiks in Iraq’s Anbar Governorate during 2004–2006, or they may be split apart through adept political initiatives, as occurred during the “Anbar Awakening” movement of 2007–2008.

Historical Applicability of the Concept of Counterinsurgency

Although the term was not in general use before the mid-1960s, *counterinsurgency* is a category of considerable historical and geographical elasticity. Thus, it has been applied to colonial efforts to suppress ethnic or national liberation movements at the turn of the 19th–20th centuries (Cuba, South Africa, and the Philippines); the Nicaraguan Intervention of 1925–1932; German and Japanese efforts to suppress partisan movements in France, Italy, Greece, Yugoslavia, Russia, the Philippines, and Burma during World War II; post-1945 decolonization struggles (French, British, Dutch, and Portuguese); various Latin American civil wars (Venezuela, Guatemala, Columbia, and El Salvador); and armed postindependence separatist movements in developing nations (Philippine Hukbalahap Rebellion, Oman, Sri Lanka, and Western Morocco). It also informs academic examinations of the unsuccessful French and American efforts against the Vietnamese “people’s war” before 1975. After 2001, analysts mined a broad range of struggles, including those in Greece (1944–1949), Algeria (1946–1962), Malaya (1948–1960), and Chechnya (1994–1996, 1999–2009), to distill “lessons learned” and “best practices” for U.S. and North Atlantic Treaty Organization application in Iraq, Afghanistan, and elsewhere. These studies resulted in the distillation of the two main senses in which the term *counterinsurgency* is now used by soldiers, academics, security intellectuals, and journalists: (1) to describe historical efforts, both successful and unsuccessful, to defeat insurgencies of various strengths in various geographical regions and (2) as doctrinal guidance for the execution of military-civil efforts to defeat contemporary insurgencies.

U.S. Doctrinal Development, 1975–2006

Efforts to revise counterinsurgency doctrine in the U.S. military began with a number of reports of the Vietnam War written by serving or retired military officers during the 1980s, typified by Andrew F. Krepinevich’s *The Army and Vietnam* (1986). Krepinevich argued that the United States failed in its central aim to defend an independent, noncommunist South Vietnam because it failed to understand the nature of the North Vietnamese “people’s war,” a sophisticated variant of Maoist Revolutionary

Warfare, in which communist military forces progressively increased their technological sophistication as the United States disengaged. This failure of analysis and adaptability prevented the United States from adopting an overall strategy balancing population security and regional development with reforms to the Republic of Vietnam’s government and military, while imposing rigorous controls on indirect fire and tactical air power during military operations to avoid alienating the civilian population.

After Vietnam, the U.S. Army’s senior leaders directed their energies toward reestablishing a traditional “warrior ethos” within the post-1973 all-volunteer force and developing a new “AirLand Battle” maneuver warfare doctrine to enable U.S. and North Atlantic Treaty Organization forces to defeat a Soviet invasion of Western Europe short of the Rhine River without resorting to the use of theater nuclear weapons. Counterinsurgency, while understood as a category of warfare expected to continue in the less developed world, seemed a thing of the past for an American military shielded by a broad domestic political consensus supporting the “Weinberger Doctrine,” which raised barriers to U.S. military participation in wars not defending a “critical national interest.” The counterinsurgency and insurgency struggles the United States opposed or sponsored between 1975 and 2000 (Soviet-Afghan War, 1979–1988; Salvadoran Civil War, 1979–1991; Nicaraguan “Contra War,” 1980–1990) were undertaken by paramilitary elements of the Central Intelligence Agency and the military’s Special Operations community; the success of the AirLand Battle doctrine during the Gulf War of 1990–1991 justified the defense establishment’s focus on maneuver warfare. Neither the failed humanitarian intervention in Somalia (1993–1994) nor the successful stability operations in Bosnia and Kosovo (1996 to date) became protracted counterinsurgencies.

As the 21st century dawned, the incoming secretary of defense, Donald Rumsfeld, could announce his intention to “transform” the nation’s ground combat forces via exploitation of emerging forms of “information warfare” and “smart weapons” to allow quick-in, quick-out interventions as occurred in Afghanistan in 2001–2002. The invasion of Iraq in 2003 seemed to be a replay of 1991, with a quick collapse of Iraq’s conventional maneuver forces. The neoconservatives directing U.S. foreign policy in the Bush administration had earlier dismissed

the possibility of significant Iraqi resistance to what was assumed to be a brief occupation. Because U.S. forces were to be redeployed out of Iraq quickly, after a rapid handover of sovereignty to returned expatriates, the United States would have no need for counterinsurgency expertise.

Two separate insurgencies, however, developed in Iraq during 2003–2005. The first was a Sunni–al Qaeda alliance, focused on killing coalition soldiers and civilian reconstruction workers via improvised explosive devices, controlling the “Sunni Triangle” immediately north and west of Baghdad, and destabilizing the U.S. occupation through sectarian assassinations and attacks on Shia religious sites. The second was an armed Shia movement, whose aims were to control Shia majority districts inside Baghdad and Basra, infiltrate Iraqi government security forces, counterattack against Sunni violence through ethnic cleansing of mixed neighborhoods, and, in the long run, transform Iraq into an Islamic republic. These conditions quickly exposed the U.S. Army’s institutional inability to combat insurgencies. Battalion and brigade commanders, trained in the era of AirLand Battle, naturally gravitated toward kinetic or insurgent-centric actions (cordon operations, raids, and airstrikes), which failed to defeat Sunni resistance, contain Shia-Sunni sectarian violence, or build the military or civil capacities of the Shia-dominated Government of Iraq.

In mid-2006, as events in Iraq seemed to be spiraling entirely out of control, General David Petraeus, commander of the army’s Combined Arms Center at Fort Leavenworth, who had largely pacified the northern Iraqi city of Mosul in 2004 as commander of the 101st Airborne Division, assembled a cadre of junior field grade officers with advanced academic degrees and previous Iraq deployments to create a doctrine for counterinsurgency operations and illuminate the way forward in Iraq. Petraeus’s soldier-scholars resurrected the classic texts of the French counterinsurgency effort in Algeria: David Galula’s *Counterinsurgency Warfare: Theory and Practice* (1964) and Roger Trinquier’s *Modern Warfare* (also 1964). Both were reprinted in 2006, and Galula’s text in particular was issued to officers preparing to deploy to Iraq (Trinquier’s was not widely distributed because of his explicit defense of the use of torture to roll up insurgent cells—an unpalatable tactic after the 2004 Abu Ghraib scandal). Galula’s and Trinquier’s emphasis on intelligence and the primacy

of political over military factors in counterinsurgency infused the revision of the army’s official counterinsurgency doctrine, aided by lessons learned from British initiatives during the Malayan Emergency, as summarized in Sir Robert Thompson’s *Defeating Communist Insurgency* (1966) and reemphasized more recently in Lieutenant Colonel John Nagl’s *Learning to Eat Soup With a Knife* (2002).

On December 15, 2006, shortly before President Bush’s “surge speech” of January 10, 2007, the Department of the Army and Marine Corps Combat Development Command published FM 3-24/Marine Corps Warfighting Publication 3-33.5, *Counterinsurgency*. Subsequently, General Petraeus was selected to command Multinational Force–Iraq as the executor of the surge strategy. He was thus in the enviable position of having personally overseen the creation of the operational doctrine and tactical synthesis he would employ to “turn the corner” in Iraq by late spring of 2008. Subsequently, David Kilcullen, an Australian counterinsurgency advisor to General Petraeus, explored the applicability of the Iraqi surge to the ongoing campaign in Afghanistan in *The Accidental Guerrilla* (2009).

Conclusion

Recently, several theorists have advanced new conceptual frameworks subordinating counterinsurgency to what they argue are permanent shifts in the essential nature of warfare. Among these are General Sir Rupert Smith’s “wars among the people” and Colonel Thomas X. Hammes’s “fourth generation warfare.” Smith voices profound doubts as to whether military force can possess *any* utility in an accelerating age of wars not among Westphalian nation-states but among “peoples,” wars that will metastasize irrespective of national borders and national counterinsurgency efforts. Hammes argues for an emerging paradigm of warfare based on “networks,” not “forces,” in which a nation’s most vulnerable point will always be the political will of its decision-making elite. In addition, the term *asymmetric warfare*, which originated in a 1975 article by Andrew J. R. Mack, has recently been rediscovered and expanded to address the question “Why do big nations lose small wars?” Most of these lost wars were counterinsurgencies, and the big nation in question is the United States. While the best of these works offer useful explorations that may prove to

have identified permanent historical developments, none of them can match FM 3-24 as a concrete guide to action. Nor do they advance “metrics” generally valid for the measurement of progress in counterinsurgency that can be cross-culturally adapted to specific environments.

While FM 3-24 documents a renaissance in the understanding and execution of counterinsurgency efforts at the operational and tactical levels, it cannot provide strategic direction to the military; that is the sole prerogative of the executive branch of the U.S. government. Nor can the military change the domestic political calculus within the United States, which imposes grave limitations on the ability of the nation to mobilize itself for both current and future counterinsurgency efforts. The Foreign Service, historically the proponent of American “soft power” (diplomacy, aid programs, and cultural exchanges, rather than armed force), has lost most of its “in-country” capabilities, forcing soldiers to carry an unexpected burden of reconstruction in Iraq and Afghanistan. The national security and intelligence bureaucracies continue to “stovepipe” their data and their analyses in the search for more access to the president and resources from Congress. The critical analytic distinction between the capabilities and intentions of hostile nations has largely been eliminated, with the result that Americans are increasingly unable to distinguish between foreign policy problems and existential threats. In addition, the triumph of acquisitive individualism in the United States since the 1970s has eroded the cohesion essential for a protracted global struggle: Presidents can wage war only so long as personal and corporate taxes remain low. The national will thus remains fragile, and the American public continues to reject significant sacrifices, financial or otherwise, placing severe limits on the human and material resources that can be devoted to any given counterinsurgency effort. In short, we have yet to learn whether the United States can exploit protraction as well as its opponents. And while baseline tactics, techniques, and procedures for successful counterinsurgency efforts are now in place, Americans have yet to forge a consensus on a new set of tests to replace the now obsolete Weinberger Doctrine, which would allow them to judge when an insurgency in the developing world threatens the critical interests of the United States.

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See also Asymmetric Warfare; Global War on Terrorism; Guerrilla Warfare; Iraq Insurgency (2003–2011); Surge, Iraq War; Terrorism

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COUNTERINTELLIGENCE

Counterintelligence (CI) is one of the most crucial yet unknown military activities in the contemporary world. There are no set standards for CI activities; in fact, CI admits of multiple strategies and tactics. CI has become a very important issue, particularly in the post-9/11 era, to protect troops, information, operations, facilities, and U.S. interests. This entry discusses the history of CI in the United States, the types of military CI operations, and the skills required by military CI specialists.

Definition

CI is defined as any activity related to collecting, understanding, organizing, or responding to intelligence threats from other countries or criminal organizations, such as terrorist groups, to avoid

sensitive and classified information falling into enemies' hands. As such, CI has both defensive and offensive aspects. Specifically, CI activities focus on spies, sabotage, attacks, and military activities carried out by countries, terrorist groups, or enemy organizations against military, intelligence, or other security targets. In a general sense, CI's ultimate goal is to neutralize enemy intelligence actions and to protect national and military information and procedures from espionage. The military bears the primary responsibility for CI activities in its jurisdiction, including bases and foreign units, while the police and other civilian agencies act outside the military's jurisdiction. Since the early 20th century, executive power, civilian agencies, and the military have based their decisions related to security issues on CI data, to cancel or counteract enemy actions during both peace and war.

History

In the 20th century, CI became a central activity of U.S. military and intelligence agencies due to the great interest foreign countries and illegal organizations had in accessing crucial security information, including data about security architecture in military zones, weapons technologies, the organization of military units, and so on. To avoid information escaping due to the work of spies and double agents, between the two World Wars selected military personnel were trained to detect infiltration activities in the United States and overseas. During the Second World War, CI functions were divided between the Federal Bureau of Investigation, which acted in the United States and in the Western Hemisphere, and the U.S. Army and Navy special corps, which held responsibility in their own jurisdictions, including bases and foreign territories such as the Panama Canal Zone and Guam. This situation implied a lack of coordination between diverse CI corps, a fact that directly affected CI effectiveness.

After the end of World War II, and responding to this debate, all intelligence and CI services were subordinated to the Central Intelligence Agency. In this way, the military was restricted to act only within the boundaries of its bases and during military operations. This situation frustrated the military during the Cold War, because military jurisdiction was subordinated to other agencies. Despite this fact, during the Cold War, the military did act at home to search

for dangerous foreign activities, a situation that interfered with civilian intelligence and CI agencies.

In the post-Cold War era, and particularly during the recent Global War on Terrorism, the military has gained significant autonomy to carry out CI measures to protect military bases and to detect terrorist groups' activities in the United States and military areas including Iraq and Afghanistan. This situation emerged after the passage of the USA PATRIOT Act (2001), which granted wide license to the military to capture suspected terrorists and to perform CI activities outside the United States.

Agencies in Charge of Military CI

The Department of Defense holds responsibility for coordinating intelligence and CI activities in all military branches, including activities in the Global War on Terrorism. Within the Department of Defense, a specialized CI office coordinates CI activities between military branches; this office, however, has no common standard or doctrine for CI activities applicable to all services. Fundamentally, this office is primarily responsible for budget coordination, in spite of the efforts of groups like the Office of the National Counterintelligence Executive (2001) and U.S. National Counterintelligence Strategy (2005) to establish basic norms across different agencies and corps. Currently, military branches design their own programs and initiatives to carry out CI missions. Army CI activities belong to its Criminal Investigation Division; the navy (which includes the Marine Corps) has the Naval Investigation Service, which combines law enforcement functions with CI; the U.S. Air Force has the Office of Special Investigations, with responsibility over CI activities in its jurisdiction. Military branches deploy operational CI services in garrisons and overseas according to the threats affecting their institutions and operations. Some experts argue that this lack of coordination has become problematic and limits the overall effectiveness of U.S. CI operations.

Characteristics

CI represents a cornerstone of military activities, with the ultimate goal of providing commanders sufficient information to preserve secrecy and to protect their troops from enemy intelligence activities and deny the enemy data that could be used to

attack friendly forces. There are at least four basic priorities for military CI:

1. *Investigation*: to prove or disapprove signs of espionage or other activities related to attacks on friendly interests, the assassination of leaders or commanders, sabotage, or attacks against military or naval units—organized by foreign countries or criminal or terrorist organizations
2. *Operations*: conducted to neutralize, disrupt, manipulate, and eliminate the possibility of the enemy manipulating friendly troops or military intelligence services, including recruiting personnel and conducting espionage or counterespionage activities
3. *Collection*: all activities related to collecting data about threats for the military or civilian agencies
4. *Analysis and prediction*: assimilating, evaluating, and interpreting information about sensitive areas of CI and producing a well-structured report on different threats to troops and the country

Types of Military CI Operations

There are at least three basic kinds of military CI operations, which have much in common with the activities of other intelligence agencies. Military CI activities, however, have limited jurisdiction, and agents must receive governmental orders to act outside military bases. Penetration is the most basic type of CI operation, consisting of recruiting an intelligence source to provide information about foreign military forces. The second type of operation focuses on double-agent activities. The main characteristic of this operation is to infiltrate an agent who appears to serve the enemy but actually is controlled by the home military, with the ultimate goal of providing information about criminal or foreign threats. The third type of operation is the most glamorous: counterespionage. Differing from movie-based stereotypes, these activities necessitate a long process to detect spies within bases or troops. Usually, these operations involve multiple activities to discover and uncover enemy agents.

Intelligence and CI

Intelligence and CI services are quite similar in spite of conceptual differences and differing methods. Both activities use human intelligence, technological

approaches, and other methods to form the first line of defense for military institutions and the country. Their common goal is to provide a multidisciplinary approach to denying information to unauthorized persons or organizations. For these reasons, military intelligence and CI teams work together, sharing data and sources with the goal of preventing information from falling into the hands of the enemy. For instance, during surveillance activities, an intelligence service might detect a double agent; this information could be vital to CI experts to uncover efforts at sabotage or terrorist activities within military units. Likewise, CI specialists could find crucial data relating to intelligence concerns, such as plans to assassinate a leader.

Basic Skills for Military CI Specialists

Military personnel involved in CI missions and activities must possess particular skills to maximize their performance in the field, including war zones, military bases, and undercover missions in other areas. The Office of the National Counterintelligence Executive prepared the “Fundamental Elements of the Counterintelligence Discipline” (2006), which could be applied to any U.S. civil or military organization tasked with CI operations as follows:

1. Knowledge of the structure and procedures of national CI missions for both military and civil agencies
2. Wide knowledge of foreign intelligence organizations and terrorist groups’ culture and methods of action
3. Advanced knowledge about CI terminology, investigation, operations, and handling of sensitive information extracted from interviews and clandestine sources
4. A sixth sense to validate collected data
5. Surveillance and countersurveillance skills
6. Communication skills to collect information and to report it appropriately
7. An advanced disposition to work in interagency operations
8. Critical thinking, interpersonal skills, and a broad knowledge about languages and foreign costumes
9. Expertise to handle technology and the information extracted using it

10. The ability to work in a high-pressure environment at home and overseas

To summarize, a soldier tasked with CI operations must be a multifaceted individual who combines these skills and abilities with the maturity to assume a low profile and eschew public recognition in spite of the importance of his or her missions.

CI and the Global War on Terrorism

After the September 11, 2001, attacks on the United States, changes were made to U.S. security measures to provide the nation with the best protection possible from foreign threats. Specifically, the military made greater use of preventive intelligence services and focused more intensely on preventing the escape of data from military and civil intelligence services. These changes were codified in the Counterintelligence Enhancement Act of 2002, designed specifically to respond to the challenges posed by hostile states and terrorist and criminal organizations. As a result of this act, the Office of the National Counterintelligence Executive assumed functions to coordinate efforts in these matters, including the activities of each CI corps in the different military branches. In spite of this new level of coordination, however, each service maintains autonomy to carry out CI activities in the Global War on Terrorism, particularly in foreign activities and in operations in Afghanistan and Iraq.

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See also Central Intelligence Agency; Federal Bureau of Investigation; Intelligence, Human; Intelligence Organizations, Military

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COURAGE

The *Oxford English Dictionary*, third edition, defines *courage* as “the heart as the seat of feeling, thought, etc.; spirit, mind, disposition, nature.” While the definition of the word *courage* has changed throughout history, the soldier’s experience in battle often revolves around or relates to the particular intrinsic feeling described by this definition. However, as soldiers’ experience changed over the past few decades in American history, the concept of courage changed as well. Military tactics evolved to protect soldiers as much as possible, so that courage no longer has to be exemplified by the traditional depiction of a 19th-century soldier waving a regimental banner in front of his brigade as he is hit with enfilade fire. In addition, the opposite of courage, cowardice, is something that no soldier would admit to during the War of Independence or the Civil War, for fear of others calling his manhood into question. In modern military practices, however, recognition of fear and the subsequent onset of courage is a common discourse among soldiers who share the commonality of battle experience. Courage is a feeling that propagates an action that is deemed as brave. Thus, the courage displayed by soldiers can be applied to the discussion of modern military strategy, tactics, and experience. This entry discusses views on the concept of courage throughout history and describes medals and awards bestowed in the United States to recognize acts of courage.

The History of Courage

Throughout U.S. history, men and women who served in conflicts overseas and at home, whether in victory or defeat, displayed the utmost examples of courage through their acts of bravery and honor.

While one usually imagines courageous acts as that of a commander leading his troops over a trench or a private soldier rallying his unit around the flag, the majority of soldiers call on courage to withstand the fear of battle on a daily basis. How did soldiers have the courage to do such actions? First, one must look at the broader culture of society to understand how a particular generation views the concept of courage. Soldier motivation can be closely tied to why men and women risk their lives on the battlefield. Studies of the common soldier correlate the degree to which a soldier believes in a “cause,” also known as ideology, to how strong his dedication is to follow orders in spite of fear. Second, many soldiers fought to display their manliness or manhood, which was a significant virtue in 19th-century society. If soldiers went to war to define their manhood, the solidification of this attribute is through committing courageous acts, just as the opposite reaction would be to retreat or desert. Finally, the leadership understands that while courage is necessary, asking soldiers to serve as cannon fodder demoralizes them, and they have thus modernized the tactics to keep up with the technology. Because early tactics did not allow for soldiers to take cover or reload under the protection of defenses, soldiers were forced to shed fear and doubt by pursuing the enemy. Since modern technology outweighed the tactics, the officers made adaptations to decrease the number of casualties and protect their soldiers by digging trenches and building fortifications, which was once viewed as cowardly. Therefore, the concept of courage is modified throughout a war based on the soldier’s lived experience and ability to withstand the imminent fear of death.

Because of the many occasions and contexts in which courage is used, it is often difficult to determine one singular definition of the concept. However, because warfare and courageous acts span time and geographical space, several defining threads appear consistently. Embedded within the American military tradition are the classical views of courage from Ancient Greece and Rome. Tactics within early American armies coincided with the Greek method of warfare and subsequent expressions of valor. When on the offensive, Spartans characterized their method by steady, organized, and disciplined tactics. Early American military strategies, including the 19th-century Napoleonic-style tactics of the Civil War, required the infantry to march across open fields, often uphill, to be met with direct fire from

enemy rifles and artillery. These soldiers displayed courage by obeying their orders, remaining in their ranks, and avoiding the temptation to retreat. On the other hand, Athenians were known for their phalanx style of fighting, where individual charges led the offensive attack. This classical style allowed for soldiers to meet their opponent face to face and demonstrate their skill, strength, and courage. These intimate, individual tests of valor rooted in classical warfare became visible in Western military engagements, particularly in hand-to-hand combat. Native Americans, particularly the Plains Indians, embraced this phalanx style because they viewed courage as the virtue necessary to avoid the ultimate shame, failure. Therefore, by the end of the 19th century, American military strategists combined the traditional aspect of unit effectiveness with individualism reminiscent of the phalanx style. At the turn of the 20th century, young men grew up hearing stories of their grandfather’s experience as a soldier. Often, each generation wanted its war, as a chance to prove its courage just as its fathers and grandfathers did. The Spanish-American War and the two World Wars brought about a new characterization of what courage meant and how it was displayed. Several elements of courage remained the same, such as the intense surge in adrenaline when asked to face an enemy and the expectation that a soldier should never show fear. However, the tactics and technology in 20th-century warfare were adapted to prevent high casualty rates and to avoid asking the common soldier to overcome unthinkable odds. For example, in World War I, commanders ordered their soldiers to remain in trenches for protection, but then they were ordered to charge “over the top” and advance across an open field only to be mowed down with machine gun fire. Again, one imagines the courageous private running faster and farther, only to be met with death before reaching the enemy trench. This image supports the expectation that the only outcome for one who displays courage is death. However, these individual acts of courage help inspire others to perform similar acts, almost like a domino effect. Lord Moran, a medical officer in World War I, argues that wars are won by the courage and endurance of the few, which others—both soldiers and civilians—cling to for hope. Thus, the fear of death, pain, and defeat succumbs to an inner emotion that rises above the doubt and in turn evokes a common inertia.

While tactics changed during World War II through the establishment of mobile protection in the form of tanks, commanders still expected soldiers to withstand deadly assignments where they were openly fired on. In the Pacific theater, American soldiers experienced a different kind of enemy, particularly with Japanese kamikaze pilots. In Japan, the samurai legacy of victory at all cost resonated during the Meiji Restoration, in the Imperial Military and among the fighter pilots who flew one-way missions. The Japanese tradition of death before dishonor caused American soldiers to redefine their own conception of courage and make accommodations to withstand a seemingly resilient enemy. Japanese tactics made the battlefield more dangerous for Americans and took a higher toll on soldier morale and casualty rates. Uncommon courage was common in those who accepted the orders of their commander and carried out their duty. A historian of World War II argues that battles are won by individual efforts, collectively amassed. The war exposed soldiers to fatigue, disillusionment, death, and isolation; but despite all of these obstacles, it raised courageous acts.

With the fear of nuclear war and the rise of guerilla warfare in the second half of the 20th century, the military transformed its understanding of courage to meet modern expectations of the combat soldier. In the jungles of Vietnam, soldiers encountered a new condition of fear—that of the unknown enemy. American soldiers in Vietnam faced terrorism, guerrilla attacks, and saboteurs from the Viet Cong. These soldiers described courage as the constant necessity to survive daily routine and always be on the defensive. In addition, to withstand the unfavorable weather, terrain, and conditions, many soldiers had to summon the courage to sustain them through the harsh realities of warfare.

At the turn of the 21st century, American soldiers redefined courage as they faced an enemy enriched in Islamic religious and cultural radicalism. During the wars in Iraq and Afghanistan, soldiers were constantly under threat from improvised explosive devices (IEDs), explosives, extremism, and surprise attacks by civilian soldiers. While Westerners perceived courage as risking one's life in combat, some Islamic soldiers believed that the utmost exemplification of honor was to give up one's life in combat. The line between combat soldier and civilian as well as between the battlefield and the home front

has become blurred. Soldiers are faced not with the sense that the enemy could be coming but rather that the enemy is all around. In addition, soldiers need to summon the courage to not kill civilians indiscriminately and seek to identify friend from foe. Therefore, hunkering down behind a defensive fortification is no longer viewed as cowardice but as a method for withstanding nonconventional enemy attacks.

Regardless of the era, there are several core components inherent in the concept of courage. Some of these timeless notions are what soldiers who exhibit courage feel; others are how society and the military reward courageous acts. Beginning with courage as a feeling, soldiers who recall instances where they performed or witnessed courageous acts claim that it is something only a combat veteran could understand. Scholars of military history argue that when soldiers return to society, they have a hard time relating their experiences to loved ones and the general population, who were not exposed to such traumatic circumstances. In addition, soldiers who try to describe a battle and what drove them to display such valor and sacrifice often cannot translate their experience into understandable terms for the public. *Courage is not a brilliant dash or an instantaneous entity but something deep within a soldier.* Thus, courage is exemplified along with other inherent emotions, such as hope, morale, and disillusionment, to name a few, because it marks the moment when a soldier's consciousness overlooks dangerous consequences and lets the mind and body take over.

Measuring Courage

There are a number of medals and awards granted for those who exhibit the highest degree of courage. The highest honor for any U.S. soldier is the Congressional Medal of Honor. Congress created this award first for the navy in 1861 and then the army in 1862. During the Civil War, a total of 1,520 individuals received the Medal of Honor. In 1896, President William McKinley restricted the award of the medals to only those who exhibited gallantry and intrepidity above and beyond what was shown by one's fellow soldiers. Throughout the 20th century, the Medal of Honor honored members of the U.S. Army, Navy, Marines, Air Force, and Coast Guard in all conflicts through the present day. During World War II, Army Captain Maurice Britt, despite being

wounded, led his unit in a counterattack against a German force in Italy. This Medal of Honor recipient's undaunted courage and prowess in arms were largely responsible for repulsing a German counterattack that, if successful, would have isolated his battalion and destroyed his company. Navy SEAL Michael Thornton received the Medal of Honor during the Vietnam War when he returned through fire to rescue his commanding officer, also a Medal of Honor recipient—Lieutenant Tommy Morris. In the 1990s, Presidents George H. W. Bush and Bill Clinton awarded Medals of Honor to Japanese Americans and African Americans who previously had been unrecognized because of racism and discrimination. Recently, in the War in Afghanistan, U.S. Army Private Ross McGinnis was operating a machine gun when a grenade was thrown in proximity to his unit. Private McGinnis's courage saved the life of at least four of his comrades, and his family was given the Medal of Honor he earned.

Apart from the Medal of Honor, the second highest award for courage is the Distinguished Service Cross, and the third highest is the Silver Star, both established in 1918. The Purple Heart, established by George Washington during the War of Independence, was originally named the "Badge of Merit" and was awarded to those who demonstrated an exceptional level of courage. The Purple Heart was a patch of purple fabric that served as the predecessor to the Medal of Honor and now serves as an award for soldiers who are injured or mortally wounded in combat. Also, each branch of the U.S. military established its own specific awards for valor and courage in combat.

However, as both soldiers and scholars alike have argued, everyday acts of courage go unnoticed, and soldiers call on the courage within them to carry out orders that may be seen in the eyes of others as expectations. The concept of courage has varying degrees based on the individual. For example, one soldier may view his ability to recover from a wound as courageous, while another may explain his rationale for leaving his family as courageous. Because courage is used and experienced in a variety of ways, it is an ambiguous concept that cannot be solely measured through awards and decoration. Arguably, soldiers utilize inner courage to reenter society, especially after being severely wounded. Because combat stress and its repercussions on the soldier's psyche trigger mental illnesses such as posttraumatic

stress disorder, soldiers have a struggle beyond the battlefield. In the same vein, wounded soldiers use prosthetics not only to function in modern society but even to return to combat. As military tactics and technology advance in the future, the concept of courage and how combat soldiers demonstrate valor and sacrifice will change. Ultimately, the tradition of courage within the U.S. military will continue to be a widely studied and ambiguous concept that only those who experience combat can articulate and communicate to the population they fought to preserve.

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See also Civil War, American; Morale; Vietnam War; War in Afghanistan; World War II

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COURT-MARTIAL

The court-martial is a military trial. Under the authority of the Uniform Code of Military Justice (UCMJ), members of the U.S. armed forces share many of the same legal rights as civilians. They have (a) the right to remain silent, (b) the right not to make self-incriminating statements, and (c) the right to legal counsel. Military appellate courts review cases under their jurisdiction, unless the accused waives the right

to appeal. The exception to the waiver concerns death penalty cases.

Military court-martial is a judicial system for trying law violators and UCMJ violations. The military court system or court-martial is similar to a civilian trial. Court-martial military offenses have direct applications from the punitive articles of the UCMJ under the authority of Title 10 U.S. Code §877. This entry discusses two prominent cases of court-martial in the United States, the three levels of court-martial, jurisdiction, and civilian review.

Background

Specific landmark cases have a historical value for examining the mistakes of the past. The court-martial of Private Eddie Slovik, who abandoned his unit in France during World War II, serves as an excellent example of disparity in military punishment. Toward the end of the war in 1944, Slovik faced a firing squad after a court-martial and was executed in January 1945 at the age of 24. He was the only member of the armed forces who would succumb to the death penalty by firing squad since the Civil War.

Colonel Billy Mitchell, a famous officer in the Army Air Corps, stood trial for openly criticizing his superiors several years after World War I. Mitchell's

court-martial denounced statements concerning his superiors' failure to develop air power and anticipate future events. Mitchell resigned from the Army Air Corps after conviction and suspension from active duty for 5 years without pay. World War II and future events would eventually prove his candid observations and assumptions correct concerning the need for a rapid air power deployment.

As the years passed, additional justice issues emerged from other incidents similar to those cases cited above. The military justice system under the so-called Articles of War was typically arbitrary and inconsistent. Under the present system, the two cases mentioned may have received improved adjudication and justice. The reform moment emerged from Article I, Section 8 of the U.S. Constitution, and the power of the Congress. The new military justice system that took effect in 1951 offered many protections permissible in the civilian justice system.

Court-Martial Hierarchy

There are three basic types of courts-martial: (1) summary court-martial, (2) special court-martial, and (3) general court-martial. Article 15 provides the means for commanders to administer nonjudicial punishments for minor offenses, and avoid

Table I The Three Levels of Courts-Martial

<i>Summary Court-Martial</i>	<i>Special Court-Martial</i>	<i>General Court-Martial</i>
Charges of minor incidents of misconduct	Intermediate court level	Most serious level of the military court system
Requires consent of the accused	Military judge and three military officer panel court or jury members	Military judge and at least five court members
Depending on the service branch, judge and advocate/attorney	Trial counsel (prosecutor) and defense counsel	Trial counsel (prosecutor) and defense counsel
Maximum punishment is less than in a special court-martial	Enlisted personnel can have one-third enlisted members	Accused may request at least one-third enlisted members
Forfeiture of two-thirds pay for 1 month	Limited to 12 months of confinement	<i>Manual for Courts-Martial</i> may require confinement
Confinement for 30 days	Forfeiture of two-thirds pay for 12 months	Dishonorable or bad-conduct discharge or dismissal
Hard labor without confinement for 45 days	Officers cannot be dismissed from service or confined	The death penalty for certain offenses

court-martial. Refer to Table 1 for the three levels of courts-martial.

The military court-martial system makes every effort to maximize the constitutional rights of armed forces members. Since World War II, the court-martial tendency has moved in the direction of enhanced “due process.” The three different levels of court-martial authority represent increasing levels of legal protections and potential punishments based on the severity of the offense.

Summary Court-Martial

The summary court-martial consists of one commissioned officer who may not be a lawyer. Moreover, the accused must consent to this level of court-martial and is normally not entitled to legal representation. The accused has the right to cross-examine witnesses, however, which is a vital opportunity to disprove the charges. The accused service member has the right to call witnesses and produce his or her own evidence during the court-martial.

This level of court-martial can adjudicate minor offenses committed by enlisted members of the armed forces. Punishment consists of a maximum of 30 days’ confinement or hard labor without confinement for 45 days. In addition, forfeiture of two-thirds pay per month for 1 month and reduction to the lowest military pay grade (E-1), which affects the amount of salary until the member achieves the same grade again.

Military enlisted members above the grade of E-4 who are legal noncommissioned officers have a different legal status. They cannot be subjected to confinement or to hard labor without confinement, and the adjudication process can only reduce noncommissioned officers to the next lowest pay grade.

Special Court-Martial

This level of court-martial is at the intermediate level of adjudication and punishment. Generally, a military judge participates at this level. The special court-martial requires (a) a trial counsel prosecutor, (b) a defense counsel, and (c) a minimum of three officers who sit as panel members. This court panel is similar to a jury member panel.

Enlisted personnel may request a court composed of at least one-third enlisted personnel to approximate that of a trial by peers. Furthermore, an officer

or enlisted military member may request a trial by judge, not unlike civilian courts. In addition, the accused may request a civilian lawyer at government expense.

A special court-martial has specific limitations regardless of the type of military offense. The sentencing structure permits (a) no more than 1 year of confinement, (b) hard labor without confinement for 3 months, or (c) a lesser amount of punishment if the charges require limitations. The forfeiture of pay is permissible: two thirds of basic pay per month for 1 year and a bad-conduct discharge.

At this level, there is a separate standard for commissioned officers. The adjudication process will not allow dismissal from service or confinement. These two options cannot be part of the sentencing process. However, enlisted personnel can receive a bad-conduct discharge or lesser punishments. The special court-martial can impose any penalty under the Rules for Court-Martial except dishonorable discharge, dismissal, and the death penalty.

General Court-Martial

This level of court-martial is the highest level of adjudication and punishment and requires a thorough Article 32 investigation. This preliminary Article 32 investigation is similar to the civilian preliminary hearing. The Convening Authority requests the Article 32 investigation in accordance with Rule 405 for the Rules for Court-Martial.

At this level, the military judge emerges. The general court-martial requires a trial counsel prosecutor, a defense counsel, and a minimum of 5 officers sitting as panel court members, similar to jury members. The exception to the number of court members occurs in the death penalty cases, which require 12 panel members. Furthermore, enlisted personnel may request a court composed of at least one-third enlisted personnel.

An officer or enlisted member can request a judge and waive the panel, with the exception of death penalty cases. Refer to the *Manual for Courts-Martial* for specific-offense punishments. The punishments are the harshest for general court-martial, for example, dishonorable discharge, dismissal for officers, long periods of confinement, and the death penalty. At this level of court-martial, the most serious cases find the proper adjudication or exoneration of the charges.

Generally, a two-thirds majority vote is required for conviction; however, a unanimous verdict is required for death penalty cases. Cruel and unusual punishments are not within the purview of the court-martial. Therefore, flogging, branding, and tattooing the body or other unusual punishments are not within the penalty provisions of court-martial.

General Jurisdiction

The court-martial authority has jurisdiction over members of the armed forces, rather than the federal or state locality of a specific place or location. The jurisdiction over service members is worldwide and does not depend on where the offense was committed. The status of the accused is directly connected to membership in the armed forces. Serving on active duty establishes military jurisdiction. The court-martial applies to either regular active duty or reserve components serving on active duty. Moreover, even retired members of the regular components of the armed forces entitled to pay are subject to the UCMJ and court-martial under certain circumstances.

Joint Jurisdiction

Military service members are subject to court-martial under the authority of UCMJ offenses for U.S. Code violations. In some cases, U.S. Code violations may also violate federal, state, and local laws or a combination therein. The dilemma presented by multiple jurisdictions requires coordination, liaison activities, and agreements as to which jurisdiction will prosecute. The staff judge advocate (the chief military lawyer) will coordinate with the appropriate civilian authorities. This liaison activity may occur among the U.S. Attorney's Office, the State Attorney General's Office, or the local District Attorney's Office.

Although an accused military member may be subjected to court-martial, that does not preclude prosecution at the state or local level. In addition to subjecting military members to prosecution under legal jurisdiction of the UCMJ, court-martial procedures for the same offense in a federal court is unconstitutional. Double trials for the same UCMJ and federal offense would constitute double jeopardy clause violations under the Constitution and be in violation of the Fifth Amendment.

There are exceptions to the double jeopardy clause concerning criminal prosecution in state and

local courts. The Fifth Amendment clause does not apply because state and local governments are mutually exclusive jurisdictions or different sovereigns. Furthermore, in multiple-jurisdiction cases, the accused can face court-martial and state or local prosecution for the offense. Agreements by both sovereign jurisdictions normally prevail in the spirit of the double jeopardy clause.

Generally, the problems of jurisdiction are more complex when legal violations emerge overseas in foreign nations. Foreign nations have jurisdiction to detain, arrest, and prosecute for violations of their laws. These laws prevail, unless waived within their nation's borders, for visiting military.

The exception arises when a foreign nation grants to the visiting military force, expressly or by implied consent, relinquishment of jurisdiction. Status of forces agreements with host nations determine which nation will have jurisdiction over particular offenses. The United States seeks status of forces agreements that maximize the jurisdiction of UCMJ and court-martial authority over military personnel overseas.

Military Appellate System

The appellate system has three levels of jurisdiction, similar to the federal court system: (1) the Court of Military Review, (2) the Court of Military Appeals, and (3) the U.S. Court of Appeals for the Armed Forces. Each level has an increasing level of formality. At the first two levels, there is a greater military presence. Civilian judges dominate at the highest level.

Court of Military Review

Under the authority of Article 66 of the UCMJ, each judge advocate general establishes a Court of Military Review. The panels are composed of not less than three appellate judges for reviewing court-martial cases. Members of the court may serve as commissioned officers, or they may be civilians, each of whom must be an attorney and a member of the bar of a federal court or the highest state court. The appellate government counsel conscientiously pursues and prosecutes the appeal under this section.

Court of Military Appeals

Appeals from the Court of Military Review are available under UCMJ Article 67. This prescribed

regulation allows certain appeals to the Court of Military Appeals. The Court of Military Appeals reviews all cases affirmed by the Court of Military Review that involve the death penalty. In addition, the Court of Military Review can review all cases when the accused can demonstrate “good cause.” Moreover, members of the armed forces can request a review of a decision by the Court of Military Review within 60 days or earlier.

U.S. Court of Appeals for the Armed Forces

The accused may petition the U.S. Court of Appeals for the Armed Forces; it has international appellate jurisdiction. The court consists of five civilian judges appointed by the president with the advice and consent of the Senate. This level of appeal considers a wide range of legal issues from the two lower level courts. Moreover, these legal considerations include constitutional law, criminal law, legal evidence, and criminal procedure. Furthermore, their jurisdiction includes administrative law and national security legal issues.

Civilian Review

Legal decisions that stem from the U.S. Court of Appeals for the Armed Forces are subject to direct review by the U.S. Supreme Court. Military convictions are subject to Supreme Court appellate review, as well as civilian cases and capital punishment convictions. According to UCMJ 867a, Article 67a, decisions of the U.S. Court of Military Appeals are subject to review by the Supreme Court by writ of certiorari, under Section 1259 of Title 28 of the U.S. Code. The U.S. Court of Appeals for the Armed Forces has an automatic review of capital punishment cases. Another important protection is that military capital punishment executions require the specific authorization of the president.

Conclusion

The presumption of innocence exists for the accused. Guilt beyond a reasonable doubt is the burden of proof. The UCMJ and the related court-martial system is among the best systems of justice; however, as with any justice system, it is not perfect. Nevertheless, it remains a superior justice system for members of the armed forces.

Thomas E. Baker

See also Abuse, Family and Child; Constitutional Rights, Personnel; Hazing; Uniform Code of Military Justice

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COVERT ACTIONS, MILITARY

Covert action, in the language of U.S. intelligence, is an “activity or activities of the United States Government to influence political, economic, or military conditions abroad, where it is intended that the role of the United States Government will not be apparent or acknowledged publicly” (50 U.S.C. §413b(e), 2006). Covert action is an activity to influence the behavior and support of a foreign government and may involve anything from persuasion, such as the spread of information or financial influence, to paramilitary action. Even though covert action is not the same as gathering intelligence, these operations most often take place within an intelligence organization due to the secrecy involved. The term *covert action* is also sometimes used to describe any intelligence activity or a military action that takes place secretly until completed. This entry discusses the history of covert actions and provides information on the 2011 assault in Pakistan against Osama bin Laden.

Early History

As early as the American Revolution, George Washington realized that espionage and covert action were crucial in winning the fight against a more powerful British army. Therefore, after Washington was elected president, the Contingent Fund for Foreign Intercourse, also known as the

Secret Service Fund, was established by the U.S. Congress to give the president the ability to carry out secret operations without notifying the legislative branch. He was not required to inform Congress of how the money was spent but only that the funds had been utilized.

Approximately 100 years later, during Woodrow Wilson's term as president (1913–1921), a philosophy took hold known as Wilsonian internationalism, which focused on the importance of making the world a safer and better place. The United States began to take a more active role in world affairs and in advancing the tenet of democracy. The question became "What means will we take to do so?"

During the years leading up to World War II, intelligence activities were usually carried out by those working with foreign policy in the State Department, the Office of Naval Intelligence, or the War Department's Military Intelligence Division. During the early years of his presidency, Franklin D. Roosevelt tried for greater cooperation between the various intelligence groups, and in 1941, he appointed William J. Donovan as the coordinator of information. Donovan's charge was to lead this new civilian office and bring organization to the gathering of intelligence by the various entities. The office would (a) correlate and analyze these data, (b) make the data available to the president and other government officials approved by the president, and (c) simplify the process for obtaining information necessary for national security.

In June 1942, under the leadership of Roosevelt, the first organized intelligence service was created. Donovan was again called on to lead this new Office of Strategic Services, predecessor to the Central Intelligence Agency (CIA). Covert action was a major component of its mission. The White House and military leaders directed the Office of Strategic Services as it successfully completed secret missions against the Nazis and the Japanese to bring about victory in the end.

After the war, Office of Strategic Services operations were transferred to the War and State Departments. However, President Harry S. Truman saw a need for a postwar central intelligence organization and signed into law the National Security Act of 1947 (61 Stat. 495) establishing the CIA. A few months later, he signed a presidential directive approving a secret propaganda program within the

CIA, believing that without it Soviet covert actions could overpower U.S. foreign policy goals.

One of Truman's first undertakings was to influence the elections to be held in Italy in 1948. Through the CIA, the United States poured millions of dollars into presidential campaigns in Italy to ensure the success of the anticommunist political parties. His 1947 presidential directive also led to the CIA's covert funding of Radio Free Europe and Radio Liberty during the 1950s through 1971.

In 1960, the U.S. Security Council established the 5412 Committee to provide the White House with approval of sensitive covert operations. They began a program of covert action against Fidel Castro and his regime in Cuba. The objective was to replace Castro's regime with one more aligned with the interests of the Cuban people and more acceptable to the United States. This program set in motion the Bay of Pigs Invasion in April 1961.

To prepare for this invasion, the United States trained a small army of Cuban exiles in Guatemala for the invasion of Cuba. However, even with the U.S. government's efforts to keep the invasion classified, word spread. Due to intelligence leaks and disagreements on the strategies and tactical errors, such as older planes that missed bombing targets, this anti-Castro regime operation failed.

The Post–Cold War Era

In 1989, the Cold War ended. The Berlin Wall came down, and communist governments in Eastern Europe were dismantled. However, the CIA already had operations under way in various Third World countries, and these undertakings to spread democracy persisted.

In the early 1990s, Special Operation Forces multiplied, and the United States became a leading force of influence in other countries. Many of these forces were used for broad purposes, such as aiding foreign governments in their fight against drug trafficking, teaching counterinsurgency techniques, and sharing U.S. military expertise.

At the end of the Persian Gulf War (1991), Iraq was still considered a grave danger to the world, and Saddam Hussein remained in power, with President George H. W. Bush comparing him to Hitler. Scientists in Iraq openly vowed to resume building nuclear weapons, and Bush authorized covert efforts to weaken and undermine Saddam.

President Bill Clinton continued Bush's efforts but in a scaled-back manner. Legislative leadership was concerned that the funds paid to some groups to help topple Saddam included too much money for too little results. Therefore, they cut in half the budget to fund such operations. There is little known about the exact nature of these operations due to the classification of such information. However, it was reported that the program had financed opposition groups inside and outside Iraq, broadcast propaganda on several radio stations, distributed leaflets, and spearheaded a disinformation campaign inside the country.

The Global War on Terrorism

With the attacks of September 11, 2001, a plot masterminded by Osama bin Laden, America's security outlook began to concentrate more on global terrorism, al Qaeda, bin Laden, and other nonstate actors. Overcoming such terrorism meant dealing more with insurgents and those advancing their agendas through irregular (or unconventional) warfare. Again, Special Operation Forces expanded, with Iraq and Saddam Hussein remaining major concerns.

A few days after the attacks, Congress passed the Authorization for Use of Military Force Act (115 Stat. 224), which gave President George W. Bush powers to combat terrorism around the world. In the hope of finding bin Laden, the U.S. military invaded Afghanistan approximately 1 month after the attacks. The troops depended on CIA operatives to help them establish links to the Northern Alliance Fighters, a group that since 1996 had been fighting the Taliban. The Taliban, an Islamist militant and political organization, was supported by bin Laden and al Qaeda. The Bush administration began drone strikes in Afghanistan and continued the same in Iraq for what were called "targeted killings" in this Global War on Terrorism.

After taking office in 2008, President Barack Obama continued the drone strikes, and in 2009, a Predator drone shot two Hellfire missiles, killing Baitullah Mehsud, the commander of the Pakistani Taliban. The drone was operated by someone at the CIA headquarters in Langley, Virginia, hitting Mehsud's father-in-law's house and killing more than 10 people, including Mehsud's wife.

Mehsud was considered an enemy of the United States, but it was not the U.S. military that killed

him but the CIA. They dropped a missile on a house in Pakistan, a country that was not at war with the United States. Though a controversial act, counterterrorism experts believe that fewer people were killed by these missiles than would have been the case if they had dropped a conventional bomb or had pursued a ground assault.

The United States lost track of bin Laden in 2007, but in the summer of 2010, thanks to Pakistani operatives, the CIA located the man they believed to be the only courier between bin Laden and al Qaeda. After identifying him and watching him for several weeks, they tracked him as he drove to a well-protected compound in Abbottabad, Pakistan. Then came orders to develop an intelligence, surveillance, and reconnaissance "soak," meaning that tremendous focus, manpower, and monetary funding were made available for this particular mission to explore the possibilities that the tall man pacing around the compound, seen from drone cameras and satellites, was truly bin Laden.

Bin Laden was given the code name Geronimo for this operation. A playbook was developed with a series of hypothetical scenarios that could take place if there was a military effort to capture or kill bin Laden. As evidence increased indicating that bin Laden was in fact living in this compound, the playbook grew larger.

A small classified group consisting of less than 25 people was discussing the plans to take out bin Laden. This group considered a Predator drone attack but was afraid that it would not be powerful enough to guarantee the death of bin Laden. They also talked of pulling in Pakistani operatives but were suspicious that some of them may have known where bin Laden had been living for the past few years. Eventually, they decided to go with a helicopter assault.

There would be 79 operatives, including Navy SEALs, intelligence specialists, medical corpsmen, and translators, and one bomb-sniffing dog.

The helicopter assault occurred during the early morning hours of May 1, 2011, Eastern Daylight Time (May 2, Pakistani time). Obama and his war council waited in the White House Situation Room, following the mission real time through video feed. Bin Laden and four others were killed, but none of the U.S. team was fatally injured. The phone call came to Obama stating, "Geronimo EKIA," meaning "Geronimo, enemy killed in action."

Not only did the United States kill this leader of global terrorism, it also collected a magnitude of intelligence, including flash drives, phone numbers, computer files, DVDs, and handwritten documents. This 2011 helicopter assault in Pakistan was a major victory for the U.S. military and intelligence communities. The year 2011 brought multiple drone successes, for example, when they were used to protect the protesters in Libya, who were rising up and demonstrating in their streets for a more favorable government. The United States remotely flew unmanned aircraft as part of a North Atlantic Treaty Organization–led air campaign to protect Libyan civilians. Initially, drones with cameras flew over Libya for surveillance. Then, on April 23, drones with missiles were utilized, with the first strike taking out a multiple rocket launcher near Misrata that had previously been used against the rebels by the Muammar Qaddafi regime.

In September, U.S. drones over Yemen killed Anwar al-Awlaki, a U.S. citizen living in that country. Awlaki was declared an enemy who incited terrorist actions against the United States. However, this strike was controversial due to the fact that Awlaki was an American-born citizen and had never been formally charged with a crime. Questions continued into 2012 as to the legality of this attack.

U.S. attorney general Eric Holder Jr. said that the United States has the right to kill American citizens abroad if they are senior al Qaeda leaders, if they pose an immediate terrorist threat, and if chances of them being captured are unlikely. However, not all U.S. citizens agreed, believing that targeting American citizens away from the battlefield without judicial review went against constitutional principles.

However, the killing of bin Laden in May 2011 affirmed the success of such covert actions and how the secret use of drones and cameras helped in gathering information without putting American forces in danger. Nevertheless, there is still concern that when drones are used to drop bombs, they more easily miss targets and innocents are killed. There is also concern about the secrecy surrounding covert action. A democracy is expected to have an open and transparent government, but covert actions depend on just the opposite for success.

Voters, Congress, and allied governments do not like being left out of the information trail. Yet there is unique flexibility and efficiency for those in charge

if they do not have to explain their every plan and action to the public. Secrecy also means less chance of retaliation. Some congressional committees, such as the Senate Select Committee on Intelligence, have limited oversight for covert activities. However, there is ongoing debate as to whether these committees are all that is needed.

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See also al Qaeda; Central Intelligence Agency; SEALs, Navy

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CRIMES, MILITARY

Article I, Section 8, states that Congress has the power “to make Rules for the Government and Regulation of the land and naval Forces.” In accordance with this provision, Congress has established regulations for the military as embodied in the Uniform Code of Military Justice (UCMJ), which constitutes the body of criminal laws governing the behavior of armed services personnel in the United States. These laws are implemented by means of the *Manual for Courts-Martial*, which is issued by the president of the United States in his role as the commander in chief of the military. Other sources that inform criminal liability in the military include the Military Rules of Evidence, regulations issued by the Department of Defense (DOD), regulations of the various service branches, court decisions, and local regulations that are expressly punitive in nature and issued by a flag officer (general or admiral).

Military crimes are offenses for which a person can be held criminally responsible under military law. While some military crimes are similar to civilian crimes, there are many crimes that are exclusive to the military justice system. This entry first examines

the jurisdiction requirements for prosecution under the UCMJ and reviews the types of crimes identified in the UCMJ. It then discusses some demographic data related to military crime and concludes with a look at the military's efforts to apprehend offenders and to prevent crime.

Jurisdiction

To try a case under the UCMJ, a military court must have jurisdiction over an individual and the offense. Article 2 of the UCMJ (Section 802 of Title 10, U.S. Code) lists 12 categories of individuals that are subject to trial by court-martial: military personnel, whether active, reserve, or retired; members of certain quasi-military organizations (e.g., Public Health Service members when serving with the armed forces); military prisoners; prisoners of war; and, under very limited circumstances, certain specified categories of civilians. Those who serve in the military are subject to the UCMJ regardless of their location throughout the world. Nonmilitary DOD employees and contractors are subject to the UCMJ under some circumstances when overseas.

Crime Under the UCMJ

Military crimes in the UCMJ are described in Articles 77 through 134. A crime can be a felony or misdemeanor. *Manual for Courts-Martial* regulations prescribe elements and punishments for each crime. Every element of the offenses listed must be proven beyond a reasonable doubt for the accused to be found guilty.

Scope of Criminal Liability

Suspects can be guilty as a principal or accessory after the fact. The accused can also be guilty of an offense and the lesser included offense.

Crimes That Parallel Those in Civilian Society

There are multiple military crimes that are similar to those found in civilian society. These crimes can be divided into alcohol and drug-related offenses, homicide offenses, offenses against a person, sex offenses, property offenses, financial offenses, offenses against the justice administration, and speech offenses.

Alcohol and drug-related offenses include drunken or reckless operation of a vehicle, aircraft, or vessel

and wrongful use or possession of controlled substances.

Homicide offenses run the gamut from premeditated murder, unpremeditated murder, murder while doing an inherently dangerous act, felony murder, manslaughter, voluntary manslaughter, involuntary manslaughter resulting from culpable negligence, death or injury of an unborn child, and negligent homicide.

Offenses against persons involve stalking, maiming, simple or aggravated assault, and kidnapping.

With respect to *sex offenses*, the UCMJ criminalizes rape, aggravated sexual assault, aggravated sexual contact, abusive sexual contact, child sex abuse offenses, indecent acts, forcible pandering, wrongful sexual contact, indecent exposure, and sodomy.

Property offenses include damaging nonmilitary property, larceny, wrongful appropriation, robbery, arson, burglary, housebreaking, receiving stolen property, and unlawful entry.

There are also a host of *financial offenses* that occur when a military person's debts are not paid.

Offenses against the justice administration include perjury, frauds against the United States, resisting arrest, escape, issuing a false official statement, and obstructing justice.

Speech offenses include provoking words or gestures, extortion, threats or hoaxes designed or intended to cause panic or public fear, and communicating a threat.

Crimes Unique to the Military Service

There are also crimes that are exclusive to the military. These include enlistment offenses, absence offenses, superior-subordinate relationship offenses, duties and orders offenses, combat-related offenses, and property offenses.

For *enlistment offenses*, the UCMJ criminalizes fraudulent or unlawful enlistment, appointment, or separation.

Absence offenses include desertion; missing movement, which criminalizes failing to be present when one's unit, aircraft, or ship leaves; and absence without leave. Absence without leave is also known in popular culture as "AWOL."

Superior commissioned, noncommissioned, and warrant officers have increased protection under the UCMJ in the execution of their office. *Offenses within the superior-subordinate relationship* include disrespect toward superior commissioned officers; assaulting or willfully disobeying a superior commissioned officer, which carries a maximum penalty of death during war; and insubordinate conduct toward a warrant officer, noncommissioned officer, or petty officer. A superior officer's misconduct can divest him or her of this protected status, however. In addition, officers can commit crimes if they exhibit contempt toward public officials currently in office. Exceptions for private comments exist.

Duties and orders offenses criminalize failure to obey an order or regulation, cruelty toward those who are subject to one's orders, getting drunk on duty, dueling, malingering by feigning or causing harm to oneself to avoid duty, straggling, and misbehavior of a sentinel. Failure to suppress mutiny or sedition in the accused's presence or to report mutiny or sedition that the accused has reason to know about is also a crime.

War can be an aggravating factor that triggers additional crimes or increases the severity of the punishment. The UCMJ criminalizes *combat-related offenses* such as misbehavior in front of the enemy, a subordinate compelling surrender, improper use of the countersign, forcing a safeguard, aiding the enemy, misconduct as a prisoner, and espionage. Retaining captured or abandoned property, frequently termed "war trophies," is also a military crime. The offense of spying applies to everyone, including U.S. citizens and non-U.S. citizens, and carries a mandatory sentence of death.

The UCMJ criminalizes *property offenses* such as loss, damage, destruction, or wrongful disposition of military property and makes waste, spoilage, or destruction of nonmilitary U.S. government property illegal.

Other unique military crimes are Conduct Unbecoming an Officer and Gentleman and violations of General Article 134. Conduct Unbecoming an Officer and Gentleman criminalizes conduct that disgraces the person as an officer. It applies to male and female commissioned officers, cadets, and midshipmen and can be used in conjunction with other

charges. General Article 134 is typically used only if the conduct is not encompassed by one of the enumerated articles in the UCMJ. The three types of criminal offenses under General Article 134 are (1) conduct prejudicial to good order and discipline, (2) conduct of a nature to bring discredit on the armed forces, and (3) noncapital offenses criminalized by federal laws that are not enumerated in the UCMJ.

Inchoate Offenses

Inchoate offenses are those that occur in preparation for or furtherance of another military crime under the UCMJ. These offenses are separate crimes from those that they furthered and include conspiracy, solicitation, and attempts to commit a crime when the further crime was not fully carried out but the intention to carry it out was present.

Defenses

Several of the crimes have available defenses. Procedural defenses that are typically accompanied by a motion to dismiss are lack of jurisdiction, statute of limitations, former jeopardy, pardon, and denial of speedy trial. Affirmative defenses, which admit that the act was committed but deny that it was criminal, include lack of mental responsibility, mistake of fact, obedience to lawful orders, self-defense, defense of another, accident, entrapment, duress, inability, intoxication, defective causation or intervening cause, justification or excuse, and voluntary abandonment. Mistake of law is usually not a viable defense. Finally, available defenses that deny that the accused committed the criminal act are mistaken identity, alibi, good character, and impossibility.

Military Crime From a Sociological Perspective

Military Crime Rate

In FY (fiscal year) 2011, crime increased in the U.S. Army from 2010 but was still less than in 2007, 2008, and 2009. Violent felonies made up 4% of the crimes, nonviolent felonies 36% of the crimes, and misdemeanors 60% of the crimes. Violent sex crimes constituted 47% of violent felonies in the U.S. Army.

Military Crime Rate Versus Civilian Crime Rate

Trends from 2006 to 2009 indicate that the crimes of aggravated assault, murder and nonnegligent manslaughter, and robbery were greater across

the U.S. civilian population than among active U.S. Army soldiers. However, forcible rape in the U.S. Army was more than double that in the U.S. civilian population in 2009.

Offenders and Victims

Junior soldiers committed 68% of all crimes and constitute 43% of the U.S. Army. Noncommissioned officers committed 22% of the crimes and constitute 28% of the U.S. Army. Interestingly, 90% of the crimes in FY 2011 were committed by 71% of active-duty soldiers.

From 2006 to 2011, the rate of victims and offenders of violent crimes in the U.S. Army increased, but there were more victims than offenders, indicating that individual offenders were harming more victims in violent crimes than in the past years. In the U.S. Army's reports on violent felonies, more victims were civilians than soldiers, and female victims outnumbered male victims by more than 2 to 1.

The rate of rape in the U.S. Army is continuing its distressing pattern of increasing yearly, with an increase in sex crimes in the U.S. Army of more than 28% from 2006 to 2011. Women constitute 95% of the victims of sex crimes. Common factors in sex crimes include alcohol and high density housing. The offenders were frequently acquaintances of the victims. Victims were more at risk between 6 months and 2 years after enlistment, during transition periods, when 18–22 years of age, and during off-duty time periods, such as weekends and holidays.

The rate of domestic violence and child abuse has increased since 2001.

Role of the Criminal Justice System in Apprehending Criminals and Preventing Crimes

Apprehending Criminals

Multiple steps are involved in apprehending those suspected of committing military crimes. The resolution of military crimes through the military judicial process is detailed in the *Manual for Courts-Martial*, which includes the Rules for Courts-Martial, the Military Rules of Evidence, Punitive Articles, and Nonjudicial Punishment Procedure (better known in the military as Article 15 discipline).

Authorized persons can apprehend suspects when there are reasonable grounds to believe that a person subject to the UCMJ committed or is in the process of

committing an offense. *Apprehending* means taking the suspect into custody and is the military equivalent of “arrest” in civilian society. Additionally, anyone can report an offense to any military authority. That authority will generally send the report to the accused's immediate commander. The charging and convening authority has the power to determine charges, dismiss the charges, or forward the charges to another commander. The accused's immediate commanding officer will notify the accused of the charges against him or her and who ordered the charges.

The military justice system has multiple judicial alternatives for resolving military crimes. Three alternatives are administrative discipline, nonjudicial punishment (NJP), and court-martial.

Under administrative discipline, commanding officers can mete out nonpunitive, administrative discipline for minor offenses under the UCMJ. The purpose of administrative discipline is to correct poor behavior rather than punish the individual. NJP punishment is carried out pursuant to Article 15 of the UCMJ. Commanding officers can immediately mete out punishment for crimes under the UCMJ that are greater than those justifying administrative discipline but not so severe as to warrant a court-martial. The purpose of NJP is corrective and to enable the commanding officer to immediately punish the offender to maintain discipline.

Courts-martial are disciplinary. The three levels of court-martial are differentiated by the level of command that can invoke the proceeding, the available punishments, due process, and appellate review. As the available maximum punishments increase, so do the level of command that can convene the court-martial, the required due process, and the available appellate review. Military enforcement officers and commissioned, warrant, petty, and noncommissioned officers have the authority to apprehend a suspect subject to court-martial.

The lowest level of court-martial, which is limited to enlisted personnel for nonserious offenses, is the summary court-martial. Offenses go to special court-martial when they are greater than those warranted for summary court-martial but not as great as those that require general court-martial. Any noncapital offense under the UCMJ and any military person can be tried in special court-martial.

General courts-martial are for the most egregious of offenses and permit the highest level of punishment, including death. An investigation must be

conducted before any charges are referred to general court-martial. Anyone subject to the UCMJ can be tried for any offense under the UCMJ in general court-martial.

Under the military judicial system, the hierarchy of review extends from the Court of Criminal Appeals to the U.S. Court of Appeals for the Armed Forces and the U.S. Supreme Court. Specific requirements must be met for the case to be reviewed at each level.

Courts-martials, summary courts-martial, and Article 15s have decreased since 2006, but separations for misconduct have increased since 2006.

Crime Prevention

The military has also attempted to prevent military crimes through a variety of measures, including attempting to correct bad behavior through administrative discipline and NJP, publicizing punishments to deter future crimes, criminalizing not stopping certain crimes from being committed in the person's presence and not reporting knowledge of certain future crimes, and implementing enhanced reporting measures. Many military bases also have crime prevention websites to report suspicious activities as well as offer advice on how to avoid victimization.

The military has also focused on preventing domestic and sexual violence. To reduce domestic violence, the DOD formed the Defense Task Force on Domestic Violence, which made several recommendations. The military branches also have family advocacy programs that help prevent domestic abuse. To reduce sexual violence, the DOD created the Defense Task Force on Sexual Assault in the Military Services and maintains a Sexual Assault Prevention and Response Office. Each military branch has a program to help further prevent sexual assaults.

Elizabeth C. Varner

See also Commissioned Officers; Court-Martial; Noncommissioned Officers; Police, Military; President as Commander in Chief; Rape; Trauma, Military Sexual; Uniform Code of Military Justice

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CRIMES, WAR

War crimes have been a part of customary law for centuries and more recently were codified by treaties and conventions. The United States codified international law rules of land warfare during the Civil War and published the results. In 1907, an international conference drew up the Hague Convention on Land Warfare, detailing existing customary laws of war and defining war crimes. After the bloody events of World War II and the war crimes trials in Nuremburg and Tokyo, states again collaborated, penning the Geneva Conventions of the Laws of War. This entry examines the roles of customary law, the Geneva Conventions, and the International Criminal Court and includes examples of specific war crimes.

War Crimes Defined

Before war crimes were described in detail by the Geneva Conventions, states were guided by customary law. Customary law derives from a standard and

consistent practice among most states and binds all states, even those that are not parties to treaties that define the same principles. A state may object to some customary law, but it generally cannot opt out of customary international law once the norm becomes a fundamental principle of international law.

War crimes were defined in the 1949 Geneva Conventions to include (a) willful killing, (b) willfully causing great suffering or serious injury to body or health, (c) torture or inhuman treatment, (d) extensive destruction or appropriation of property not justified by military necessity, (e) compelling a prisoner of war or civilian to serve in the military of the hostile power, (f) unlawful deportation or transfer of civilians, (g) willfully depriving a prisoner of war or civilian of the right to a fair trial, (h) unlawful confinement of a protected civilian, and (i) taking of hostages.

Further amendments from the Additional Protocol I, passed in 1977, developed new protections during international conflicts. The most serious crimes, called grave breaches, include (a) medical experimentation, (b) delaying repatriation of prisoners of war, (c) attacking civilians or undefended localities, (d) using the Red Cross emblem in a fraudulent manner, and (e) attacking historic monuments. Under the Geneva Conventions and Additional Protocol I, countries must prosecute those accused of grave breaches or turn them over to a state willing to prosecute. Grave breaches apply only to international armed conflicts and only to protected persons. Protected persons include wounded and sick combatants, prisoners of war, and civilians.

The process to form the first International Criminal Court (ICC) began in 1998 with overwhelming international support. In 2002, the ICC treaty entered into force, and as of December 2011, 120 states are party to the court. The law of the court was designed to work with existing national legal systems and may exercise jurisdiction only when national courts are unwilling or unable to prosecute crimes. Crimes included within the jurisdiction of the court are war crimes, genocide, crimes against humanity, and crimes of aggression, and they may not apply retroactively.

Rules pertaining to internal conflicts are far fewer because most states already have laws that regulate domestic matters. Additional Protocol II, also written in 1977, details rules for civil wars. The Statute of the International Criminal Tribunals

in Yugoslavia and Rwanda included crimes of violence to life or health, summary executions, pillage, collective punishment, and hostage taking. The Statute of the ICC further lists war crimes for internal conflicts. Some of the worst atrocities committed during the century are not considered war crimes, however. Although genocide and crimes against humanity are international crimes, they are usually defined separately from war crimes. Crimes against humanity are acts of violence or other inhuman treatment committed against civilians, generally perpetrated against civilians in one's own country, while genocide is the deliberate and systematic elimination of a certain group of people.

Terrorism also further complicates issues relating to war crimes. Both customary law and the Geneva Conventions fail to encapsulate individual actors (or groups) committing atrocities against civilians. Where terrorist activity is part of an international or civil conflict, the actions could be considered violations of other laws or customs, but most states do not consider it a war crime.

Specific Conflicts

Vietnam

One of the most infamous incidents of war crimes committed by U.S. servicemen during the Vietnam War occurred at My Lai. In 1968, Charlie Company moved through My Lai, killing every person and animal in the area. Hundreds of civilians, mostly women, children, and the elderly, were rounded up and executed; almost two dozen women and young girls were reportedly raped. Although one soldier reported the incident to his superior and a chaplain, no thorough investigation was done.

One soldier's letters to a congressman and other government officials exposed the truth, and Lieutenant General William Peers was directed to open an official investigation into the event. Although the Peers Commission recommended that more than 20 officers be charged with the events that transpired at My Lai, only a few were formally charged. Lieutenant William Calley was the only soldier brought to trial and convicted; he was given a life sentence on 22 counts of premeditated murder of civilians. His defense was that he was following orders. My Lai was not the only incident of murder during Vietnam, however. A Pentagon task force found numerous war crimes during the Vietnam War that were substantiated by

army investigators, and more than 200 individuals were recommended for formal charges, not including the My Lai participants. Only 57 were actually court-martialed and 23 convicted, however.

Yugoslavia

A series of deadly wars in the former Yugoslavia led to some of the worst war crimes committed since World War II. In the 1990s, fighting driven by ethnic conflicts led to several new independent states, but not before atrocities had been committed by all sides during the war. In 1993, the United Nations established the International Criminal Tribunal for the former Yugoslavia (ICTY) to investigate and punish those who committed war crimes. The ICTY was the first war crimes tribunal since the Nuremburg and Tokyo tribunals.

The ICTY made major achievements in the area of international humanitarian law, focusing on individualizing guilt so that soldiers and politicians were held accountable for their actions. Victims could testify against the accused; the ICTY has collected an impressive historical record of the atrocities. The majority of cases the ICTY has heard have been of Serbs and Bosnian Serbs, but convictions have also been secured for Croats, Bosnian Muslims, and Kosovar Albanians, demonstrating the court's commitment to fairness. The ICTY has charged more than 160 persons, including soldiers, police and political leaders, and, most notorious, Serbian president Slobodan Milosevic. Sixty-four have been convicted or pleaded guilty, and 70 are currently on trial or still awaiting trial. The key objective of the court is to punish not only the ethnic cleansing committed by the Serbs but also torture, rape, murder, and various other war crimes. The ICTY was one of the first war crimes tribunals to recognize and punish rape as an instrument of war crimes, and it made a major contribution to customary international law in this area.

Rwanda

In 1994, a violent ethnic cleansing took place in Rwanda. Over 100 days, Rwandan Hutus systematically tortured and killed between 800,000 and 1 million Tutsis and moderate Hutus. National political leaders, mayors, the military, and the police were involved in many ways. Men, women, and children were slaughtered throughout the country, but the international community was reluctant

to get involved and waited more than a month to intervene.

After the majority of the violence was over, more than 2 million Hutus fled Rwanda, anticipating swift retribution. The United Nations established the International Criminal Tribunal for Rwanda in 1994. The tribunal, like the ICTY, has jurisdiction over genocide, crimes against humanity, and war crimes. Almost 70 cases have already been completed, with more than 40 convictions or guilty pleas. Another 6 cases are still in progress or awaiting trial. The International Criminal Tribunal for Rwanda was also one of the first international tribunals to recognize rape as a crime of genocide and a war crime.

Afghanistan and Iraq

After the events of September 11, 2001, the United States prepared to retaliate against those involved. Intervening in Afghanistan in late 2001, the objective was to not only defeat al Qaeda but also remove the Taliban from power. To defeat the Taliban, the United States needed allies, sometimes allying with groups that had questionable records with human rights. Although a new government was established in Afghanistan in 2002, the Taliban remained a strong fighting force, assisted by fighters in Pakistan.

There has been controversy about U.S. and coalition methods in Afghanistan. While transporting captured Taliban fighters, Northern Alliance forces overpacked container trucks, and 200 prisoners died. Some public figures around the world have also criticized American detention centers in Afghanistan. The use of torture and other abuses at these facilities has been debated, especially since the International Red Cross is not allowed access to many facilities.

At the same time, the United States faced another enemy in Iraq. In 2003, U.S. forces swept into Iraq. Within 30 days, Baghdad was captured. The low number of American troops and destabilization of the Iraqi government made it easy for insurgents to fight during the next stage of the war. The fighters wore no uniforms, had no chain of command, and hid among the population, especially in religious sites normally protected under international law. Anticoalition forces employed tactics to inflict maximum pain on both American troops and Iraqi civilians. The use of improvised explosive devices, designed to inflict maximum pain, grew exponentially. These methods clearly violated the laws of war.

As coalition forces grew increasingly frustrated with the insurgency, a number of questionable incidents occurred that resulted in trials by court-martial. In 2005, two dozen Iraqi civilians were murdered in Haditha, resulting in four U.S. Marines being charged with murder and four officers being charged with dereliction of duty for not reporting the incident. In Abu Ghraib, military prison guards were seen humiliating and using harsh techniques on Iraqi prisoners to extract information.

The United States has come under fire internationally for these incidents, among others, and has tried to quickly investigate and charge soldiers who commit crimes. Many military members have been tried and convicted under the Uniform Code of Military Justice (for breach of duty, assault, murder), however, instead of being charged with

crimes of war. As of 2005, more than 300 cases of detainee abuse have been investigated by the army in Afghanistan and Iraq, with 20% of those cases resulting in a detainee's death.

U.S. View on War Crimes

In 1996, the United States passed the War Crimes Act to integrate grave breaches and other war crimes under the Geneva Conventions into federal law. Although the act relates to crimes committed by or against a U.S. national, the main goal of the War Crimes Act was to prosecute offenses against Americans. The military has historically disciplined soldiers through the use of trials by courts-martial. Due to the increase in claims of prisoner abuse arising from Afghanistan, Iraq, and Guantanamo Bay, focus has been brought on American actions throughout the world. Currently, a serviceperson could be charged by a court-martial for a breach of the Geneva Conventions, without mention of war crimes. Because the War Crimes Act and federal antitorture statute prohibit use of the death penalty, military members cannot be charged under either statute in a court-martial where the action resulted in the death of the victim. To address the rise in crimes committed by service persons, the military released a new Army Field Manual in September 2006, instructing military and Department of Defense civilians to comply with the Geneva Conventions, especially avoiding grave breaches. The new manual also describes prohibited interrogation methods and provides instructions to disobey orders to commit illegal acts and to report violations immediately.

An agreement between the Departments of Justice and Defense allows most military members who commit crimes to be prosecuted by the Department of Defense. It is likely that a person convicted of a crime by the military cannot then be charged with a war crime under federal law for the same act due to the prohibition of double jeopardy. Another issue of concern is that the military cannot court-martial former military members, even if their crimes were committed during their service. Some critics urge change within the military and justice systems to avoid these circumstances and allow the United States to prosecute (and label) perpetrators of war crimes throughout armed conflicts.

Experts also reveal that the enforcement of military law in the United States generally focuses



This image shows an unidentified detainee standing on a box with a bag on his head and wires attached to him in late 2003 at the Abu Ghraib prison in Baghdad, Iraq.

Source: Associated Press.

on soldiers lower in the chain of command. In the most publicized cases from Vietnam and Iraq, most convictions in courts-martial have been of enlisted personnel or noncommissioned officers. Although investigations are occasionally started of those higher in the chain of command (My Lai, Abu Ghraib), many officers have been acquitted of charges or receive nonjudicial reprimands. Critics question these results and argue that treating soldiers involved in war crimes as “a few bad apples” limits the ability to correct problems higher in the chain of command.

Another area of controversy for the United States has been the ICC. The United States opposed the powers and jurisdiction given to the court, and some maintain that joining the ICC would violate the Constitution. Although the treaty was signed under the Bill Clinton administration, the George W. Bush administration “unsigned” the Rome Statute, fearing prosecution of American servicemen. The Obama administration is currently reengaging with the court. The United States is currently supporting the prosecution of leaders of the Lords Resistance Army in Uganda and has also spoken in support of prosecutions in Kenya and Sudan.

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See also Geneva Conventions; Hague Conventions; Human Rights; International Criminal Court; Laws of War; War Powers Act

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CRUISERS, NAVAL

By definition, a cruiser is a naval war vessel that is smaller than a battleship and larger than a destroyer. Cruisers have served a number of different purposes since their inception, including commerce raiding, air defense, and shore bombardment. Today, cruisers are capable of engaging enemies on land, sea, or air using advanced weaponry and technology. This entry discusses the history of cruisers and describes the features and missile systems of contemporary cruisers.

History

In the past, the word *cruising* was used to describe the mission that a sailing vessel was to undertake. These “cruising” missions would be anything from commerce raiding, to scouting, to protection of other ships. Until the mid-19th century, the predominant cruiser type was known as a frigate. These sailing ships were lightweight and fast, designed to go long ranges quickly. They employed only one deck gun and were used primarily as scouts and interceptors.

Following the obsolescence of sailing vessels as a weapon of war, cruising vessels maintained their place in world navies; however, their scope was substantially increased. These new steam-powered cruisers were larger than their predecessors and could allow heavier gun armament. Steam power also made it possible for the creation of ironclad ships, whose hull was reinforced with iron sides. By the late 19th century, ironclad ships were being built and deployed by the world’s powerful navies, including the United States and Great Britain. It was not long after the introduction of iron that engineers discovered the possibilities of steel for warships. Steel had the obvious advantage over iron in that it was lighter. Navies were able to utilize steel to increase the size, speed, and firepower of warships. This had the effect of confusing the distinction between battleships and cruisers, for the new cruisers began to mirror the battleships of the past.

By the early 1900s, heavily armed and armored battle cruisers emerged in naval fleets, accompanied by light cruisers, which were necessary to protect the larger vessels. The London Naval Treaty of 1930

established clear definitions of light and heavy cruisers, dictating that any ship with guns of 6.1-inch caliber or more was to be called a heavy cruiser. Heavy cruisers typically had 8-inch caliber guns and began active service following World War I. Prior to World War II, construction began on anti-aircraft cruisers; however, following World War II, it became evident that large ships were little match for advanced aerial power. This led to the dissolution of large-scale naval warfare as it had been known. Only the United States, Russia, and Peru currently have cruisers on active duty, indicating that the time of cruiser-dominated navies has most likely come to an end.

The Contemporary Period

The United States has 22 *Ticonderoga*-class guided missile cruisers in active service. Generally 567

feet long, the class is small and quick, topping off at 32.5 knots. The *Ticonderoga*-class cruiser was first deployed in 1983 and is equipped to combat air, sea, and land forces using advanced radar technology and a vertical launching system that can fire multiple missile types. Tomahawk cruise missiles for long-range warfare, surface-to-air missiles, and undersea missiles for submarine warfare make the *Ticonderoga*-class cruiser a powerful naval weapon. The U.S. Navy is currently undergoing a phase of upgrade and restoration of the *Ticonderoga* class, making improvements to the radar and weapons systems.

The Aegis Combat System is responsible for the strength of the U.S. Navy. Literally meaning “shield” in Greek, Aegis combines the most up-to-date radar technology with the most advanced missile systems available. Using radio frequencies, the Aegis system



The *Ticonderoga*-class cruiser USS *Mobile Bay* (CG 53) leads the *Oliver Hazard Perry*-class frigate USS *Curts* (FFG 38) and the *Arleigh Burke*-class destroyer USS *Russell* (DDG 59) in formation off the coast of southern California.

Source: Department of Defense photo by Petty Officer 3rd Class Geoffrey Lewis, U.S. Navy (released).

is able to guide multiple missiles to multiple targets simultaneously. The Aegis Ballistic Missile Defense System is used to defend friendly targets from enemy missiles. Aegis technology is currently used by the United States, Spain, Australia, Norway, and Japan; however, only the United States uses the technology on its cruisers.

The Russian *Kirov*-class cruiser is the largest cruiser in active service. The giant *Kirov* class, 827 feet long, mirrors a battleship of World War II, earning it the distinction of a modern battle cruiser. The *Kirov* class features a nuclear-powered engine that propels the gigantic vessel to 32 knots. The first was originally deployed in 1980; however, there is only one newer model currently in operation. The *Slava*-class cruiser is Russia's 612-foot-long cruiser capable of going to 32 knots. The collapse of the Soviet Union resulted in only three ships being completed. The final class of cruiser still in Russian service is the *Kara*. The *Kara* class has been in service since 1971

and is a guided missile cruiser. The *Kara*, 568 feet long, reaches 32 knots using a gas turbine engine. There is currently one *Kara* class cruiser in active service.

The Peruvian navy has one *De Zeven Provinciën*-class cruiser in active service. Originally launched in 1941, the *Almirante Grau* is the oldest cruiser currently serving. Despite its age, the cruiser is capable of speeds of 32 knots. The ship was sold to Peru in 1973 by the Royal Netherlands Navy.

Recent Conflicts

Nine *Ticonderoga*-class cruisers were deployed in Operation Desert Storm, beginning in 1991. They were largely responsible for discouraging any air defense by the Iraqi armed forces, allowing for a successful ground campaign. Following Operation Desert Storm, the U.S. Navy decommissioned all non-Aegis cruisers. Operation Iraqi Freedom,



A starboard view of the Soviet *Kirov*-class nuclear-powered guided missile cruiser *Kalinin*.

Source: Department of Defense photo.

beginning in 2003, featured 11 *Ticonderoga*-class, Aegis-operating cruisers.

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See also Battleships; Missiles, Cruise; Warfare, Submarine; Weapons, Antiaircraft

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CUBA

Located in the northern tier of the Caribbean Sea with a population of 11.5 million (according to a July 2010 estimate), in terms of population Cuba ranks approximately in the middle of 20 Latin American nations occupying the hemisphere. Measured by landmass, the island occupies approximately as much territory as the state of Ohio. However, statistics aside, Cuba's most notable distinction in modern history has been its significant influence on Latin America, the United States, and the world. This entry discusses the history of Cuba, focusing on its revolutions and its relationship with the Soviet Union and the United States.

Cuba has been governed by a one-party communist system since Fidel Castro seized power in 1959. Due to Castro's failing health, his brother Raul replaced him as president and commander of the Cuban military in February 2008. Raul Castro possesses a "practical, no-nonsense style" that is in marked contrast to his brother's more dogmatic approach to domestic and foreign affairs.

For most of its history, Cuba's economy has been an appendage of greater powers: first Spain, then the United States, and then the Soviet Union. Under Moscow's tutelage, agriculture, a traditional economic mainstay of the island, recorded steady growth in the 1970s and 1980s. However, with the collapse of the Soviet Union and the end of economic assistance, Cuban production dropped by as much as 40% between 1990 and 1998. In recent years, Havana has recovered some of this prosperity through (a) limited economic reforms,

(b) Venezuelan aid, and (c) new credit from communist China.

In the modern era, the Cuban military has been integral to the country's success, both as a symbol of the revolution and as a means to preserve Cuba during the Cold War. The Fuerzas Armadas Revolucionarias (FAR) arguably reached its peak in the 1980s, a time when it possessed nearly 1,000 main battle tanks and deployed thousands more troops abroad, particularly in Africa. Although militarily a fraction the size of the U.S. armed forces, the FAR and its various militia support units have been adequate to deter an American invasion of the island for more than half a century.

The Spanish-American-Cuban War and Its Aftermath

What drew Spain and, later, American attention to Cuba was the value of its many excellent harbors. Santiago, Havana, and Guantanamo all afforded excellent anchorages for commerce and naval defense. Both were especially important to U.S. strategists intent on expanding American influence at the end of the 19th century. Protected harbors offered the prospect of improved trade in sugar, cotton, copper, oil, and other raw materials. Naval installations also promoted political influence and the protection of key strategic interests, such as the Panama Canal.

Guantanamo Bay figured importantly in this equation. By virtue of the 1903 Cuban-American Treaty, the United States obtained "complete jurisdiction and control" over the area. For the next half-century, the U.S. Navy maintained Guantanamo as a base and coaling facility. Cuba renewed the lease on the base in 1934, and American ownership of the harbor was not challenged until the Cuban revolution in 1959.

Revolution and the Cold War

Fidel Castro's successful revolution against the Fulgencio Batista regime permanently changed Cuba's relationship with the world. In one shocking moment, a reliable American proxy was gone. Perhaps more important, the Cuban Revolution legitimized the use of violence to redress the inequities of capitalism and American power abroad. Castro became an inspiration for a cohort of revolutionaries, the so-called Generation of '59 in Nicaragua, as well as other countries that sought to use the Cuban

model to win back sovereignty and social justice in what they believed was a historical turning point. To this end, they borrowed Castro's and Ernesto "Che" Guevara's approach to revolutionary war, a methodology that proved deceptively simple in concept. During the 1960s, Guevara argued that "popular forces" could prevail against an organized military opponent. Moreover, he believed that revolutionaries did not have to wait until political, economic, or military conditions were ideal to overthrow a regime. Both assumptions reflected a fundamental faith in the depths of popular revulsion for Western capitalism and a belief that political discipline would be adequate to shape revolution. Although history would prove these assumptions to be tragic mistakes, particularly for Guevara, contemporary conventional wisdom saw Cuba as only a starting point for a new order in Latin America.

What gave this assumption credence was Soviet sponsorship of Cuba. At the start of the 1960s, Moscow essentially underwrote the Cuban economy and provided Havana with massive military assistance. When Castro entered the Soviet sphere of influence, what had been a relationship defined by American hegemony took on all the worst connotations of Cold War conflict between two superpowers. This transition was clearly evident during the American-sponsored exile invasion at the Bay of Pigs in 1961 and the more dangerous Cuban Missile Crisis a year later.

America's long-term policy response to the new Soviet-Cuban axis later appeared as the Alliance for Progress, a U.S.-initiated assistance program built around the premise that stability and security would undercut support for radicalism in the hemisphere. Fearful that the communist "beachhead" in Cuba would spread, the John F. Kennedy administration and its successors invested enormous sums in economic development and military assistance. Ten years and billions of dollars later, the American-led effort was successful, but at the cost of militarizing the hemisphere. As the 1960s closed, military-led or -dominated governments became the rule rather than the exception in Latin America.

Blocked at home, Cuba expanded its support of revolutions abroad, particularly in Africa. In practice, Cuban military action evolved from providing revolutionary cadres, to fostering popular rebellion, to direct intervention by conventional units. During the 1970s and 1980s, Havana deployed as many as 75,000 troops to Angola and Ethiopia alone. The

Cuban military was rewarded for its efforts. In contrast to the U.S. experience in Vietnam, the FAR won the three wars—Angola (1975–1976), Ethiopia (1977–1978), and Angola (1987–1988)—that it fought in the Third World.

When Cold War tension returned in the 1980s, it seemed reasonable to conclude that Cuba was a danger by virtue of its own military power and utility as a Soviet proxy. The Ronald Reagan administration would stress both roles, especially with respect to Cuban influence in Central America. Successive administration intelligence estimates and diplomatic "white papers" emphasized Havana's hand in El Salvador and Nicaragua during the 1980s. Counterbalancing the Cuban threat became a primary justification for American support of Nicaraguan Contras and regional military intervention in countries such as Honduras and Grenada.

Cuba and the New World Order

The collapse of the Soviet Union in 1991 drastically changed Cuba's status versus the United States and the world. For Havana, the failure of Soviet communism translated into a dramatic decline in economic subsidies and military equipment. Consequently, the early 1990s witnessed a Cuban military that did not so much decline as plummet in size and capability. Between 1991 and 1995, the number of personnel under arms decreased from 297,000 to just 70,000. A general withdrawal of military forces abroad followed thereafter. The Cuban military presence in Africa and Latin America first dwindled and then vanished. Havana also retrenched its support for overseas revolutions. To Farabundo Martí National Liberation Front guerrillas in El Salvador who had enjoyed Cuban aid for decades, the Castro government announced in 1991 that its future solidarity would be limited "to the political level."

The U.S. approach to this new reality was less predictable. Rather than capitalize on the worldwide dissolution of communism, Washington, D.C., did not attempt to overthrow Castro at what seemed an opportune moment. Instead, the George H. W. Bush and Bill Clinton administrations indulged in attempts at confidence building, particularly through military cooperation. As a result, the Pentagon regularly notified the FAR of military exercises conducted at Guantanamo Bay. At sea, the two respective navies also began to coordinate operations around the island.

This policy proved especially useful in the early 1990s, when tens of thousands of Cubans and Haitians fled to the United States seeking economic and political sanctuary. By 1995, a deliberate effort to return refugees transformed Guantanamo Bay into a temporary holding area that eventually contained as many as 50,000 persons. Although Cuban citizens located in Guantanamo were eventually allowed entry into the United States, in a major policy reversal the Clinton administration announced that it would return future refugees back to the Cuban authorities.

Whatever positive steps occurred in the 1990s were later offset by military clashes at the end of the decade. Tension rose significantly in February 1996 when a Cuban jet fighter destroyed two civilian aircraft piloted by members of the exile group Brothers to the Rescue. Although the group had clearly violated Cuban airspace, the deaths of the crew members provoked worldwide protests and demonstrated the vulnerability of rapprochement. The September 2001 arrest of Ana Montes, a Cuban spy who had infiltrated the upper ranks of the U.S. Defense Intelligence Agency, was perhaps even more ominous, illustrating the fact that parts of the Cold War were not over.

Since the September 11, 2001, attacks on the United States, the so-called Global War on Terrorism has again altered U.S.-Cuban relations, particularly one key component of it. Guantanamo Bay underwent its most recent evolution from a refugee center to a prison for terrorists and terrorist suspects. Declassified documents have since revealed that the George W. Bush administration deliberately chose the base because officials believed that it would be outside the jurisdiction of American courts, an assumption that the U.S. Supreme Court proved false in June 2004.

For nearly a decade, Guantanamo has become synonymous with global criticism of U.S. counterterrorism policy. The Bush administration's claim that detainees could provide useful operational intelligence was counterbalanced by a losing war over public opinion. Not surprisingly, when the 2008 presidential campaign unfolded, the status of the detention facility became a major political issue. When Barack Obama ran for president, his promise to close the facility resonated with the view of the 58% of Americans polled by Angus Reid in May 2008, who said that Guantanamo had increased anti-American sentiment around the world.

Translating that campaign promise into action has proven more difficult for the Obama administration. As of this writing, the facility remains in operation.

Cuba in the 21st Century

As the U.S. Global War on Terrorism winds down, discussion has again returned to U.S.-Cuban relations and, more specifically, the future of the country after Castro. As the transition of official power to his brother Raul indicated, meaningful changes await Castro's death and a postcommunist Cuba. The real dilemma for policymakers is how best to ease this transition. Ironically, the answer may come from the Cuban military.

Twenty-first-century Cuba is a restive place. The population is tired of underdevelopment, corruption, and the seemingly impossible prospect of change. Massive layoffs from public sector jobs in September 2010 likely only compounded antigovernment sentiment.

As discontent grows, the government will probably revert to familiar form and use the formidable power of state coercion against its citizens. However, in this predictable act might lie a larger story. The Cuban security forces, particularly the military, retain a greater degree of cohesion than most other national institutions. Although reduced in size, the military remains well disciplined, trained, and reliable. Perhaps more important, the military is also one of the more respected elements in Cuban society. Like the Sandinista armed forces in Nicaragua, the Cuban military is largely untarnished by charges of corruption. Bolstered by public faith, it will likely have an important voice in shaping Cuba's future after Castro.

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See also Caribbean; Counterinsurgency; Guantanamo Bay; Guerrilla Warfare

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CULTURAL PROPERTY AND HERITAGE

Both cultural property and cultural heritage have a variety of legal definitions. Generally, however, cultural property, also known as tangible cultural heritage, is defined as movable or immovable property of great importance to the culture of people, such as works of art and monuments. Cultural property is afforded greater protection than other property. Article 27 of the 1907 Hague Convention Respecting the Laws and Customs of War on Land and Article 1 of the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict elucidate the main definitions of cultural property for military purposes.

The term *cultural heritage* is broader than *cultural property*, can be tangible or intangible, and is more commonly accepted today, especially in international circles, than is the more antiquated, traditional term *cultural property*. However, the term *cultural property* is still frequently used when discussing the 1954 Hague Convention and military usage and will be used as such in this entry.

Cultural property has special status and risk in armed conflict. The U.S. military is subject to multiple provisions that regulate the military's conduct toward cultural objects and edifices. These provisions have evolved over time in response to military developments to reduce harm toward cultural property in armed conflict. This entry describes U.S. military interaction with cultural property from the Civil War to the two Gulf Wars and examines the

impact of the Hague Conventions that pertain to cultural property.

Special Status of and Risk Toward Cultural Property

Cultural objects and edifices have special status so that they can be better protected against the risks inherent in armed conflicts. Cultural objects and structures have greater protection than other property for multiple reasons. First, each is unique: There is only one of its kind, and it cannot be replaced. Second, the value of cultural property is more than financial. Cultural objects and edifices can have cultural, historical, or religious significance to a group. This significance can result in emotional and psychological connections to the work, which can make it a target in armed conflicts. Furthermore, damage to the cultural property of one state is frequently viewed as harmful to the international community.

Cultural property is at risk in armed conflicts from looting, pillaging, and destruction. Cultural objects are susceptible to looting and pillaging because of their intrinsic value and potential for realizing cash on the black market. Cultural property is also at risk for destruction in armed conflicts because of the damaging nature of weapons used in the conflicts.

Moreover, in armed conflict, cultural property is in jeopardy of the enemy taking or harming the cultural objects or structures to punish the state or group with which it was affiliated. The cultural objects can be taken as trophies for the possessing state to flaunt. Cultural property can also be destroyed, seized, or modified to alter historical perception of the state or group affiliated with the cultural objects or structures. A conquering state or group can take or modify the cultural property of a vanquished state or group to emotionally and psychologically suppress the vanquished state or group and more easily integrate it into the conquering entity's culture.

U.S. Military Interaction With Cultural Property

Civil War

Lieber Code

President Abraham Lincoln had Francis Lieber, professor at Columbia University, draft a legal

military code for the Union Army to regulate conduct in war. In 1863, Lieber released the Instructions for the Government of Armies of the United States in the Field (the “Lieber Code”). Key provisions in this code that address cultural heritage include Articles 31, 34, 35, and 36.

According to Article 31, the conquering state could seize public movable property and revenue from the opposing state’s real public property. Under Article 34, property belonging to entities that were devoted to charity or knowledge, including churches and museums, were not considered public property under Article 31. Accordingly, these movable properties and revenue from real properties were not subject to seizure even if such property belonged to the state. However, the property could be taxed or used if needed by public service. Under Article 35, art was to be secured against all avoidable harm. According to Article 36, the conquering state could remove artworks belonging to the opposing party if the works could be removed without injury. The art was not to be harmed, sold, given away, or privately appropriated. Title was to be determined by the subsequent peace treaty.

The military necessity exception limited the legal requirement not to harm cultural property. The military necessity exception provided flexibility to accommodate the practicalities of armed conflict and was applied in a multitude of situations when the necessity of the situation permitted a military actor to proceed without fault. Article 14 of the Lieber Code defined the military necessity exception as “the necessity of those measures which are indispensable for securing the ends of the war, and which are lawful according to the modern law and usages of war.” Article 15 of the Lieber Code noted that military necessity permitted destruction of enemy property.

March to the Sea and the Carolinas Campaign

Much cultural heritage was destroyed in the Civil War, particularly in the South. For example, in 1864, General William T. Sherman commenced his “March to the Sea,” which left a swath of destruction that still leaves a void in the cultural landscape of the southern United States. A Union Army general in the Civil War, Sherman seized and burned Atlanta before commencing the 300-mile march to Savannah, Georgia, and then the Carolinas. Sherman led more

than 60,000 soldiers who liberally foraged, burned, and destroyed property and objects in the troops’ path pursuant to his methods of total war, thereby devastating the cultural landscape. A plethora of southern cultural heritage was obliterated by these troops during his military campaigns.

1899 Hague Convention With Respect to the Laws and Customs of War on Land

The 1899 Hague Convention With Respect to the Laws and Customs of War on Land is a set of provisions that regulate war on land between belligerents. The United States signed the 1899 Hague Convention on July 29, 1899, and the Senate ratified it on April 9, 1902. Key provisions relating to cultural heritage include Articles 23, 27, 28, 47, and 56.

Under Article 23, seizure or destruction of enemy property is not permitted unless necessity requires it. Under Article 27, religious and art-based structures are not to be harmed in sieges and bombardments to the extent that is feasible unless they are being misused for military purposes. These structures are to be visibly marked and the enemy notified. Pillage is prohibited during hostilities under Article 28 and when the military has authority over the territory under Article 47. Pursuant to Article 56, state religious, educational, and art properties are treated as private property, and no such properties, historical monuments, or artworks are to be seized or destroyed when the military has authority over the territory.

1907 Hague Convention Respecting Laws and Customs of War on Land

The 1907 Hague Convention Respecting the Laws and Customs of War on Land provides protection for broad categories of cultural heritage. The United States signed the 1907 Hague Convention on October 18, 1907, and the Senate ratified the 1907 Hague Convention on November 27, 1909. Key provisions relating to cultural heritage include Articles 27 and 56.

Under Article 27 of the 1907 Hague Convention, parties to the convention are not to harm historic monuments or buildings devoted to art or religion to the extent that is feasible. The structures are to be marked and the opposition notified before the armed conflict. Moreover, under Article 56 of the 1907 Hague Convention, state property dedicated

to religion or art is accorded the same protection as private property.

Two primary exceptions limit the legal requirement not to harm historic monuments or buildings devoted to art or religion. These exceptions are the military necessity exception and the misuse of cultural property exception. Article 23(g) of the 1907 Hague Convention elucidates the military necessity exception noting that, while it is improper to take or destroy the opposition's property, infringement on property is permitted if it is "imperatively demanded by the necessities of war."

Under the misuse of cultural property exception, protection afforded under Article 27 is removed if the structure is used for military purposes.

Treaty on the Protection of Artistic and Scientific Institutions and Historic Monuments

The Treaty on the Protection of Artistic and Scientific Institutions and Historic Monuments ("Roerich Pact" or "Washington Pact") provides for marking and protection of immovable cultural heritage in the Americas. The United States signed the Roerich Pact on April 15, 1935, and the Senate ratified the Roerich Pact on July 13, 1935. Nine other countries are party to the Roerich Pact. These countries include Brazil, Chile, Colombia, Cuba, the Dominican Republic, El Salvador, Guatemala, Mexico, and Venezuela. The purpose of the Roerich Pact is to promulgate a flag that demarcates immovable cultural property to be respected and protected during peace and war. Under Article 1, protected works include "historic monuments, museums, scientific, artistic, educational and cultural institutions" as well as the personnel of the protected works. The designated flag consists of a white background with a triple red sphere circumscribed by a red circle. The misuse exception removes this protection if the edifices are used for military purposes.

World War II

A plethora of cultural heritage was misappropriated, damaged, and destroyed in Europe during World War II. Many cultural objects still have not been returned to the original owners or heirs. To ameliorate the harm to cultural heritage, the military worked with museum and art history professionals to develop a list of sites that were not to be harmed if possible and secured artworks as the military forces

advanced into an area. This collaborative group was called the Monuments, Fine Arts and Archives.

States drafted the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict as a result of the large-scale misappropriation of and injury to cultural heritage. While the United States signed the 1954 Hague Convention on April 14, 1954, the Senate did not ratify the convention until March 13, 2009.

There are two protocols to the 1954 Hague Convention. The First Protocol to the Convention, which addresses portable cultural property, was drafted in 1954. The Second Protocol, which was drafted in 1999, responded to the international community's experiences with and shortcomings of the 1954 Hague Convention. The United States has not signed or ratified either protocol at this time.

Gulf Wars

While steps were taken to protect cultural heritage during the Iraq War in 2003, cultural objects were misappropriated and harmed during the armed conflict. For example, the U.S. military compiled a no-strike list in conjunction with museum and art history professionals to avoid harming cultural heritage. However, military bases were constructed on the historic sites of Ur, Babylon, and Samarra, damaging the sites and resulting in international criticism. Moreover, museums, archives, and libraries were looted and destroyed by third parties in Iraq, which prompted a public outcry. The most notorious of these was the Iraq Museum in Baghdad, which housed thousands of cultural objects. The U.S. military investigated and sought return of cultural objects that were looted. Many objects are still missing.

The public condemnation of the construction of military bases on the historic sites and looting of cultural objects led to an evaluation of the U.S. military's practices toward cultural heritage and several calls for the United States to ratify the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict.

1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict

The 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict is

one of the main conventions regulating the U.S. military's interactions with cultural property. The Senate ratified the 1954 Hague Convention on March 13, 2009. The 1954 Hague Convention has a preamble, 40 articles, and Regulations for the Execution of the Convention for the Protection of Cultural Property in the Event of Armed Conflict. Within the 1954 Hague Convention, Chapter 1, Articles 1–7, explains the regime for the general protection of cultural property. Chapter 2, Articles 8–11, outlines the elevated protections and requirements for a small number of specially protected cultural properties. Chapter 3, Articles 12–14, details the transport of cultural property. Chapter 4, Article 15, discusses personnel who protect cultural property. Chapter 5, Articles 16 and 17, describes the emblem that should mark the cultural property, and thereby notify opposing military forces of the protected status of cultural property, and the use of the emblem. Chapter 6, Articles 18 and 19, outlines the scope of the application of the Hague Convention. Chapter 7, Articles 20–28, explains the execution of the Hague Convention. The final provisions, Articles 29–40, discuss practical matters such as the signing and ratification of the 1954 Hague Convention and its relation to previous conventions. The regulations primarily deal with the procedures used to apply the 1954 Hague Convention.

The designation of cultural property under Article 1 of the 1954 Hague Convention is limited to property “of great importance to the cultural heritage of every people” and the buildings that contain such objects. This is the threshold for the cultural property to receive protection under the 1954 Hague Convention. The 1954 Hague Convention applies before an armed conflict commences, during an armed conflict, and during partial or total occupation under Article 18.

Parties have legal requirements before an armed conflict arises under the 1954 Hague Convention. Under Article 7, the future invading state and future invaded state have legal requirements to instill respect for cultural property and provide instructions to ensure compliance with the 1954 Hague Convention before an armed conflict. Furthermore, under Article 3, the future invaded state has an additional legal requirement to prepare for the protection of the cultural property within the state against foreseeable harm. Cultural property is to bear a distinctive emblem, which consists of blue and white

triangles and squares. However, a state's failure to safeguard cultural property against foreseeable effects of armed conflict does not relieve the invading state of the duty to respect cultural property.

During the armed conflict, the invading state and the invaded state have legal requirements toward cultural property to not harm cultural property, not use cultural property in a way that would expose it to harm, and stop state actors, and possibly third parties, from stealing, misappropriating, pillaging, and vandalizing cultural property unless military necessity exists or, potentially, if the opposition misuses the cultural property. Under Article 4(1), the 1954 Hague Convention requires that parties respect cultural property by not harming the property. The U.S. *Law of War Deskbook* reiterates the obligation to not attack cultural property. Cultural property receives additional, special protection if it is listed on the International Register, which is maintained by the United Nations Educational, Scientific, and Cultural Organization.

The 1954 Hague Convention also extends a legal requirement to prevent and stop theft and harm to cultural property under Article 4(3), which states that parties will “undertake to prohibit, prevent and, if necessary, put a stop to any form of theft, pillage or misappropriation of, and any acts of vandalism directed against, cultural property.” Discrepancies in views of whether states have a legal requirement to protect other states' cultural property from third parties under the 1954 Hague Convention exist. Article 4(3) does not clarify who the parties must stop from stealing, pillaging, misappropriating, and vandalizing cultural property or when the legal requirements apply. Some argue that states must prevent their own soldiers from misappropriating or damaging cultural property, while others argue that states must prevent all persons, including third parties, from misappropriating or harming cultural property.

One exception to the duty not to harm cultural property is the military necessity exception. Under Article 4(2) of the 1954 Hague Convention “any use” that would harm the cultural property is permitted if required by military necessity. There is a higher burden to invoke military necessity for specially protected cultural property under Article 11.

A second, potential exception that limits the legal requirement not to harm cultural property is the misuse of cultural property exception. Misuse of cultural

property can include using the cultural property as a shield or using it for military purposes. However, the U.S. military has previously balanced the value of destruction of legitimate targets against potential damage to cultural property that was being misused.

All parties have legal requirements toward cultural property during occupation under the 1954 Hague Convention. The occupying state has a legal requirement to support the occupied state in safeguarding and preserving cultural property to the extent feasible and to preserve cultural property to the extent feasible if the competent national authorities cannot do so under Article 5. The states might also have a legal requirement to comply with Article 4 during occupation. Under Article 4, the states would have legal requirements regarding cultural property during occupation to not harm cultural property, not use cultural property in a way that would expose it to harm, and stop state actors, and possibly third parties, from stealing, misappropriating, pillaging, and vandalizing cultural property.

Occupied states also have legal requirements toward cultural property during occupation. Under Article 5(1) of the 1954 Hague Convention, the occupied state has the primary duty to protect and preserve its cultural property. Article 5(2) mitigates the difficulty of this legal requirement by stating that the occupying state has a duty to preserve cultural property to the extent feasible if the occupied state is unable to preserve its cultural property.

Conclusion

The definition of cultural heritage and cultural property, and the military's obligation toward them continues to evolve as the world grows more interconnected and the harm to one state's or group's cultural heritage reverberates through the international community.

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See also Civil War, American; Europe; Iraq War (2003); Persian Gulf War; Public Opinion on War and the Military; Red Cross, International Committee of; Total War; Venezuela; World War II

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CULTURE, MILITARY

Culture is most easily defined as the values, behaviors, norms, and artifacts that define how a social group interacts with the world. Like all groups, the military developed its own culture to achieve its mission. The armed forces of the United States share many elements of military culture, including basic training, hierarchical organizations, and promotion based on merit. The unique missions and orientations of each branch of the armed forces led each to develop its own culture that includes its mission, history, and traditions—its sense of self. The U.S. Air Force (USAF), U.S. Army, U.S. Marine Corps, and U.S. Navy (USN) have therefore developed unique cultures based on how they experience war, and that is the focus of this entry.

Elements and Tenets of Military Culture

Don Snider identifies four elements of military culture based on his understanding that fighting wars defines the beliefs, values, and behaviors that combine to form military culture. The first element of military culture is discipline, which encompasses behavior both in and out of uniform. Discipline allows individuals and a unit to function in the chaos

of combat, and during peacetime it helps ensure military readiness. A professional ethos forms the second element of military culture. In the United States, this ethos is formed not only by the dictates of the profession of arms but also by American ideals of liberty and equality, military subordination to civilian authority, and emphasis on national defense rather than aggressive war.

The final two elements of military culture are (1) tradition, in the form of ceremonies and etiquette, and (2) cohesion and esprit de corps. Ceremonies and etiquette, such as salutes, uniforms and insignia, induction, promotion, and retirement ceremonies, work to control anxiety by providing the outward semblance of order and solidarity among service members. These ceremonial components provide the outward symbols that enhance cohesion and esprit de corps. Cohesion is the connection individual soldiers feel to the members of their immediate unit, while esprit de corps refers to the larger institution the unit belongs to. Cohesion and esprit de corps are important indicators of morale and the soldiers' willingness to fight and their ability to face adversity.

While each branch of military service has its own unique culture, the four major services all subscribe to several overarching tenets. All of the services use basic training to indoctrinate new members with their service culture and impart basic skills, have a hierarchical organization, are oriented toward youth through a personnel system that limits the maximum age of service members, and forces them out of the service if they don't receive regular promotions. Members of combat specialties dominate all of the services, each of which aspires to be a meritocracy. Promotions in American military organizations are handled through a central system of impartial boards working from a fixed set of objective and subjective criteria, including the numbers of positions available at each grade.

U.S. Air Force Culture

As the youngest of the four services, the culture of the USAF bears the marks of both its arena of combat and the battles its leaders waged to become an independent service. Technology is the most important object in air force culture. Indeed, its pilots identify more readily with the specific type of aircraft they fly rather than the service itself. USAF leaders will accept dramatic reductions to the number of aircraft

wings, bases, and personnel to ensure that their aircraft are the most advanced in the world. The service organizes itself into communities grouped around different platforms: the bomber community, the "fighter mafia," the strategic transport, and the missile force. While the bomber community was dominant in the aftermath of World War II, tactical fighter organizations now dominate the air force. Twenty-first-century global deployments have increased the status of the transport aircraft; the end of the Cold War had reduced the status of the missile force.

The air force's fight during the 1930s and 1940s to become an independent service continues to color its relationships with other services. Its operational foundation is that air superiority is a precondition for all other activities in modern warfare. More than this, the quest for institutional independence drove the air force to base all of its arguments for strategy based on the doctrine of strategic bombardment. While evidence from Europe showed that bombardment contributed to the Allied victory over Germany during World War II with attacks on transportation and fuel complexes, it did not live up to the grandiose prewar claims of Brigadier General Billy Mitchell. The development of the atomic bomb in 1945 appeared to support air force doctrine, even if strategic bombing was not decisive during the Korean War. The air force's early domination of nuclear weapons delivery allowed it to argue that it deserved the largest share of defense spending and that the other services were no longer needed for national defense.

U.S. Army Culture

Unlike its younger sibling, the army focuses less on technology than on people. Where the air force obsesses about technological superiority, the army defines itself in terms of the number of soldiers it fields and on their skills in the art of war. Unlike the air force or the navy, the army is used to fluctuations in its size, a reflection of the small professional army of the 19th and early 20th centuries that fought irregular campaigns and trained expeditionary forces as needed. Like the air force, the army creates subdivisions based on branch of service. Soldiers identify with their branch—infantry, artillery, armor, combat engineers, and so on—but rather than creating a hierarchy based on the perception of which branch

is most important, the army's culture recognizes that to fulfill its mission, all of its branches are necessary. Although members who served in the combat arms dominate the highest levels of leadership, even the support branches are vital to the army's function. The lack of hierarchy among branches is illustrated by the army practice of general officers removing their branch insignia when promoted from colonel.

The army's ideals are those of selfless service to the nation. Rather than a specific technology or doctrine, the army most closely identifies itself with its long traditions and roots in the citizenry of the United States. Because it relies on the USAF and USN for transportation and support to fulfill its missions, the army is the most comfortable of all the services in joint operations.

U.S. Navy Culture

The USN shares the USAF's affinity for technology because merely surviving at sea requires sailors to rely on their ships. Unlike the air force, however, the navy's culture focuses on tradition and independence. For most of its long history, the USN operated out of communication with civilian or military leaders when it set out to complete its mission. Before the advent of satellite communications, once a ship sailed beyond the horizon, it was beyond help or recall until making landfall once more. This meant that regardless of rank, the captain of a ship has a far higher level of personal authority than the commander of an equivalently sized unit in the other services.

Of all the services, the USN is the most concerned with its size as measured in the size of its fleet and the number of capital ships that it contains. Although the nature of the capital ship has changed since World War II from onboard aircraft carriers or submarines instead of battleships, the navy's requirement for the number of capital ships remained static from the 1940s through 1990. Despite measuring the navy itself in terms of vessels, members of the navy are more likely to identify with the navy as an institution than with a specific ship or type of ship, as is the case with air force pilots.

Like the army and the air force, the navy has institutional subcultures based on officers' specialties—with submarine, surface warfare, and aviation the most dominant. These three specialties form the basis for a finely delimited hierarchy within the USN. Pecking orders within specialties are carefully

defined. Within the aviation community, precedence is given to carrier pilots over land-based pilots and to fighter pilots over the pilots of all other aircraft. Similarly, officers serving on attack submarines that hunt enemy submarines or ships rank above officers of ballistic missile submarines in the hierarchy.

The navy is less reliant on formal doctrine than the army or the air force. Roger W. Barnett argues that the constantly changing nature of ocean conditions and the greatly varied locales, potential opponents, and missions that the navy must allow for cause the USN to prefer to base its methods of fighting on the context in which it operates. This separates it from the air force's emphasis on prescribed methods for fighting wars, such as an emphasis on strategic bombing or specific doctrines like the U.S. Army's AirLand Battle doctrine developed for use in Central Europe from 1976 to 1990.

The historian Alfred Thayer Mahan's (1840–1914) strategic philosophy argued that navies must control the seas to pursue national objectives ranging from commerce to defense and diplomacy. To do this, Mahan argued that the proper objective of the navy was enemy fleets. After defeating the enemy's fleets, the USN could attack the enemy's commerce and coastlines, and the United States could deploy troops with impunity. Unified fleets of capital ships were necessary to accomplish the destruction of the enemy, as was control of coaling stations and key geographic features.

Although the USN developed submarines for commerce raiding after World War I, it remained wedded to the Mahanian strategy, which continued to influence naval policy, through the end of World War II. The postwar era witnessed radical changes in navy philosophy regarding capital ships. Due to the flexibility and range of carrier aviation, aircraft carriers emerged from World War II as the preeminent capital ships. The USN's Carrier Strike Groups not only provide control of the seas in the Mahanian sense but also provide the United States with power project capability to influence events far from land using aircraft and cruise missiles. During the Cold War, ballistic missile submarines provided nuclear deterrence and strike capabilities as part of the nuclear triad, which combined the use of strategic bombers, submarine-launched ballistic missiles, and land-based intercontinental ballistic missiles to enable nuclear forces to survive a surprise attack. In the 21st century, the USN entered into the arena of

homeland security as part of national missile defense programs and coastal surveillance duties.

U.S. Marine Corps Culture

Of all of the branches of the U.S. military, the U.S. Marine Corps has the strongest and most distinctive culture. Along with the corps' small size, the marines cherish their sense of uniqueness and their faith in each other, the corps, and the nation. The Marine Corps's motto *Semper Fidelis*, "always faithful," exemplifies this *mentalité* of cohesion, family, and service. Further enhancing this image of group cohesion are the prescriptions that "every Marine a rifleman," and that "once a Marine, always a Marine."

Before World War II, the Marine Corps was an effective light infantry force that fought America's small wars from North Africa to South America. Two realities combined to create the Marine Corps's postwar structure. Like the USAF, the Marine Corps continually feels the need to justify its existence due to the army's occasional claim that it and the Marine Corps serve the same functions. In response, the Marine Corps positions itself as a more elite fighting force than the army, with better personnel. In effect, the marines' response to the army's encroachment was to assert that they were a superior option. The result is that the Marine Corps defines itself in terms of its relationship with the U.S. Army.

World War II also provided the Marine Corps a specific doctrine for fighting. The Navy-Marine Corps joint doctrine of amphibious warfare shaped U.S. strategy during the Central Pacific campaign, providing the Marine Corps key elements of its culture. During this campaign, marine leaders developed a preference for short, aggressive battles. While some engagements required frontal assaults, marine officers like Colonel Lewis Burwell "Chesty" Puller preferred the momentum offered by close fighting along a defined front, even when able to attack a flank, as in the Battle of Peleliu.

The modern Marine Corps remains small, never more than two corps in size, and organized into three Marine Expeditionary Forces that each include infantry, support, and aviation elements. Unlike the army, the Marine Corps operates its own fixed-wing aircraft for close air support, providing it more flexibility than the army has. Its small size and deployment patterns, as well as economic costs, led the Marine Corps to rely on younger personnel who

spend less time in uniform than the other services. Half of all marines are on their first deployment. The Marine Corps also has fewer female personnel than any of the other services.

Joint Operations and Cooperation

While the services' individual cultures are critical to their success, they can also be obstacles to efficiency and operational effectiveness. With few notable exceptions such as U.S. Army-Army Air Forces combined arms operations in North Africa, and Army Air Forces use of skip bombing and troop transport in the Pacific during World War II, the services tended to fight their wars without cooperation with other services. During World War II and the Korean War, the U.S. Army complained that close air support was not a priority for airmen, leading air force leaders to argue during the Korean War that the army was better off relying on field artillery for support. These issues of cooperation evolved out of the services' parochialism regarding others' needs and missions.

The Vietnam War witnessed a renaissance of close air support coordination between the army and the air force. Disagreements over centralized control of aviation assets continued, but soldiers and marines were happy with the quality and quantity of the support they received. The successful coordination between the services in Vietnam was not the result of a change in philosophy but was the result of the nature of the war, the large numbers of aircraft in the theater, and high expectation of air superiority in the theater. Service parochialism continued to hamper interservice cooperation outside of Southeast Asia.

The failure of Operation Eagle Claw, the disastrous attempt in April 1980 to rescue hostages held in the American embassy in Tehran, Iran, and lack of coordination among the services during the invasion of Grenada, led Congress to reorganize the Department of Defense with the Goldwater-Nichols Department of Defense Reorganization Act of 1986. Interservice rivalry during Operation Eagle Claw led to the development of an excessively complex plan using the elements of the army, air force, and navy rather than relying on a single service to rescue the hostages. The desire to include the three largest services led to the use of USN RH-53D helicopters incapable of air-to-air refueling rather than USAF HH-3E special operations helicopters, which may have contributed to the failure of the mission.

The goal of the Goldwater-Nichols Act was to strengthen military advice from the military to civilian leaders, provide combatant commanders the authority to achieve their missions, and increase cooperation between the services. The earliest cultural changes resulting from the newly mandated emphasis on jointness occurred in the Joint Chiefs of Staff.

The Goldwater-Nichols Act reorganized the Joint Chiefs of Staff by designating the chairman the principal military adviser to the president and the secretary of defense. While the chairman had to notify the civilian leadership of dissenting opinions from the service chiefs of staff, the effect was to provide unified advice and planning for the Department of Defense. The Goldwater-Nichols Act removed the chiefs from direct operational authority, reorganizing the chain of command so that regional combatant commanders (formerly commanders in chief, CINCs) reported directly to the secretary of defense. This gave the combatant commanders greater authority to plan and conduct operations. Despite these changes, jointness had little effect on service culture for the first 16 years after passage of the Goldwater-Nichols Act. Service parochialism hampered operational planning and effectiveness during Operation Desert Storm (1991) and Operation Anaconda (2002).

Designed to find and capture members of al Qaeda's leadership in the mountainous Shahi Kot valley of eastern Afghanistan, Operation Anaconda required close cooperation between the army, air force, and navy to provide intelligence and close air support for the U.S. Army and its allies in the new Afghan army. Lack of cultural awareness on the part of the commander of the ground forces, Major General Franklin Hagenbeck, and the commanders of the air force and navy leadership diminished the effectiveness of the air support available and the quality of the intelligence gathered. Including the air force and the navy earlier in the planning process likely would have provided more accurate estimates of enemy strength, which at approximately 1,000 men was significantly more than expected.

The flaws in joint planning and operations evident in Operation Anaconda illustrated a need for improvement in joint planning before the invasion of Iraq. Preparation for Operation Iraqi Freedom included the appointment of an air liaison to the land component commander, joint training and

rehearsals for operations, and an emphasis on the air force's dedicated air-ground team. Of all the services, the USAF's culture has changed the most because of jointness since 2002. The realities of fighting the insurgency in Iraq led air force culture to change for Operation Iraqi Freedom as it took on greater infrastructure support, base security, and extensive ground support roles. The unpredictability of insurgent warfare forced airmen to become more familiar with ground combat, develop self-defense skills, and increase their physical fitness.

Of all the services, the USN has lagged the most in embracing cultural changes required by joint operations due to its long history of operating in an environment requiring independent operation. The navy operated jointly only when close to land or supporting amphibious operations. The navy actively worked to defeat the passage of the Goldwater-Nichols Act, and for the next 20 years, the navy continued to favor navy staff and command assignments over professional military education and joint-duty assignments. In 2007, Admiral Mike Mullen, chief of naval operations, argued that the navy needed to strive to change its culture to value jointness.

The 2005 Base Realignment and Closure plan exposes additional conflicts between service cultures under the guise of efficiency and jointness. The law created 12 joint bases, with each service giving up its facilities at those locations to the managing service. The USAF has balked at giving up control of facilities to the army and the navy, which traditionally cut spending on base maintenance and welfare programs when the budget is needed elsewhere. Air force leaders worry that runways and housing needed to fulfill their mission will be neglected at joint bases in Hawaii, Guam, and Washington. The services also worried that joint bases would erode service cultures.

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See also Air Force, U.S.; Army, U.S.; Customs and Traditions; Mahan, Alfred Thayer; Marine Corps, U.S.; Navy, U.S.; Professionalism; Warrior Culture

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CUSTOMS AND TRADITIONS

Military customs and traditions are an integral part of the armed forces, used to reinforce the institutionalized values instilled through set standards and routines. These customs and traditions have developed over time and differ slightly between branches, units, and training. For the military, customs are established practices, in essence, common law for official behavior both in and out of uniform; traditions are ingrained actions and histories that work to preserve legacy and values of each branch. This entry discusses customs and traditions specific to

and in common with the five branches of the U.S. armed forces.

The scope of customs and traditions can be extremely expansive, including, but not limited to salutes, designated symbols for rank, awards for action, daily procedures, the process for formal events, rules for conduct, and so on. Most of these customs and traditions are deeply rooted in American military history and aim to pay deference to those who fought in previous wars. Each of the branches of the military has a different set of customs and traditions, with various causes, all of which are constitutional to that designated branch, be it army, navy, Marine Corps, air force, or Coast Guard.

In recent years, some customs and traditions have come under public scrutiny in areas of service, including training and formal education at military schools like West Point and The Citadel. The bulk of these controversies stem from the implications customs and traditions have on the gender and sexual orientation of service members. As the military has accepted women and minorities into service, and the country has entered into an era of heightened national security and evolving military strategy, customs and traditions have started to adapt.

Army

As the largest and oldest branch of the U.S. armed forces, the U.S. Army has a host of customs and traditions that date back even before its official founding in 1775. The army uses seven core values as the tenets for duty and action of soldiers, both on and off duty: (1) loyalty, (2) duty, (3) respect, (4) selfless service, (5) honor, (6) integrity, and (7) personal courage (creating the acronym LDRSHIP).

In terms of army customs, these make up the common law and practices carried out by each soldier. Examples include the following: (a) never criticize the army or a leader in public, (b) do not jump the chain of command, and (c) never intentionally avoid giving a hand salute. These customs extend into military courtesies, which involve the finite details of how and when to salute, what salute to offer, and similar customs that showcase respect between ranks. To understand this aspect of army customs, each soldier must learn to identify rank, report to an officer, and react appropriately to an approaching officer or noncommissioned officer, to

passing colors, and to specific national and military music.

Army traditions are twofold; some are designated for all service members, while others are unit or squadron specific like colored berets and official mottoes or mascots. For the army, the servicewide traditions have become incredibly important in the past century, notably with the implementation of the encompassing army flag and streamers in 1956. Army traditions are generally physical symbols, like the morning bugle call and uniform colors, that stand as a testament to the legacy of land-based military operations continually used both during wartime and peace.

Another army tradition is the use of the word *hooah*, a battle cry most often used as a positive response that can follow almost any statement. It is notably cried after completing the Soldier's Creed (see below for text). The term has been translated into similar words and uses in other branches of the military. The "hooah" form is also used by the air force.

The army, like all branches of the military, stresses consistent conduct and model behavior; in the event that a soldier acts outside select customs and traditions, he or she may be subject to punishment. Failure to abide by more stringent army customs and traditions, like recognizing one's superiors or disgracing an army uniform, can lead to disciplinary action or an official censure.

Navy

Similarly, the customs and traditions of the U.S. Navy are deeply rooted in the branch's storied legacy, which also dates back to the mid-1770s. While the navy lacks some of the formal traditions common in other branches, sailors still practice a number of customs related to their posts, uniforms, and naming conventions. The most visually recognizable of these is the traditional sailor dress, always in navy blue and/or white, with varying degrees of accents for more formal uniformed occasions. Additionally, the navy has strict grooming traditions that regulate the length of hair for men and approved styles for women; these standards prohibit any and all body piercings, multicolored hair, and tattoos on the face, neck, and hands.

Many of the formal naval customs are similar to those of the army, mainly involving the salute and

rules surrounding usage. One such custom is the relieving of watch wherein the relieving officer turns to the sailor on watch and says, "I am ready to relieve you, sir" followed by a salute. In response, the other sailor announces, "I am ready to be relieved" and salutes. This exchange is finished up with "I relieve you, sir" with another salute and finally, "I stand relieved." Failure to follow the salute customs will result in individual counsel and the request for an official salute to be completed. Naval customs also dictate the order in which vessels and vehicles are boarded and unboarded by officers, designated by rank and enlisted sailors.

Naval traditions are equally as detailed in execution, particularly in reference to honors, colors, flags, and dressing for the ship. For example, one such naval tradition, still in practice, celebrates George Washington's birthday every February 22, marked by a full dress day for each vessel, displaying a rainbow of signal flags in addition to a 21-gun salute at noon, tolling the bell, a full band, and half-masting the national ensign.

Despite being a smaller presence in current military affairs, the navy has continued to pay rigorous attention to set customs and traditions. Drawing on a deep historical connection, most naval customs and traditions have stayed consistent with little adaptation or evolution needed.

Marine Corps

Like the army and navy, the U.S. Marine Corps was also originally incorporated in 1775 as the Continental Marines. From its initial inception to the present time, the Marine Corps developed a long lineage of customs and traditions, including the celebration of the branch's birthday every November 10. Much like the naval tradition observing Washington's birthday, the marines have marked the date every year since 1921 with a formal ball complete with cake-cutting ceremony. This time-honored tradition also includes the birthday message from the 13th commandant, John A. LeJeune; a birthday message from the current commandant; and the presentation of the first two pieces of cake to the oldest and youngest marines present at the event.

Similar to the other armed forces, the marines use their customs and traditions to reinforce their unique identity compared with the procedural nature of

the army. The most recognizable symbols of this commitment to the corps are the branch's flag, seal, and slogan *Semper Fidelis*, informally shortened to "Semper Fi," or in translation "Always Faithful." The slogan is also the name of the Corps' official march, written in 1889, 6 years after the marines adopted the *Semper Fidelis* slogan.

The Marine Corps also continues the traditional use of nautical terms to describe daily activities, even when onshore. "Gangway" is exclaimed to clear the way for an officer, and marines often say "Aye, aye, sir" to acknowledge verbal orders. To answer a question directly, a marine must respond, "Sir, yes, sir." Additionally, the Marine Corps puts strong emphasis on the proper use of salutes, similar to the other branches of the military.

In comparing the branches, the customs and traditions of the Marine Corps appear to be the most numerous, drawing from a variety of sources both historical and more modern. A prime example of this is Fleet Week in New York City, which began in 1984 for the purpose of paying homage to the efforts of the marines and navy through a series of military demonstrations, parades, lectures, competitions, ceremonies, and related celebrations that invite civilians to witness military life.

Air Force

Primarily composed of pilots, the U.S. Air Force tends to be the most individual-centric of the military branches, reflected in its customs and traditions. The collective U.S. Air Force, as it is known today, was formally established in 1947, making it the newest branch, present in conflicts from the Korean War to the engagements in Iraq and Afghanistan.

In its short history, the air force has instituted a number of slogans and symbols. Additionally, this branch bases its conduct on three core values: (1) integrity first, (2) service before self, and (3) excellence in all we do. In 2007, the air force introduced the Airman's Creed to explain and summarize the branch's culture and ethos, similar to the established creeds of the other, older military branches. The creed consists of four stanzas that spell out the promise of each air force member, defining his or her person and intentions.

The bulk of air force customs and traditions are rooted in proper behavior and etiquette. A number of these spell out the proper use of salutes. This

includes not saluting if your arms are full but instead substituting a verbal greeting; however, it is suggested to always carry items with just the left arm so the right remains free to salute. The air force also stresses the idea that rank has its privileges (abbreviated as RHIP), meant to be an inspiration for all serving members who are to show respect and deference at all times.

In terms of the greater armed forces, the U.S. Air Force customs and traditions are incredibly similar to the army, navy, and marines. There are few distinguishing customs or traditions that set this branch apart; this is most likely the result of the short history associated with the air force, modeled after the older branches and influenced by the branch's unique mission "To fly, fight and win . . . in air, space and cyberspace."

Coast Guard

The Coast Guard got its start in 1790, founded by Alexander Hamilton. Like other armed forces, the Coast Guard functions around a set of core values that include honor, respect, and devotion to duty. The Guard operates under the motto *Semper Paratus* or "Always Ready"; this is also the branch's official musical march. Similarly, the Coast Guard has both an official ethos and a creed. The Guardian Ethos was introduced in 2008; it defines the Guard's mission and contract with the nation. The creed dates back to the mid-1930s and describes the duty of each member.

The Coast Guard offers a number of distinctions and awards, each relating back to the branch's connection to the sea and lengthy history. Officers and enlisted persons with the earliest date of qualification as a cutterman, with a minimum of 10 years of service (it takes 5 years to be deemed a cutterman), earn the honor of the Ancient Mariner. In an official ceremony, the honoree wears a traditional Ancient Mariner outfit complete with gold braided shoulder epaulets while holding a nautical long glass and log book. Similar awards include the Ancient Albatross, a plaque given to the longest serving, active-duty Coast Guard aviator.

Another Coast Guard tradition is the christening of vessels. While this custom is not Coast Guard specific, it has long been associated with the branch and continues in the present times. The christening occurs as a brand new vessel is launched, such as a

ship into the water; at that time, an officer ceremoniously breaks a bottle of champagne over the bow. This tradition dates back to early civilization when christenings would be performed to appease the gods. Today, this commissioning ceremony officially recognizes a vessel in the fleet.

The Coast Guard has a formal tradition known as “Dining In” or “Mess Night.” Again, this event dates way back, historically associated with the Romans and Vikings, who celebrated their victories with banquets. The current Coast Guard version is a formal event that honors the service of officers, respectfully thanking departing officers and welcoming the newly appointed ones. The banquet is a large dinner that dictates wearing evening dress uniforms with medals. The event is as much a ceremony as it is a social function that promotes relationships between serving members. The navy and marines host similar “Mess Night” events. Both “Dining In” and “Mess Night” are military exclusive events; however, there exists “Dining Out” and “Mess Out,” which invites military and civilian guests.

For a large portion of Coast Guard vessels, animals have become a tradition, serving as mascots and companions. There is some evidence that indicates cats were the first Coast Guard pets, brought on board to help control rat populations; however, at some point in time, this practice switched to dogs, though some ships have kept parrots and other animals. These animal mascots often not only serve a purpose aboard a vessel but also provide entertainment and friendship on long voyages.

As far as the armed forces go, the Coast Guard’s customs and traditions differ from the other branches. The deep core values are there, but in practice, the Coast Guard has a few more relaxed customs that enrich the experience without detracting from stringent organizational guidelines and etiquette.

Current State of Customs and Traditions

Given the long history of each branch of the armed forces, most customs and traditions have remained untouched over time. Despite being run by different departments, each branch has a lengthy code that explains and enforces each custom, listing the rules and regulations for salutes, public behavior in and out of uniform, and so on. Individual traditions, specific to a branch, are more open to

evolution, and several of these traditions are in fact, newer, with a number of them created in the 1980s.

Most customs and traditions appear untouched despite specific conflicts and the rapid technological advances of the past century. In fact, it seems that these customs and traditions are intended to continue the history of each branch rather than to change lasting practices. Core values, symbols, flags, slogans, uniform rules, behaviors, and the like are invaluable to both serving and discharged members of each branch. These customs and traditions represent a shared experience, a common bond, and the rigor of service.

Still, over the last half of the 20th century, military customs and traditions came under close consideration in the face of changing civil rights. What had once been a boys’ club that went so far as to segregate races by squad was now desegregated and even allowing female enlistments. The general state of these customs and traditions remained untouched; specific events sparked attention that ultimately forced change.

The Citadel, the Military College of South Carolina, had a tradition of keeping barrack doors lock-free for two reasons: (1) to keep with the sparseness of military life and (2) as a part of the school’s honor code. However, with the introduction of female cadets, this changed over time, and by 2009, not only had The Citadel installed locks on all doors, but it also updated the campus relations guide, *The Blue Book*, to require that doors and gates be locked by lights out following Taps. Without the introduction of female cadets, the lengthy tradition would most likely have continued. Even in light of isolated events, the customs and traditions of the military are still historically rooted and reflect the established core values.

Soldier’s Creed

*I am an American Soldier.
I am a Warrior and a member of a team.
I serve the people of the United States, and
live the Army Values.
I will always place the mission first.
I will never accept defeat.
I will never quit.
I will never leave a fallen comrade.*

*I am disciplined, physically and mentally
tough, trained and proficient in my
warrior tasks and drills.
I always maintain my arms, my equipment
and myself.
I am an expert and I am a professional.
I stand ready to deploy, engage, and
destroy, the enemies of the United States
of America in close combat.
I am a guardian of freedom and the
American way of life.
I am an American Soldier.*

Kate Achille

See also Drill and Ceremony

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CYBERWAR

Cyberwar is the domain of warfare in which military and paramilitary forces conduct defensive and offensive operations using computer networks. Although military forces around the globe are continually modifying computer systems in an attempt to make them more secure, the computer software running on servers, switches, routers, and other attached computing hardware that make up these networks remains vulnerable to exploitation by skilled computer technicians known as “cyberwarriors.” As militaries around the world have become more dependent on computer networks in land, air, sea, and space domains, they have increasingly focused on cyberwar capabilities. Logistical support running over the civilian Internet is particularly vulnerable, but private networks designed to support

military command, control, communications, and intelligence operations have the same potential vulnerabilities as they run the same basic TCP/IP suite of network protocols. This entry discusses the history of cyberwar, with a focus on cyberwarfare and preparedness in the first decade of the 21st century.

Nonstate actors and emerging powers like India have joined the former Cold War rivals China, Russia, and the United States in a race to develop capabilities and warfighting doctrine as part of a computer network–centric power struggle that has increasingly replaced the nuclear arms race as the primary site of debate over international military technology policy. Two cases of computer network–based attack attributed to Russian cyberwarriors, one in Estonia in 2007 and another in Georgia in 2008, illustrate this shift from conflict scenarios once defined by nuclear balance-of-power concepts like mutually assured destruction to scenarios defined by computer security. The Estonian and Georgian cases featured distributed denial of service attacks and website defacements.

Historical Roots of Cyberwar

Cyberwar has historical roots in both the history of military intelligence and the history of computing. The ability to know the capabilities and intentions of one’s adversaries, or military intelligence, and exploit that knowledge to gain battlefield dominance has long been part of the operational art of warfare. Cyberwar’s roots stretch back at least as far as the development of military telegraphy and the operational use of encrypted communications over the telegraphic network, a network Tom Standage has called the Victorian Internet.

During the American Civil War, Confederate and Union forces used wigwag signaling (a combination of flags, Morse Code, and hand signs) to communicate command, control, and intelligence information to and among forces in the field. At the suggestion of Albert Myer, the inventor of this form of signaling, wigwag was used to feed Southern commanders inaccurate information via unencrypted messages sent by Northern forces. Using this communications network–based deception technique, Union commanders were successful in their attempts in the spring of 1863 to distract J. E. B. Stuart’s Cavalry and thereby created an opening in Confederate lines that was exploited by Union forces.

In the two World Wars of the 20th century, the United States and European nations attempted to make strategic use of encryption and decryption techniques to protect their own communications and to read adversaries' secret message traffic. Revelations of German intentions in Mexico made possible by decryption of the Arthur Zimmerman telegram helped Woodrow Wilson build a case for America's first entry into a war on the European continent in the spring of 1917. In the Second World War, the Ultra (British) and Magic (U.S.) code-breaking efforts provided intelligence information that allowed British and American forces to know German and Japanese plans. These code-breaking efforts in England and America during the Second World War laid a foundation of people and technologies on which military computing would build in the aftermath of the Second World War.

Cyberwar Is Coming! (1989–2009)

By the end of the Cold War, computing capabilities had not only reached the desktop but also become embedded in weapons systems. During the Persian Gulf War of 1990–1991, the U.S.-led military coalition strategically attacked antiaircraft defense systems to allow for the successful bombing of Baghdad in preparation for Operation Desert Storm. Smart bombs controlled by computer guidance systems reached their targets with devastating effect. On the battlefield, the use of the Global Positioning System allowed the coalition forces to navigate through miles of Saudi desert to deliver the “left hook” to the Iraqi Republican Guard forces in Operation Desert Storm.

Following the Persian Gulf War of 1990–1991, the military forces of the former Cold War rivals continued their process of reorienting warfighting doctrine and realignment of forces in the new post-Cold War world. During this period, analysts at the RAND Corporation in California began to talk metaphorically about networks of warfare in which the collection, processing, and application of information would afford strategic advantage to the U.S. military. Thinking of the “left hook” in Iraq in the context of the Internet's broader use in information warfare, two analysts at RAND named John Arquilla and David Ronfeldt wrote papers on cyberwarfare to include Zapatistas in Mexico, international organized crime in Russia, and militant environmentalists in Seattle.

A particularly vexing problem for cyberwar planning has been the increasing dependency of military

operations on civilian information technology (IT) infrastructure for transportation, telecommunications, power, health care, and financial networks. From the supervisory control and data acquisition systems that control power grids to the electronic health record systems used in hospitals, increasingly military operational planning under the aegis of cyberwar preparedness has expanded to include the civilian IT infrastructure. During the 1990s, cyberwarfare preparedness came to be associated in the United States with the revolution in military affairs, which promised a more cost-effective approach to warfighting and focused agency efforts on IT systems as core elements of warfighting strategies. Defense agencies extended the concept of information warfare to include concepts of network-centric warfare, as civilian and military planners engaged in “day-after” exercises in the 1990s that included penetration tests directed at IT systems. Among the most highly visible of these exercises occurred in June 1997 and was called Operation Eligible Receiver. During this exercise, the National Security Agency Red Team simulated attacks on government IT systems and on commercial IT infrastructure as well. U.S. Atlantic Command then conducted a follow-up exercise called Evident Surprise to explore cyber vulnerabilities in the Department of Defense systems, including simulating an attack on the electronic health record systems that track blood supplies to identify and then remediate vulnerabilities in those systems.

In the aftermath of the attacks on the World Trade Center and the Pentagon on September 11, 2001, the U.S. president George W. Bush declared a Global War on Terrorism, and the U.S. government reorganized defense agencies into the new Department of Homeland Security. Fears of al Qaeda use of the Internet led to the passage of the USA PATRIOT Act in the immediate aftermath of the attacks, which granted the government wide-ranging authority to conduct searches on domestic computer networks in an effort to fight international terrorist networks. A reorganized U.S. intelligence community, attempting to respond to the lessons learned from intelligence failures in the lead-up to the 9/11 attacks, grew at rapid rates in the first decade of the 21st century in a manner that critics pointed out lacked a grand strategy unified military command structure for cyberwarfare.

Widely reported attacks on U.S. assets at the start of the 21st century were thought by the U.S. intelligence community to have emanated from the former Cold War rivals Russia (1998–2000, Moonlight Maze) and

China (2003–2005, Titan Rain). In both cases, the cyber attacks had been going on for months before they were detected. In 2006, Russian hackers and scientists operated in the Middle East during the Israeli war with Hezbollah. Israel then used cyberwarfare to provide cover for an air strike against Syria the following year. Also, in 2007, attacks originated from Russia on the Estonian government after that government removed a Russian statue. In the summer of 2008, Russian forces used cyber attacks in support of their invasion of Georgia. Each of these incidents featured denial of services against nonmilitary targets. More recently in late 2010 and into early 2011, attacks on Google and other companies originating in China caused Google to rethink its market development strategy in that country. As these attacks show, cyberwarfare blurs the line

between traditional definitions of war and peace. It also blurs the lines between criminal acts and acts of war, while it further erodes the traditional boundaries between military and civilian targets.

Formation of U.S. Cyber Command (2009–)

In June 2009, the U.S. secretary of defense Robert Gates announced the formation of U.S. Cyber Command, inaugurating a new joint forces structure for waging cyberwar that would provide the Obama administration a basis for coordination among U.S. Army, Air Force, Navy, and Marine cyber commands formed in the 1990s and early 2000s. Appointing the four-star general Keith Alexander as its first commander, Secretary Gates reinforced the linkage to intelligence capabilities that dominance in the cyber



U.S. sailors assigned to Navy Cyber Defense Operations Command man their stations at Joint Expeditionary Base Little Creek-Fort Story, Virginia, August 4, 2010. Navy Cyber Defense Operations Command sailors monitor, analyze, detect, and respond to unauthorized activity within U.S. Navy information systems and computer networks.

Source: U.S. Navy photo by Mass Communication Specialist 2nd Class Joshua J. Wahl (released).

domain requires of modern militaries. A career army intelligence officer, Alexander continued to serve as director of the National Security Agency after assuming command of Cyber Command. Congressional debates over Alexander's nomination and the caution that marked his public statements on the capabilities and mission of his new command highlighted persistent American concerns over the possibility that cyberwar intelligence-gathering capabilities could be turned on American citizens. Secretary Gates and Alexander have focused on the role this new command is to play in protecting the Department of Defense's computer systems and in preparing for offensive operations.

Michael E. Dobe

See also Asymmetric Warfare; Central Intelligence Agency; Communication; Counterintelligence; Defense Intelligence Agency; Deterrence; Global War on Terrorism; Intelligence, Geospatial; Intelligence, Human; Intelligence Cycle; Intelligence Organizations, Military; Intelligence Oversight, Congressional; Persian Gulf War; Psychological Warfare (PSYOP); RAND Corporation; Tactics, Covert; Technology

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The Reader's Guide is provided to help readers find entries on related topics. It classifies entries into 20 categories: Alliances and Allies, Potential Adversaries, and International Organizations; Civil-Military Relations; Diversity; Educational Institutions; Intelligence; Law/Military Justice; Leadership; Logistics, Supply, Equipment, and Transportation; Media, Military and Public; Medical Care, Disability, Veterans, and the War Dead; Military and Civil Society in the United States; Military Life; Military Organizations and Commands; Operations and Tactics; Personnel: Recruitment and Training; Strategy and Strategists, Military Intellectuals, and Military Concepts; Values, Ethics, Culture, and Religion; Wars/Military Involvement; Wars/Military Involvement: Contemporary; Weapons Systems and Weapons Contractors. Some entries appear in more than one category.

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 Iraq Insurgency (2003–2011)
 Iraq War (2003)
 Iraq War, Planning for
 Kosovo Intervention
 Middle East Conflict
 9/11 (2001)
 9/11 Attack on Pentagon
 Nuclear Proliferation
 Panama, U.S. Intervention in
 Peacekeeping
 Persian Gulf War
 Petraeus, David
 Powell, Colin
 Prisoners of War
 Rumsfeld, Donald
 Rwandan Genocide
 Shock and Awe Offensive
 Somalia Intervention
 Strategic Arms Limitation Treaties
 Surge, Iraq War
 War in Afghanistan

Weapons Systems and Weapons Contractors

Airborne Warning and Control
 System (AWACS) Aircraft
 Aircraft, Antisubmarine
 Aircraft, Attack
 Aircraft, Bomber
 Aircraft, Fighter
 Aircraft, Patrol
 Aircraft, Reconnaissance
 Aircraft, Transport
 Aircraft Carriers
 Ammunition
 Amphibious Vehicles
 Armored Vehicles
 Arms, Small
 Artillery
 Battleships
 Boeing
 Bombs, Cluster
 Bombs, Gravity

Bombs, Nuclear
Bombs, Smart
Cruisers, Naval
Destroyers
Frigates
General Dynamics
Guns, Machine
Helicopters
Lockheed Martin
Mines, Land
Mines, Naval
Missiles, Air-to-Air
Missiles, Conventional
Missiles, Cruise
Missiles, Nuclear
Northrop Grumman
Raytheon

Research and Development
Science Applications International
Stealth Technology
Submarines
Tanks
Targeting Systems
Technology
Textron, Inc.
Torpedoes
United Technologies Corporation
Unmanned Aerial Vehicles
Warfare, Biological
Weapons, Antiaircraft
Weapons, Chemical
Weapons, Nonlethal
Weapons, Nuclear
Weapons, Space

D

DECORATIONS AND MEDALS

Decorations and medals are the two broad categories of award recognition given to military members for valorous acts, achievement, and service. Both are symbolic in nature and intended to reinforce desired behavior through public recognition. A decoration is awarded to an individual for a heroic act during a military conflict or engagement. A medal is awarded to individuals or units for achievement or service, both during war and peacetime. Decorations and medals physically consist of a medallion suspended beneath a ribbon. Each has a distinctive design and color pattern and is worn on the dress uniform during parades or formal events. Both are presented in public, usually by the level of command corresponding to the place of precedence of the award. The Department of Defense uses the American Pyramid of Honor to set out the precedence of its top decorations and medals. The Medal of Honor is the highest award that can be bestowed on a member of the U.S. military. This entry describes the historical background and development of decorations and medals in the U.S. military.

Background to U.S. Decorations and Medals

The tradition of bestowing decorations and medals in the United States was rooted in its colonial connection to Britain. The British system in turn was rooted in medieval notions of chivalry and awarded decorations only to officers, symbolic of their entrenched social stratification. Unencumbered

by that strict social system, the American military was the first to award decorations to enlisted men. George Washington authorized the Badge of Military Merit, which after a period of disuse later became the Purple Heart. Few of these were actually awarded, but the precedent was set.

The next period of award usage in the American military was during the Mexican-American War when the U.S. Army authorized the use of the Certificate of Merit. The certificate did not include a decoration or a medal, however, until 1905. The Certificate of Merit Medal became obsolete in 1918, but awardees could exchange it for the Distinguished Service Medal. In 1934, all of these awards were upgraded to the Distinguished Service Cross.

The Medal of Honor debuted on December 21, 1861, when President Abraham Lincoln signed a bill initiated by the secretary of the navy, Gideon Wells, that authorized the decoration to promote efficiency in the navy. The wording of the bill also established acts of gallantry as criteria for the award. The army quickly followed suit and designed a Medal of Honor of its own and borrowed the criteria language from the navy. The problem of subjectivity in defining whether or not an action met the award criteria was immediately clear. Some medals were awarded by mistake, and men could even apply for the award themselves after the war was over.

In 1890, a group of Medal of Honor awardees formed the Medal of Honor Legion and agitated for a top-down review of the award criteria to prevent gratuitous or politically motivated awards. As a result, the army issued the first order that distinguished between acts of bravery and acts of superior

service. The Medal of Honor was for bravery and the Certificate of Merit was for service. Furthermore, the order established that the medal was appropriate to recognize valor even in defeat.

The practice of issuing medals to whole units began during the Spanish-American War in 1898. Naval and Marine Corps enlisted and officers received a medal for battle participation, but those who were not in battle were eligible for a separate service medal. The army caught up in 1905 when President Theodore Roosevelt authorized campaign medals for all past or future campaigns. In the same year, Roosevelt issued an Executive Order that established the precedent of a formal public ceremony for presentation of the Medal of Honor. This enhanced the medal's prestige, but little else was done until 1916 when the United States began preparation for possible entrance into World War I. An investigation board was established as part of a larger national defense act with instructions to identify Medal of Honor awards that did not involve combat. As a result of the board's work, 911 medals were rescinded. This was the first step in establishing the sanctity of the Medal of Honor.

Modern Military Decorations and Medals

In 1918, Congress established clearer criteria for the Medal of Honor that included acts of conspicuous gallantry beyond the call of duty. To alleviate the subjectivity inherent in defining what constituted "conspicuous gallantry" and what it meant exactly to go "beyond the call of duty," Congress substituted the Distinguished Service Cross for the Certificate of Merit and established the Citation Star, which in 1932 became the Silver Star. These two new decorations allowed commanders to recognize valorous acts that did not meet the more rigid standards of the Medal of Honor. The establishment of these decorations also served to heighten the distinction of the Medal of Honor as it now sat firmly atop the Pyramid of Honor.

The distinction between awards for heroism and awards for service was also reaffirmed. In addition to the Medal of Honor, the Distinguished Service Cross, and the Silver Star, in 1919 the services began awarding the Distinguished Service Medal. The year 1926 witnessed the addition of the Distinguished Flying Cross for heroism or achievement, and in the same year, the army added the Soldier's Medal for



William J. Donovan's Medal of Honor. He was awarded the medal for action in France in 1918. Donovan led his men to take the German position. He was eventually wounded in the leg but refused to be evacuated from the battlefield until his men and the position were secure. General Donovan was the most decorated officer of World War I.

Source: Central Intelligence Agency photo.

noncombat heroism. George Washington's original design for the Badge of Military Merit served as the basis for the 1932 Purple Heart awarded to men who received wounds from the enemy during conflict.

In World War II, the United States committed to total war. The sheer number of men involved in combat in both the Pacific and the European theaters necessarily meant that the number of

recommendations for awards would be larger than for any previous conflict. With a functioning award system in place, the U.S. military added several new awards to capture acts of heroism, valor, and distinguished service. The new awards ranked at different levels of the precedence scale, which empowered lower levels of command with award authority. This had the added benefit of reduced administrative strain on higher headquarters. Service regulations established the award authority and administrative routing process for each decoration and medal to facilitate administrative speed and reduce the time between the recommendation and receipt of the award.

The highest of these new awards was the Legion of Merit, established in 1942 and awarded for distinguished service. In the same year, the U.S. Navy and the Marine Corps added a medal equivalent to the U.S. Army's Soldier's Medal for noncombat heroism. Also in 1942, the Air Medal was added by all services for valor or meritorious achievement. This award recognized flight crews or individuals who participated regularly in flight missions. The Bronze Star Medal was created 2 years later to recognize valor or meritorious service. Meritorious achievement was recognized by the navy and the Marine Corps in 1944 and by the army in 1945, with the creation of the Navy and Army Commendation Medals, respectively.

The sanctity of the Medal of Honor as the highest decoration for valor was firmly established during World War II, in part because of the various subordinate awards outlined above, but mostly because more Medals of Honor were awarded posthumously than to living recipients. Edward Murphy points out in *Korean War Heroes* that of the 433 awarded only 190 recipients survived their exploits. This established a trend that continued through the Vietnam War. Updating Murphy's numbers with information from the Medal of Honor Society's website shows that during the Korean War only 37 of 132 men who received the medal were living recipients. In the Vietnam War, 151 of 242 medals were awarded posthumously. Several new awards were added to the Pyramid of Honor between 1969 and 1986, but by this point, the sobering statistics of Medal of Honor awards from World War II, Korea, and Vietnam overshadowed any additional effect that expansion of the pyramid would have in adding to the prestige of the Medal of Honor.

Since the 1990s, only eight Medals of Honor have been awarded, all of them posthumously. Two were awarded for actions taken during the 1993 "Black Hawk Down" incident in Somalia when a mission to capture a Somali warlord resulted in 18 American deaths. During the Global War on Terrorism, two Medals of Honor have been awarded in Afghanistan and four in Iraq. The relative lack of Medal of Honor awards was perceived as a consequence of the changed nature of fighting low-intensity conflicts that have had few sustained actions comparable in scale to the battles of World War II, Korea, or Vietnam. The issue prompted a House of Representatives Military Personnel Subcommittee of the Committee on Armed Services hearing in December 2006. Committee members were concerned that an unwritten criterion was established in the minds of military commanders that the recipient had to have lost his or her life in order to qualify for the Medal of Honor. Most of those who testified recommended a thorough review of lower awards during the Global War on Terrorism with the intent of upgrading some to the Medal of Honor. This would in effect be a complete reversal of the 1916 review board.

The subordinate decorations and medals have experienced a negative correlation in terms of public awareness with the ascension of the Medal of Honor. The downward trend in publicity concerning these lower awards began in Korea. The Medal of Honor was publicized in the Korean War to help sell the war effort and thus received heightened attention, but Distinguished Service Crosses and Silver Stars still received press attention. With the unpopular Vietnam War, coverage of awards in general dropped off. Today, it is unlikely to read about a lesser award in anything other than a military publication or the recipient's hometown newspaper.

Decorations and medals, however, remain very important within the military. The issue of subjectivity in determining whether or not an action meets established criteria remains a contentious issue among, and between, officers and enlisted personnel. The essential structure established in 1918 and expanded up to 1986 remains the same. One change reflecting the expanded bureaucratic nature of a large standing military has been the addition at all levels of commands of the "awards board" to study each case, scrutinize it against established criteria, and recommend approval or disapproval to the unit

commander. This process is repeated at each level of command until it reaches the appropriate approval authority. Today, military members are eligible for decorations, service awards, unit awards, campaign ribbons, skill badges, and foreign awards. Each symbolizes an important event in the life of a military member that transcends the physical award and reinforces military culture.

David Glenn Williams

See also Armed Services Committee, House; Global War on Terrorism; Iraq War (2003); War in Afghanistan

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DEFENSE, DEPARTMENT OF

The Department of Defense (DOD) is headquartered in the Pentagon in Arlington, Virginia. The department comptroller estimated the budget of the

DOD for 2011 to be \$708 billion, with \$159 billion included for overseas contingency operations; the base budget of the DOD is approximately 3.5% of the U.S. gross domestic product. The organization, the largest in the Executive Branch, is responsible to the president of the United States for the military forces needed to deter war and to protect the security of the United States. This mission began shortly after the American War for Independence, in 1789, under the supervision of an organization called the War Department, joined in 1798 by the Navy Department. This entry discusses the history of the U.S. DOD from its creation after World War II to the present.

Throughout the 19th century, the army and navy competed for the primary role in planning the nation's strategic defense. Because of U.S. geography and political neighbors, the navy assumed a leading role as the nation's first line of defense and arm of force projection. The two services continued to compete for status, and the resources that accompanied that status, well into the 20th century through two World Wars and the emergence of the United States as a global power.

Post-World War II Unification of the Armed Services

In 1945, President Harry Truman proposed, to a special session of Congress, the unification of the nation's armed services under one organization. This plan, developed by the War Department, placed the service departments—to include the U.S. Air Force, to that point the Army Air Forces—under a uniformed head supervised by a civilian department secretary. Unifying the services under one secretary of defense would both quash at least public interservice competition as well as place the weight of the military behind one voice in considerations of strategy and resources. After 2 years of debate and conflict, and despite the protests of Secretary James Forrestal and the Navy Department, the National Security Act of 1947 created the National Military Establishment (NME). Congress confirmed James Forrestal as the first secretary of defense on September 17, 1947.

The NME consolidated the three service departments: (1) the Department of the Army, (2) the Department of the Navy, and (3) newly independent the Department of the Air Force. A cabinet-level

secretary headed each department; however, the relationship between these secretaries and the new secretary of defense was unclear. The secretary of defense had an ambiguous relationship with the Joint Chiefs of Staff and the chairman, who retained their roles as the uniformed heads of the military. By failing to define the relationships, roles, and responsibilities of the varied services and the secretary of defense clearly, the National Security Act of 1947 failed to end the conflict within the American military establishment.

Competition between the services boiled over in 1949. After Secretary Forrestal denied them the budget they requested, the secretary of the air force and the air force chief of staff brought their grievance to the Senate Armed Services Committee. Under Forrestal, they contended, the NME continued to favor a plan that prioritized the naval budget before the other services. Each service claimed that its advancement, be it super carriers for the navy or increased authorizations within the air force's bomber wings, was essential for the security of the nation. Each expensive request ran counter to the will of President Truman's administration, which desired to cut costs after the war. In this scenario, James Forrestal resigned on March 2, 1949.

Expanded Authority: The Department of Defense

On Forrestal's resignation, Congress confirmed Louis Johnson as the second secretary of defense. Congress amended the National Security Act of 1947, making several changes beginning August 10, 1949. Among these, it renamed the National Military Establishment, calling it the DOD, and so losing the unfortunate acronym "NME." Furthermore, the amendments granted the secretary of defense greater authority over the services and reduced the service secretaries from cabinet-level positions to department heads within the DOD. With more authority, the secretary of defense gained greater control and staff; Congress authorized funding for a deputy secretary of defense and three assistant secretaries, one of whom, as comptroller of the DOD, held primary responsibility for the department's budget.

This expanded power strengthened Johnson's role in the conflict between the air force and the navy. On April 23, 1949, he cancelled the super carrier funded under Forrestal—a ship on which construction had begun—and shifted that funding to the

air force. Johnson moved national strategic policy firmly away from the navy toward the air force, acting on his belief that the navy's, and the Marine Corps's, utility was waning. Navy officers reacted to his actions and attitudes with what became known as the "revolt of the admirals."

These admirals watched the DOD stripping the offensive power of the navy and gifting it to the air force—a loss that, in their eyes, damaged the nation. They marshaled a political attack on Johnson and W. Stuart Symington, secretary of the air force, raising accusations of corruption and malfeasance and attacking the abilities of the air force's newest strategic platform, the Convair B-36. Hearings before the House Committee on Armed Services drew attention to the failings of particular technologies integral to the air force strategy. The outcry forced the debate on fundamental issues of strategy, made more relevant by the first Russian atomic detonation in September 1949. Subsequently the secretary of defense and the DOD played a key role in developing the strategy of massive retaliation first enunciated in 1954.

NSC-68 (a 1950 top-secret report from the U.S. Department of State's Policy Planning Staff) expanded the Cold War from Europe to the rest of the globe; the State Department initiated the study of U.S. strategic policy and military programs and presented it to Truman on April 7, 1950, after his request on January 31, 1950—primarily in response to the Russian nuclear explosion. Committee members doubted that the defense budget of \$13.8 billion agreed on by Truman and Johnson could meet the needs of American security. The outbreak of war on the Korean Peninsula—the first proxy conflict of the Cold War—lent their doubts validity and began the growth of the American national defense budget.

A Strategic Reorientation: 1960s

The eighth secretary of defense, Robert McNamara, also attempted to diminish the DOD's budget. Serving under Presidents John F. Kennedy and Lyndon Johnson from 1961 to 1968, McNamara drew on business principles to implement systems analysis for public policy within the defense bureaucracy. To create this change, McNamara centralized more power in the Office of the Secretary of Defense, creating the civilian Defense Intelligence Agency, the Defense Communications Agency, and the Defense

Supply Agency in 1961. These agencies took control of their fields from uniformed service members, giving the secretary of defense greater control, particularly in supply procurement, distribution, and inventory management.

Under McNamara, the DOD instituted the Planning, Programming, and Budgeting System to analyze defense requirements in order to plan a long-term budget. Combining this process with greater control over defense resourcing enabled by the Defense Supply Agency assisted the secretary of defense in reducing costs, in part by consolidating programs. The results balanced the successful consolidation of the F4 Phantom and A-7 combat aircraft against the failure of the TFX dual-service aircraft and the troubled beginning of the M-16 rifle. During this time, the DOD began, ended, and consolidated programs with little regard for the protests of senior officers. The Joint Chiefs of Staff came to believe that McNamara and his staff could manipulate the mountains of data produced to support the Planning, Programming, and Budgeting System in order to rationalize decisions already made by the Office of the Secretary of Defense.

During McNamara's tenure and at President Kennedy's initiation, the DOD moved away from the strategy of massive retaliation to one of flexible response. The new strategy required the nation's military to develop more options in the area of limited warfare. Because the Cold War against the Soviet Union and the spread of communism remained the preeminent threat to national security, this change in strategy meant emphasizing counter guerrilla warfare and developing the ability to teach counter guerrilla techniques to allies faced with communist revolutions. Along with this strategic reorientation, McNamara supported the domino theory for engaging U.S. troops in Vietnam. His orientation toward systems analysis and budgetary management led him to determine that a war of attrition could successfully eliminate the limited number of fighting men available to the Viet Cong in that theater and so measure success by the metric of the body count. McNamara grew increasingly disillusioned by the war in Vietnam until he left the position on February 29, 1968.

Effects of the 1986 Goldwater-Nichols Act

Alarmed by American military failures in the 1960s and 1970s—a list dominated by Vietnam—Senators

Barry Goldwater and Sam Nunn authored the Goldwater-Nichols Act of 1986. Despite a steady growth of the secretary of defense's power since 1949, the bureaucracy of the DOD remained tangled, with an unclear chain of command and disputed jurisdictions that enabled bureaucrats and uniformed officers to establish jealously guarded fiefdoms within the organization. Goldwater-Nichols expressly granted total authority within the DOD, and over all activities of the DOD, to the secretary of defense. The act specified that the military chain of command ran from the president through the secretary of defense to the unified combatant commanders, explicitly removing the Joint Chiefs of Staff, including the chairman, from that chain of command. The unified combatant commanders gained greater power and autonomy, to include explicit authority over the elements from other services within their joint commands, an issue fought by the army, navy, air force, and even Coast Guard. Goldwater-Nichols finally delineated the subordinate relationship of the service secretaries to the secretary of defense. Over the opposition of the Joint Chiefs of Staff and their supporters in Congress, the senators pushed the legislation through; President Ronald Reagan signed the act into law on October 1, 1986.

After the reforms of the Goldwater-Nichols Act, the DOD experienced a period of great success, to include Operations Desert Storm and Desert Shield in the Persian Gulf. The department experienced such success that, in 2001, Secretary of Defense Donald Rumsfeld could legitimately criticize the organization for complacently ignoring the need to change; the DOD suffered from too much success. On his appointment as secretary of defense, Rumsfeld began a project of transformation in the services, particularly the army, intent on reshaping the military to be lighter, more responsive, and more mobile.

The Department of Defense Today

The attacks on the United States on September 11, 2001, aided Rumsfeld's and the DOD's efforts to reshape the military. The secretary of defense, particularly, seized on problems of cross-government cooperation and information sharing, offering solutions that drew more power within the DOD and the Office of the Secretary of Defense. The success of the short military campaign to seize Baghdad

in 2003 lent validity to these increases in power, but the lengthening occupations and insurgent struggles in both Iraq and Afghanistan tarnished that validity. In early 2006, eight retired generals and admirals called for Rumsfeld's resignation in an unprecedented demonstration of uniformed service members' discontent with their civilian leadership. On November 1, 2006, President George W. Bush announced that Secretary Rumsfeld enjoyed his full support, yet the DOD announced Rumsfeld's resignation on November 8, making him the second longest serving secretary of defense after McNamara.

Robert Gates, sworn in December 5, 2008, to replace Rumsfeld, oversaw the troop surge credited with stabilizing the struggle in Iraq and reformed the veteran's health system after the scandal of neglect exposed at Walter Reed Medical Center. During his tenure, the DOD began another cycle of periodic budgetary reform, cutting many projects oriented toward a conventional struggle deemed unlikely by strategists and politicians. President Barack Obama replaced Secretary Gates in 2011 with Leon Panetta, previously head of the Central Intelligence Agency, who was expected to continue the budgetary reform Gates instituted. The administration is reported to expect DOD to cut as much as \$178 billion from its budget between 2012 and 2016, including dramatic cuts to the projected budgets for combat operations. In February 2013, former Nebraska senator Chuck Hagel replaced Panetta as Secretary of Defense.

The combatant commands within the DOD in 2010–2011 included the following:

- Northern Command (NORTHCOM)
- Central Command (CENTCOM)
- European Command (EUCOM)
- Pacific Command (PACOM)
- Southern Command (SOUTHCOM)
- Africa Command (AFRICOM)
- Special Operations Command (SOCOM)
- Strategic Command (STRATCOM)
- Transportation Command (TRANSCOM)
- Joint Forces Command (JFCOM)

Part of the budgetary reform of the DOD under Gates includes closing Joint Forces Command. To face the changing electronic threats of the 21st century, the

DOD established a new major command, Cyber Command, which became fully operational in 2010.

Daniel I. Johnson

See also Congressional Relations, Military; Defense, Secretary of; Gates, Robert; Goldwater-Nichols Department of Defense Reorganization Act

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DEFENSE, SECRETARY OF

Since the end of the Second World War, the president appoints one person—a civilian retired from military service for at least 7 years—to advise the president on matters of national security and to direct the Department of Defense. Sitting on the president's cabinet and National Security Council, the secretary of defense is a position of immense national influence and international significance. This entry describes the responsibilities of the secretary of defense, examines influential secretaries of defense in U.S. history, and concludes with an assessment of the position's challenges in the 21st century.

Primary Responsibilities

Directed by the commander in chief, the secretary of defense (frequently abbreviated to SecDef in military communications) oversees the chairman of the Joint Chiefs of Staff, all military departments, and the Department of Defense. The position is sixth in the presidential line of succession. Congress allocated a salary of \$191,300 as of 2011 for the presidential appointee, who is approved by the Senate. In 2010, the SecDef controlled a \$725 billion budget

that added up to more than \$1.1 trillion in spending after military-related costs were added. Additionally, the SecDef must help coordinate the president's foreign and domestic policies, especially regarding matters of national security, but also relating to matters of energy, emergency management, immigration, and trade. As one of the most recognizable faces of the military—especially since the 1960s—the SecDef must address the media on issues of national security. (See the section on Robert S. McNamara below for more on the public profile of the SecDef.) Infrequently, the secretary will visit troops in war zones to boost troop morale and convey a first-person connection to wars that the secretary directs from the Pentagon. The SecDef must lead the effort to procure all equipment necessary to the military and maintain a catalog. In this effort, the secretary must strive to secure contracts that will allow the armed forces to thrive now and in the future. Along with these more mundane responsibilities of budget and procurement, the secretary sits in a prominent position on the National Security Council that was founded with the same act of Congress in 1947.

History

The position descends from a heritage going back to Henry Knox, who served President George Washington in the first cabinet as secretary of war. The secretary of the navy became a cabinet position under John Adams, when the United States faced increasing threats at sea. During the Second World War, the various military departments frequently found themselves at odds in planning and carrying out strategies, especially in the Pacific theater. The postwar effort to unify planning resulted in the SecDef as the chief military advisor to the president. The National Security Act of 1947 created the National Military Establishment, dissolved the office of the secretary of war, and created secretary posts for the army, navy, and air force, none of which would sit on the president's cabinet thereafter. Initially, the new powers of the SecDef seemed unclear, but the National Security Council renamed the National Military Establishment the Department of Defense in 1949. In the resulting organizational chart, the SecDef assumed immense responsibilities in coordination with the president's policy, including serving as part of the National Command Authority, which paired the SecDef with the president to command dually all nuclear weapons.

The most influential secretaries have shaped and reshaped the position, overseeing a tremendous expansion of the military-industrial complex, influencing the conduct of the United States in the Cold War, planning and implementing military moves around the world, and advising presidents. Among the 24 men who have held the position since its formation in 1947, several stand out for their contributions to the position.

President Harry S. Truman appointed the first four secretaries of defense. While many secretaries have carried a lower profile, the first SecDef, James Forrestal, forged the position as an advocate of keeping the military well funded and prepared, resisting Truman's publicly stated wishes to pare down the military and its budget after the Second World War. Forrestal is credited with the effort to integrate the military and initiate the unification of military policies. Truman replaced Forrestal with Louis Johnson, who carried out Truman's plan to minimize the military. The overall result meant that secretaries would be chosen primarily to carry out the president's plan—frequently in the face of opposition from active armed forces. Johnson's emphasis on consolidating the armed forces and reducing the defense budget put him in opposition to people arguing for military preparedness, especially in the wake of Soviet nuclear tests, which Johnson chose to deny. The episode of tension between the SecDef and military leaders became known as the “revolt of the admirals.” Truman replaced Johnson with his former secretary of state, George Marshall, who was in the midst of working for the Red Cross. In only 1 year, Marshall successfully argued for selective service and the dismissal of General Douglas MacArthur. For this action, Senator Joseph McCarthy accused him of being pro-communist. Despite this, Marshall soon earned the Nobel Peace Prize for his work in stabilizing Europe after the Second World War. His successor, Robert Lovett, became known as the chief architect of America's Cold War containment plan and one of America's “Wise Men.”

President Dwight D. Eisenhower lured away the president and CEO of General Motors, Charles Erwin Wilson, to be SecDef and implement the military's New Look, which emphasized nuclear weapons and an air force able to deliver such weapons. The plan called for a smaller army, which met with resistance. As the point person in outpacing the Soviet Union in nuclear weapons for

the diplomatic strategy of brinksmanship, Wilson found himself plotting the Cold War. For his second term, Eisenhower appointed the first SecDef without any military service record, Neil McElroy, who had been president of Procter & Gamble. McElroy's tenure became devoted to media inquiries about the "Missile Gap," which were closely linked to the Soviet Union's launch of the satellite *Sputnik*. One year after the Soviets gained the upper hand in space, McElroy helped secure legislation reorganizing the military to fund more technological research. Eisenhower promoted Thomas Gates from secretary of the navy for the final 14 months of his term. Due to his experience in the Department of Defense, Gates could take credit for a dramatic increase in the missile defense system as well as growth in nuclear-powered aircraft carriers and the B-52 bomber. Gates spent much of his time addressing conflicting reports of the missile gap between the United States and the Soviet Union, so he proposed the Defense Intelligence Agency, designed to minimize interservice rivalries and criss-crossing jurisdictions and to provide intelligence to a centralized command. The Defense Intelligence Agency was supposed to provide a unified source of information reporting to the Joint Chiefs of Staff and finally to SecDef and began with John F. Kennedy's administration.

In many ways, Kennedy appointed the most controversial SecDef, Robert S. McNamara, who spearheaded the country's strategy to defeat or at least contain communism, especially in places like Cuba and Vietnam. McNamara became associated with the dramatic escalation of the Vietnam War and led the effort to provide the public with optimistic portraits of American chances for victory. McNamara's actions magnified the position in the public eye, especially in the way he represented the Johnson administration before the media, which led subsequent secretaries to seek a more subdued public profile. Leaving his mark on every aspect of the position, he revised budgeting to make the military more cost-effective and restructured significant elements of the military. He supported the Nuclear Test Ban Treaty in 1963, while increasing the American ability in "second-strike" ability. He devised the "flexible-response" approach of military readiness, which led to increased numbers of active-duty service members prepared for counterinsurgencies against guerrilla warfare. Budgets rose significantly during his tenure even before the Tonkin Gulf

Resolution. His personal reservations about U.S. success in Vietnam contrasted with his public advocacy of invasion and escalation. He opposed air attacks and provided a pessimistic counterpoint to military leaders but continued to support the Johnson administration's positive perspective on the war in public. He resigned just before 1968 and the Tet Offensive that seemed to confirm his reported suspicions about the potential for American victory in Vietnam. Decades later, he published books and exposed his mistakes in an Academy Award-winning documentary ("The Fog of War") that revisited his decisions as SecDef, providing rare admissions of mistaken judgment in power, while simultaneously vindicating some of his actions. McNamara served longer than any other SecDef.

Appointed by Richard M. Nixon, Melvin Laird served as the bureaucratic servant of the president and Henry Kissinger, the national security advisor. Laird tried to improve morale in the Department of Defense, diminish use of drugs, and stop racism. He supported "Vietnamization" as the U.S. plan for the Vietnam War, led the effort to remove U.S. troops from Vietnam, and tried to get allies to share the burden of fighting communism. At the beginning of his second term, Nixon appointed James Schlesinger to complete the removal of troops from Vietnam and deactivate conscription. As SecDef, Schlesinger took his place in a lengthening line of secretaries who faced the challenge of maintaining military strength in the midst of postwar budget cuts and declining public support for the military in general.

The defense budget declined until 1979, when revolution in Iran and the Soviet invasion of Afghanistan provoked concerns for SecDef Harold Brown, whose main legacy under President Jimmy Carter had been his efforts to support the Camp David Accords and SALT II.

Under President Ronald Reagan, Caspar Weinberger helped design the arms race designed to end the Cold War by bankrupting the Soviet Union. Helping Reagan imagine a system of defense from above the earth (Strategic Defense Initiative), Weinberger guided a vast peacetime expansion of the military.

Robert M. Gates made history for being the first secretary to serve presidents of both parties. Appointed in 2006 on the resignation of Donald Rumsfeld, Gates's tenure will be remembered for significant shifts in policy such as the reorganization of

the Pentagon's budget to focus less on missile defense and more on current wars, a more aggressive attack strategy in Iraq and Afghanistan including surges in troops deployed, and the end of "Don't Ask, Don't Tell." Rumsfeld, who held the position under Gerald R. Ford and George W. Bush, led defense efforts after the terrorist attacks of September 11, 2001. Arguing for new weapons systems like the Strategic Defense Initiative, he emphasized futuristic armament. He argued for quick strikes against al Qaeda, the Taliban, and Iraq, designed to limit the commitment of occupying forces. Among the achievements of the post-Soviet era, various secretaries can claim success in expanding the North Atlantic Treaty Organization to include nations that were once part of the Warsaw Pact and well beyond the strict limits of the North Atlantic.

Challenges in the 21st Century

SecDef Chuck Hagel and future secretaries must balance the increase in allies against new threats to the United States. Hagel began his work in March 2013, avoiding a suicide bomber's attack in Afghanistan while indiscriminate sequestration cuts threatened his budget. Indeed, the SecDef faces significant obstacles in leading the nation's defense in the 21st century. Cyber attacks may pose the biggest threat to the United States. The multiplicity of opponents and decentralized terrorist networks around the world complicate the demands of defense, especially when these adversaries may not be connected officially to governments with whom the United States negotiates. As the United States struggles to find ways to balance fiscal budgets and to reduce the federal deficit, appointees must nonetheless ensure national security in an increasingly hostile world. Defending America overseas without great expense of life or money will continue to be difficult. The secretary will continue to forge a policy that may favor the use of drones for their ability to strike at elusive enemies without immediate loss to American life, while knowing that the use of drones may be beyond the shrinking budget and antagonize American enemies. The secretary must help the president and secretary of state confront the fallout from leaks of highly sensitive documents, which threaten to destabilize relations with even the most vouchsafed allies of the United States. Such disruptions to American alliances undermine the secretary's ability to build coalitions

to bear the financial and military burdens of a global defense network for the United States.

Robert Robillard

See also Defense, Department of; "Don't Ask, Don't Tell"; Global War on Terrorism; National Security Act; National Security Council; North Atlantic Treaty Organization; Strategic Arms Limitation Treaties; Vietnam War

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DEFENSE INTELLIGENCE AGENCY

The Defense Intelligence Agency (DIA) coordinates all-source intelligence activities for the secretary of defense, Joint Chiefs of Staff, and military commanders as well as the intelligence community. Considered to be the head of military intelligence, the DIA coordinates intelligence communities within the U.S. Navy, Marine Corps, Army, and Air Force. The DIA employs both military and civilian personnel and places an emphasis on military intelligence sharing. This entry describes the background and creation of the DIA and the current strategic plan.

Background and Creation of the DIA

The creation of the DIA was approved by Secretary of Defense Robert McNamara on July 5, 1961, with a public announcement on August 1, 1961. It became fully operational on October 1, 1961. The creation of the DIA was a response to a Joint Study Group recommendation; during the Eisenhower presidency, the Joint Study Group had reviewed military intelligence activities with a view to their reorganization under a single intelligence organization. The Joint Study Group (led by the former inspector general of Central Intelligence Agency Lyman Kirkpatrick) reported on the need to have an organization that would have oversight of all

military intelligence activities. A central organization was required, because before the establishment of the DIA, each intelligence division within the navy, the Marine Corps, army, and air force coordinated its own intelligence activities and did not necessarily share intelligence among the other services.

The creation of the DIA was made possible by the 1958 Department of Defense Reorganization Act, which paved the way for the coordination of intelligence activities by a central agency in that it allowed for a shift of intelligence activities away from the traditional military sources (army, etc.) to the secretary of defense and Joint Chiefs of Staff. In this sense, the DIA filled the gap that existed between the various intelligence services, as its aim was to function as an umbrella organization that oversaw the coordination and dissemination of intelligence. The seal of the DIA features an image of the world globe surrounded by the universal trademark representing the atomic ellipse. A flaming chalice sits atop the world, which in turn is surrounded by the 13 stars and wreath symbolic of the Department of Defense.

The first director of DIA was Lieutenant General Joseph Carroll (October 1961 to September 1969) from the U.S. Air Force, and he was confronted with instability in Germany, Soviet Russia, and Cuba, as well as China. The attempts by DIA to coordinate the intelligence activities of different agencies, as well as gathering its own intelligence at such a tumultuous time, did not endear it to the existing intelligence community who saw it as interfering with their own internal intelligence-gathering operations. Despite early misgivings about the role of the DIA within the intelligence community, its place was solidified when it was designated as a combat support agency in 1986 with the director as the principal advisor to the secretary of defense. The director also reports to the Joint Chief of Staffs and has a wide support role.

Operational Support

Operationally, the DIA supports the Directorate for Analysis and each of the four centers associated with it (the Underground Facility Analysis Center, the Joint Intelligence Task Force for Combating Terrorism, the National Center for Medical Intelligence, and the Missile and Space Intelligence Center). In addition, the DIA has oversight for intelligence-gathering activities of the military, notably, the Air Force National Air and Space Intelligence

Center, the Office of Naval Intelligence, the Army National Ground Intelligence Center, and the Marine Corps Intelligence Activity Center. Acting as a designated combat support agency also allows for the DIA to be involved in specific command support centers.

The Military Intelligence Board

Under the Plan for the Activation of the DIA (1961) and as part of the organizational structure of the DIA, an advisory board called the Military Intelligence Board (MIB) was created. The MIB's board structure consisted of the head of DIA and various DIA planning staff as well as intelligence heads from the army, navy, air force, and Marine Corps acting as an ad hoc advisory board. The MIB reported on and collated intelligence to the DIA. The success with which the MIB implemented the Plan for the Activation of the DIA (1961) ensured that it remained a viable part within the wider DIA organization and thus was kept operational.

DIA Presence in the Persian Gulf War

The role of DIA as an intelligence support organization grew substantially both before and during the Persian Gulf War in 1991. Interagency cooperation and the role that DIA played in its facilitation were especially evident during Operations Desert Shield and Desert Storm. Prior to Operations Desert Shield and Desert Storm, the DIA had opened a U.S. Defense Attaché Office in Baghdad as early as 1985 in an attempt to collate intelligence at the source and to disseminate this as appropriate among the intelligence community. The success of the U.S. Defense Attaché Office led to the establishment of the Operational Intelligence Crisis Center in 1987 to further expand intelligence capabilities. From 1988 onward, the DIA had 24-hour intelligence coverage, which fed back into the intelligence community and ultimately culminated with the then general Colin Powell awarding it a Joint Meritorious Unit Award for exemplary performance during the operations.

DIA in Afghanistan, Iraq, and the Global War on Terrorism

The DIA's usefulness in accessing and collating all intelligence sources was evidenced by its ongoing ability to brief the intelligence community

on issues at hand and as they unfolded. The DIA was also instrumental in all-source intelligence gathering in both Afghanistan and Iraq for Operations Enduring Freedom and Iraqi Freedom and deployed thousands of people in support of the operations. The DIA supported the Global War on Terrorism through the establishment of a Joint Intelligence Task Force for Combating Terrorism, which sought all-source intelligence and provided the lead intelligence source for the Department of Defense.

Strategic Operations

The DIA's future strategic operations focus squarely on improving interagency cooperation, especially in light of rapid technological advancement where information and sources may change frequently. For example, in 2006, the DIA created the Defense Joint Intelligence Operations Center, which collaborates with the Department of Defense. The main function of the Defense Joint Intelligence Operations Center is to assess competing intelligence requirements and provide appropriate solutions to its intelligence stakeholders.

However, in line with its focus on increased intelligence sharing, the DIA has also been expanding its role in support of humanitarian aid and was a major contributor to aid under Operation Unified Assistance in relation to the South Asian tsunami in 2004.

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See also Central Intelligence Agency; Defense, Department of; Intelligence Organizations, Military

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DEFENSE LANGUAGE INSTITUTE

The Defense Language Institute Foreign Language Center (DLIFLC) provides language training for all military branches and Department of Defense civilians. Enacted during World War II, the DLIFLC has grown dramatically in response to U.S. needs around the world. New training methods and qualified instructors have improved language education. The DLIFLC also supports the language needs of deploying troops. This entry discusses the history, facilities, and programs of the DLIFLC.

History

The DLIFLC was created out of need shortly before the United States entered into World War II. There was an immense need for Japanese speakers when the U.S. Army created a clandestine school in San Francisco. On November 1, 1941, 60 students, mostly second-generation Japanese (nisei), and 4 instructors began school in an old airplane hangar.

The school continued to grow throughout World War II and became known as the Military Intelligence Service Language School (MISLS). The facility was moved twice, as Japanese Americans were moved to internment camps in 1942. Thousands of graduates of the MISLS program served in the Pacific throughout the war and during the occupation.

Following World War II, at the introduction of the Cold War, the school, renamed the Army Language School, moved to the Presidio of Monterey in California. New instructors were brought in to expand the program, teaching 30 languages. To meet America's Cold War needs, the Russian language program grew the fastest, followed by Chinese, German, and Korean.

Until the 1960s, both the U.S. Air Force and U.S. Navy had separate methods of teaching foreign languages. The air force used programs at universities like Syracuse, Yale, and Cornell. The navy had its own school in Washington, D.C., the Naval Intelligence School, to teach foreign languages. The Department of Defense determined that it would be more efficient to combine the programs and created the Defense Foreign Language Program in 1963 at the new Defense Language Institute (DLI) in Washington, D.C.

Foreign language training grew faster during the height of the Vietnam War. The DLI conducted its regular language programs throughout the war. Between 1965 and 1973, more than 20,000 soldiers were taught Vietnamese through regular DLI programs and shortened survival courses. When the U.S. Army Training and Doctrine Command was formed, it gained control of the newly renamed DLIFLC, which had moved its headquarters back to Monterey.

After Vietnam, the student population at DLIFLC continued to change. Women were now welcome in many military jobs, and the fighting force consisted of only volunteers. The school was awarded academic accreditation in the late 1970s, and the increase in students led the DLIFLC to open two other branches to accommodate the need. Lackland Air Force Base in San Antonio, Texas, hosted air force students of Russian from 1981 to 1987 and another school was located in San Francisco for army students in four languages. The Presidio also expanded its facilities.

Present

The DLIFLC has made academic excellence a top priority. New instructional materials and methods have been implemented and the instructor-to-student ratio is 2 per 10-student section. Through the new Proficiency Enhancement Program, the ratio has further decreased, where the ratio is down to 6 students per 2 instructors in the more difficult languages (Categories 3 and 4). The U.S. Congress granted the authority to DLIFLC to award associate of arts degrees in October 2001, and the school granted the first degrees in 2002.

In the last two decades, the DLIFLC has responded to several global initiatives, including Operation Desert Storm, the War on Drugs, and verification of arms control treaties. DLIFLC also reacted quickly following the events of September 11, 2001, creating the Emerging Language Task Force, which responds to problems throughout the world by offering language instruction to match changes in the deployment of American forces abroad, most notably in the Middle East and Central Asia.

The DLIFLC currently teaches 24 languages and several dialects. Duration of courses range from 26 to 64 weeks, depending on what language is taught, and students attend class 5 days a week. Instructors

come from a wide range of backgrounds, and 98% of instructors are native speakers of the languages taught.

The school only hosts Department of Defense civilians and service members from all branches of the military as students. Applicants for the Basic Program are required to have a high school diploma and take the Defense Language Aptitude Battery (DLAB). A score of 95 on the Defense Language Aptitude Battery qualifies the applicant to study Category 1 (French, Italian, Portuguese, and Spanish) languages, while scores of 100 qualify for Category 2 (German). To study a Category 3 language (Hebrew, Hindi, Kurmanji, Pashto, Persian-Farsi, Persian-Dari, Russian, Serbian and Croatian, Sorani, Tagalog, Thai, Turkish, Uzbek, and Urdu), a score of 105 is required. The most difficult languages, that is, Category 4 (Arabic, Chinese, Japanese, Korean) require a score of 110 or higher. Refresher or Advanced Program admissions depend on the level of the language proficiency of the applicant. There are more than 3,000 students at any point in Monterey, and more than 170,000 students have graduated from a DLI program since its inception in 1941.

To further achieve proficiency, DLIFLC has created an Immersion Program. Students and instructors spend 1 to 3 days in the isolated facility, completing real scenarios like shopping at a market place, traveling overseas, and making hotel reservations. Students may also be sent abroad for a month-long immersion. Thirteen sites across the United States contain Language Training Detachments, where instructors teach refresher and continuing education courses.

In addition to continuing education, the DLIFLC also contains the Field Support and Special Programs Division. Before deployments, service members receive language training as well as cultural awareness classes. Units may request Mobile Training Teams year-round. The DLIFLC lends additional support by shipping thousands of Language Survival Kits to troops deploying. The kits are designed to be used in the field and are produced in more than 30 languages.

Lindsey Chamness Maguigan

See also Global War on Terrorism; Intelligence, Human; World War II

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DESERTION

There are several forms of absence from military duty, with desertion being the most serious. Desertion has been a problem for the U.S. armed forces throughout their history, but its frequency has changed dramatically. It was far more prevalent in the 18th and 19th centuries than later. Just as U.S. society has changed radically, so have the composition of the armed forces and the incidence of desertion. Standards for entering the armed forces, even in wartime, are higher than they once were. More and more service members are specialists, often serving in support roles rather than in combat units, perhaps thereby helping to reduce desertion. This entry examines the history of desertion in the U.S. armed forces from the 18th century to the present, factors that contribute to desertion, and punishments.

Background

Escaping from military service was relatively easy in a largely rural society that lacked the extensive communications and law enforcement networks that exist today. Societal attitudes, furthermore, have been vastly transformed. During the 18th and 19th centuries, many civilians had a strong prejudice against standing armies, and they encouraged desertion and aided deserters. Now, an increased degree of governmental control over individuals is generally accepted. Paradoxically, desertion rates in the services during periods when conscription was in force have been lower, often much lower, than in periods when the armed forces were dependent on recruitment.

Within recent decades, military personnel who have left their duty stations without permission have generally been listed as deserters after 30 days. Only absentees who seem to have intended to leave military control permanently are likely to be charged with desertion, but remaining away from military control for more than 30 days shifts the burden of

proving intent from the government to the accused. In the past, desertion has often been construed as any absence, especially in combat areas. Thus, some service members were listed as deserters simply because they had become separated from their companies and fought in other units. Charges were dropped when the absence of a crime became apparent.

Offenses related to desertion are absent without leave or an unauthorized absence of less than 30 days and “missing a movement,” the failure of a service member to move between duty stations when ordered. Missing a movement to a combat area is likely to have more serious consequences than failure to move in accord with orders not involving combat duty.

Causes for Desertion

Although cowardice has certainly led to many desertions, the offense has been frequently caused by a revulsion against some or all features of military life. In the late 19th century, some soldiers even deserted because they objected to being sent to school to learn to read and write. Others disliked working with horses, which explains why, at times, more cavalrymen and artillerymen than infantrymen deserted. More substantial reasons for desertion in past centuries were the failure of Congress to provide pay in a timely manner and the all too often lack of decent food and even uniforms.

In many instances, personal problems, including family responsibilities, have been intensified by military service and have led to desertion. During the American Revolution, in particular, many members of the armed forces left the army to harvest crops to support their families. In the 19th century, the labor involved in building and maintaining military installations alienated some soldiers, who compared themselves to better paid civilian laborers who enjoyed more freedom. When civilian jobs were readily available and were paying well, some service members deserted. Depressions, however, encouraged enlistments, not desertions, although in the Great Depression, some soldiers deserted because they could earn more in the Civilian Conservation Corps.

There have been numerous other causes for desertion. In the War of 1812, many apprehended deserters pointed to their well-founded fear of disease as their reason for leaving. In the

19th century, some men joined the army for free transportation to the West. The proximity of gold fields, moreover, was a lure for service members. In the Mexican-American War of 1846–1848, some regular army soldiers deserted to join volunteer units, which had much less rigorous discipline. From the American Revolution until after the Civil War, bounties, that is, bonuses, were paid to many recruits during both peace and war. The provision of such rewards, not surprisingly, led some men to become “bounty jumpers,” that is, to enlist in a military organization, then desert, and join another military organization, in order to secure another bounty.

Desertion has been very largely, but never wholly, an offense committed by enlisted personnel, especially those at the lowest ranks and, in particular, early in the deserter’s service. Many deserters have had little education, and in some instances, they may not have grasped the seriousness of their actions. Although most of the many immigrants in the armed forces have served well, often with distinction, immigrants in past times deserted in relatively large numbers, suggesting that they may not have developed much attachment to the United States. Drunkenness has often been a precipitating factor in the decision to desert.

Desertion Rates

The desertion rates that follow come from what appear to be reliable sources, but statistics, in particular before the 20th century, must be viewed with at least some caution because of the incompleteness of surviving records. The meaning of the terms *desertion* and *absent without leave* have changed at times, moreover. During World War I, draft evaders were considered deserters, for example. The desertion rate in a given military service or during a particular campaign may differ considerably from global numbers for a war or other time period.

In the Revolutionary War, approximately a quarter of the soldiers deserted. About 13% of the army deserted in the War of 1812. During these conflicts, moreover, substantial numbers of soldiers left in whole groups. The overall rate for the army between 1815 and 1861 was about 15%, although the ratio of army deserters to recruits sometimes amounted to 50% or even more a year. During the Mexican-American War, the desertion rate was below 7%,

a fact that may be attributed to the relative brevity and highly successful course of the war.

The Union Army experienced substantial numbers of desertions as early as 1862. Overall, the desertion rate was about 9% or 10%, with a much lower rate in the navy. Nevertheless, enough men, including numerous African Americans, stayed in service to defeat the Confederacy. Despite the stake they had in the Civil War, African Americans deserted the Union Army in significant numbers. Often, they were assigned to extremely demanding labor duty, and for much of the conflict they were paid less than Whites. For years after the Civil War, African Americans deserted from the army at substantially lower rates than White soldiers because of their benefits and the prestige their service gave them among African Americans. The South had great difficulty in keeping its armies together; its inability to do so was a major factor in its loss of the war. The desertion rate may have been between 8% and 13%. The outnumbered Confederates could sustain such losses even less than federal forces. The increasingly dim military prospect for the South was an extremely important motive for desertion, especially in the last months of the war.

After the Civil War, the army returned to an average annual desertion rate of approximately 15%. In 1871, however, about one third of the army deserted. Retention improved during the 19th century, partly as a result of salary increases and improved living conditions, but there were still many desertions. In 1906, for example, the army desertion rate was 7.4%. The navy suffered even more severely. Between 1900 and 1908, at least 14% of enlisted personnel deserted each year. In 1880, the rate had been about 12%, so there had been no improvement in the retention of sailors.

Desertions during World War I were markedly fewer than ever before, running to only about 1%, aside from draft evaders. The short duration of the conflict for the United States and the general confidence among soldiers and sailors about the success of the war effort were factors in keeping the desertion rate low. During World War II, desertion rates increased over those of 1917–1918, with an army high of 6.3% in 1944. Although military discipline deteriorated during the Vietnam War era, desertion rates never reached those of the 18th- and 19th-century wars. They were only marginally higher than those recorded for the Korean War years. Rates

ranged from 1.49% to 7.35%. More recently, rates have been highest for the army and marines and the lowest for the air force, with the navy somewhere between the other services.

Punishment for Desertion

The incidence and severity of punishment for deserters has varied considerably. In the 18th and early 19th centuries, the armed forces did not have prisons, so punishment usually took the form of execution or some combination of running the gauntlet or physical mutilation, such as branding or cutting off one ear or both ears, frequently in addition to flogging and dismissal from the service. During the American Revolution, moreover, many deserters were prepared for execution, but then their lives were spared at the last moment, a measure that was also used in the War of 1812. Deserters, other than those who had defected to the British, were usually executed only if they were repeat offenders. In the course of the War of 1812, executions increased rapidly, owing to the increased desertion rate. Congress abolished the death penalty for desertion during peacetime before the Civil War. Several hundred Union soldiers, many of them "bounty hunters," were executed, although there were huge numbers of deserters.

In the early 20th century, desertion continued to be a major offense, but punishments continued to vary significantly. In some cases, men were given dishonorable discharges after prison, but others suffered only fines. The use of capital punishment has decreased and has now been effectively eliminated. Only a single execution for desertion occurred in World War II when higher commanders in the European Theater of Operations thought an execution was an absolutely necessary deterrent. Some other World War II offenders were sentenced to death, but the sentences were later changed to prison terms; others received long prison sentences. Following the war, these punishments were reduced significantly. The magnitude of the problem has declined steadily, thereby putting in question the need for the most drastic sanction. Execution has never seemed to be a particularly useful weapon against desertion, moreover. Then, too, support for capital punishment in the United States has declined generally over the years, especially in regard to crimes other than murder.

Deserting to the enemy has been an especially heinous crime that has often been punished by death. A number of soldiers and sailors deserted to the British during the American Revolution. In the Mexican-American War of 1846–1848, several hundred U.S. soldiers served in the Mexican Army. These deserters have often been portrayed as Irish Americans who sympathized with the Catholic Mexicans. Although they were organized as a Saint Patrick Battalion, only a portion were Irish. Some of its members were immigrants from other countries, and many others were native born. Religion does not seem to have played a significant role in the episode. Fifty of these deserters were executed. There were significant desertions to the opposing forces in the course of the Civil War, too, but deserting to the enemy was a course taken by very few during the two World Wars or counterinsurgency campaigns. During the Philippine-American War, 1899–1902, a few African Americans joined the Philippine nationalist forces.

After the Vietnam War ended, some political leaders believed that those who had unlawfully avoided military service, and perhaps those who had deserted, should be treated mercifully. President Gerald Ford offered a complicated scheme for allowing draft evaders and deserters to undertake "national service" to compensate for time not spent in the military. The plan was unpopular, and relatively few people took advantage of it. Later, President Jimmy Carter gave draft evaders an amnesty, while conceding nothing directly to deserters. Some deserters, however, were successful in having their discharges changed, if they had only deserted after having served a full tour of duty in Vietnam.

Despite the seriousness of desertion in the past, punishment has not been the only way to combat the problem. Amnesties have been very much a part of efforts to counter the effects of desertions, especially during wartime. George Washington offered several amnesty periods for soldiers who would return to the army, despite his conviction that deserters merited harsh treatment, including capital punishment in many instances. Early in the 19th century, general pardons were issued for all deserters. The Confederacy issued amnesties several times, the last one in 1865, but such measures were ineffective in dealing with the offense.

In good part, the seriousness with which desertion is viewed by the military depends on the need for personnel. The value of apprehending deserters

has to be weighed, even apart from the question of punishment. Before the advent of the Federal Bureau of Investigation, catching deserters necessitated employing troops, who were lost to combat or support operations. Deserters are unlikely to become very useful to the armed forces. Instead, they are likely to repeat the offense. After the conversion from conscription to voluntary military service in the 1970s, the Government Accounting Office pointed to the expense of pursuing deserters who were generally discharged as unsuitable after their apprehension. Perhaps following that advice, the armed services have not been making strenuous efforts to apprehend deserters within recent years. Deserters are generally receiving relatively brief prison terms, moreover.

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See also All-Volunteer Force; Conscription; Oath of Enlistment

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DESTROYERS

The warship type known as the destroyer came into being during the period from 1868 to 1900. As a ship class, destroyers are a good example of how technology can drive ship design and type. They also highlight how warship design must balance speed, endurance, armament, and maneuverability against purpose. Steam and torpedoes gave birth to the original destroyers. Today, the term *destroyer* refers to a multimission surface warship capable of any number of tasks. These include hunting submarines, air defense, and even overland strike using cruise missiles. The standard warship of today is a destroyer, and all the surface fleets of the world are essentially built around this type of ship. This entry provides a brief history of the destroyer, then discusses its roles, designs, and capabilities.

It all started with the British. Robert Whitehead produced the first self-propelled torpedo in 1868 using compressed air as propulsion. Shortly afterward, the Royal Navy decided that the most promising class to mount torpedoes on were small, cheap, steam-powered patrol boats because of their speed. When this craft was combined with the new self-propelled torpedo, a new and dangerous ship class emerged—the motor torpedo boat (MTB). The MTB posed a threat to all large ship classes and was ideal for coastal defense. The near-simultaneous invention by John Holland of the first submarine, really a submersible MTB, only heightened the fear that these new weapons caused in their day. It was not long, however, before naval designers proposed a smaller and cheaper class of ship to destroy MTBs. This was the birth of the destroyer. Its sole purpose was to defend the battle line, or the merchant ships, against the attacks of swarms of MTBs. The first two true destroyers were built in Britain in 1892 and displaced 275 tons each. It was not long before they were among the most ubiquitous class of ship in every navy. They were often armed with 3- or 4-inch-caliber guns, plus torpedoes, and later

machine guns to defend against both MTBs in close combat and that other new technological marvel, the airplane.

New missions accrued rapidly for these fast, maneuverable warships. They eventually came to assume the role of the MTB in the open ocean fleet engagement and at the tactical level would continue in this role up through World War II. Naval history is filled with exciting charges by “squadrons” of destroyers against larger ships launching salvoes of deadly torpedoes. Among the most famous examples of this tactical use of destroyers are Jutland (World War I), around Guadalcanal by the Japanese (World War II), and the Battles of Surigao Strait and Samar off Leyte (World War II).

The most effective role for the destroyer came against its most fearsome opponent, the submarine. It was against these “terror” weapons, first in World War I and throughout World War II and the Cold War, that destroyers established their fearsome reputation as sub killers. With the addition of the helicopters, destroyers could hunt submarines with “dipping sonars” lowered from the hovering helo—the major tactic for sub hunting and destruction today. Destroyers also fulfilled other less glamorous, but important, roles, often known as sea control—missions like convoy escort, antipiracy patrol, and search and rescue. In addition to their antisubmarine warfare (ASW) missions, they came to serve as important antiaircraft ships protecting the aircraft carrier, transport, and amphibious shipping.

During the Cold War, the destroyer performed all these missions—going from specialized classes to the one-size-fits-all destroyers of today’s modern fleets. After World War II, it seemed that the destroyer had no natural enemies left, and navies slashed their inventories of destroyers. With the coming of the Korean War, and later Vietnam, destroyers gained a new lease on life as naval gunfire support ships. As the Soviet Union built up its submarine fleet in the late 1950s, the destroyer and the ASW aircraft carrier became the premier sea control task force of the North Atlantic Treaty Organization (NATO) navies, forming “hunter killer” groups, a concept proven during World War II. Later, when the Soviets deployed long-range maritime strike bombers, the destroyer was modified by NATO navies as the antiaircraft-guided missile destroyer.

The biggest design drawback of the destroyer, both today and when it was first put to sea, is its high fuel consumption. This is a result of its design criteria for both high speed and maneuverability. In particular, maneuverability is a function of size, the smaller the more maneuverable—too small means that the destroyer cannot accompany the main fleet and in any case would spend all its time refueling. In the unending cycle that is warship evolution, the destroyer gave life to another war-winning concept, the fleet oiler, without which the destroyer is practically useless. During the Cold War, Admiral Hyman Rickover tried to produce a nuclear powered destroyer, the USS *Bainbridge*, but this ship’s upkeep and expense proved unsuitable to the role that destroyers had come to play as the backbone of any modern surface warfare fleet. To justify the expense, *Bainbridge* was reclassified as a cruiser.

Since the end of the Cold War in 1991, the destroyer has become *the* multipurpose surface warship. It is still the primary ASW ship in most navies, always, as mentioned, with ASW helicopters aboard. It also has the role of a surface-to-air missile platform, capable of shooting down enemy aircraft at both low altitude and high altitude at great distances to protect high-value units like convoys or aircraft carriers. Since the Persian Gulf War of 1991, navies have also placed long-range cruise missiles, such as the U.S. Tomahawk land-attack cruise missile (TLAM) on United States and some NATO warships. These missiles can attack targets hundreds of miles inland using satellite guidance. Recently, in Libya, 2011, NATO destroyers performed this function, called strike warfare, in attacking Muammar Gaddafi’s air defense systems. These same ships have also been used to attack terrorist targets.

The People’s Republic of China is building vast quantities of destroyers—although they only have a couple of the multimission types. The premier destroyer in the world today is the *Arleigh Burke* class of the U.S. Navy. In fact, the United States no longer builds cruisers and has gone to the destroyer as its largest surface combatant class of ship. These ships, in addition to performing all the missions mentioned, also have the most advanced surveillance radar in the world, the SPY-1D. This radar, when coupled with the latest software and missiles, is the only sea-based

missile defense system in the world that can defend against intermediate-range ballistic missiles.

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See also Aircraft Carriers; Battleships; Frigates; Submarines; Torpedoes

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DETERRENCE

"Deterrence," explains the title character of Stanley Kubrick's 1963 film *Dr. Strangelove*, "is the art of producing, in the mind of the enemy, the fear to attack." While an object of ridicule in the film, the good doctor was right. At about the same time that Kubrick was explaining the emerging theory of deterrence to the world, a young Harvard University professor, who would shortly make a name for himself outside the hallowed halls of academe, ventured his own remarkably similar definition. In his 1962 study, *The Necessity for Choice*, Henry Kissinger explained the following:

Deterrence is finding a way to make an adversary realize that there is danger, and that this danger is greater than the benefit that might be realized, and as a result the adversary does not dare take a particular course of action. (p. 12)

A decade later, the political scientists Alexander L. George and Richard Smoke, in their classic 1974 study, *Deterrence in American Foreign Policy: Theory and Practice*, defined deterrence as "simply the persuasion of one's opponents that the costs and/or risks of a given course of action he might take outweighs its benefits" (p. 11). As the reader clearly can see, the general explanation or goal of deterrence remained

constant throughout the Cold War. Its theoretical underpinnings, however, have changed a good deal. This entry examines deterrence theory and the history of deterrence, with a focus on U.S. policies.

Deterrence Theory

During the Cold War, rational choice, also known as cost-benefit analysis and game theory, dominated the writings on deterrence. Writers in the cost-benefit analysis school presuppose that the actors are rational and will apply a classic cost-benefit analysis. They further presuppose that if the costs of challenging another actor are too great, then the rational acting challenger will back down and deterrence will succeed. While studies confirm that this theory played out successfully during the nuclear age, when American nuclear power deterred the Soviet Union on countless occasions, conventional forces as often as not failed to deter challengers prior to 1945. In particular, weaker states while fearing the costs of military action sometimes perceived that inaction carried greater risks.

A second theoretical approach, game theory, pioneered by Thomas C. Schelling during the 1960s, also presupposed rational actors that were motivated by goals that can be rationally calculated and quantified. Game theory, however, made greater use of psychological factors and recognized that success depended in part on credibility, which is the ability to convince an opponent that a given action will invite severe consequences. In what some game theorists refer to as a "chicken game," the deterring actor must convince the challenger that it will not back down in the face of threats no matter how severe and that the deterring party will even accept its own destruction. This refinement of game theory led, during the Cold War, to the concept of mutually assured destruction. A counterpart to mutually assured destruction, proportional response, which evolved at about the same time, stressed that to retain credibility, deterrence must be proportional to the issue at stake; put another way, a defender cannot deter an aggressor when the only means at its disposal is massive retaliation and a general nuclear war. Game theory then, far more than cost-benefit analysis, sees deterrence as a fluid or ongoing process where the actors are constantly evaluating information.

In the 1970s, during the so-called third wave of deterrence writings, scholars began to question the

very utility of deterrence. Like the earlier schools, these newer writers recognized that incomplete or inaccurate information often undermined deterrence. They further reasoned that given its limited value and tendency to strain relations between Washington and Moscow, thereby making a fundamental readjustment of Soviet-American relations impossible, policymakers should reevaluate the entire strategy.

Deterrence in History

Although major writing on deterrence began with the nuclear age, the concept itself dates back to ancient times. And while successful in restraining the superpowers after 1945, deterrence failed as often as not in the prenuclear era. Thucydides, the great chronicler of ancient Greece, for example, recounts in his epic history of the Peloponnesian War how both sides used, with limited success, what today is known as deterrence. The failure of Athenian naval deterrence, in fact, led to conflict with Corinth and eventually the Peloponnesian War, a generation-long death struggle with Sparta. In all likelihood, deterrence failed in ancient Greece because neither antagonist maintained a sufficient military advantage to convince its opponent that it possessed a credible deterrent. Likewise, while Titus Levy's history of the Second Punic War recounts multiple instances where Roman might and the reputation of its forces deterred Hannibal from taking aggressive action, Roman military power did not deter the weaker Carthage from challenging the Roman-imposed status quo.

Deterrence's checkered record continued into modern times. During the early 19th century, not even the greatest coalition of European powers, led by Britain at sea and Austria and Russia on land, could deter Napoleon. At the dawn of the next century, Russia's dominance on land and sea could not deter upstart Japan from humiliating Tsar Nicholas II and redrawing East Asia's geopolitical map during the 1904–1905 Russo-Japanese War. Japan's decision to fight in 1904 is especially important in that it illustrates what game theorists had hypothesized—a rational state using cost-benefit analysis can reasonably decide to go to war because the costs of inaction are as great, if not greater, than the cost of action.

A decade later, deterrence failed spectacularly as neither the Franco-Russian buildup on land nor

England's dominance at sea deterred the Central Powers from starting Europe's greatest war since Napoleon. John H. Maurer rightly concluded in his 1995 study, *The Outbreak of the First World War*, that deterrence failed in 1914 because of Britain's unwillingness to offer ironclad guarantees to defend France and upgrade its own land forces.

American Deterrence

Within a generation, American leaders learned firsthand the limits of deterrence. In response to the Second Sino-Japanese War, which began in July 1937, Tokyo's decision to join the Tripartite Pact in September 1940, and the general power vacuum in Asia that occurred because of the Anglo-Soviet preoccupation with Nazi Germany, the Franklin D. Roosevelt administration attempted to deter further Japanese aggression in Asia. For nearly 3 years, Washington used military and economic deterrence to halt Japanese expansion only to see the policy fail on December 7, 1941. As was the case in 1904, Japanese leaders decided that the cost of inaction, which in this case meant exhausting the country's oil reserves within a year, was worse than fighting a coalition of stronger powers.

America's deterrence began in the summer of 1938 when, in response to the worsening situation in Asia, Congress approved the Second Vinson Trammell Act, which provided for the construction of 3 battleships, 2 aircraft carriers, and some 40 other vessels. The fall of France in June 1940 provided an impetus for naval expansion and before the summer of 1940 ended, Congress approved two additional naval expansion bills, including one designed to produce a true two-ocean navy. By this time, the Pacific Fleet had already been transferred from the West Coast to Hawaii to deter Japan. In addition to naval deterrence, Washington also used the threat of American air power to thwart Japanese expansion. During the summer and autumn of 1941, the War Department rushed the new American B-17 bomber to the Philippines, where Army Chief of Staff George C. Marshall and Secretary of War Henry Stimson believed that they might deter a Japanese strike South.

By the summer of 1941, American economic deterrence had actually run ahead of military measures. In the summer of 1940, Congress approved an export control act that allowed Washington to

embargo select raw materials and finished goods vital to the Japanese war machine. In theory, by embargoing only certain goods, the United States would deter Japan from further acts of aggression by threatening to curtail the sale of goods not yet subject to the embargo. By the summer of 1941, the United States had stopped selling to Japan nearly all vital raw materials, save for oil, and in July 1941, Washington froze Japanese assets and brought all U.S.-Japanese trade to a halt following Tokyo's absorption of the southern half of French Indochina.

Unfortunately, American deterrence failed to halt Japan and may even have accelerated the onset of the Pacific War. In the run-up to Pearl Harbor, Japanese navy chief of staff Osami Nagano described American deterrence as "iron chains" that Japan must fight to break. For Japan, the prospect of a potentially ruinous war was better than the further sanctions and additional American military preparations. Fortunately, during the long Cold War that followed the end of World War II, deterrence proved more successful.

Deterrence and the Cold War

During the nearly five-decade-long Cold War, both the United States and, after 1949, the Soviet Union relied heavily on nuclear deterrence to protect vital national interests. During every decade of the long conflict, one side or the other put nuclear deterrence to the test. President Harry S. Truman, for example, used the threat of nuclear weapons early in the 1948–1949 Berlin Blockade in an attempt to compel the Soviets to reconsider their actions, and in 1950, Washington agreed to a vast expansion of American nuclear military power to deter Moscow.

However formidable, America's nuclear arsenal did not deter the Soviets from building the Berlin Wall in 1961 nor was deterrence uniquely American. Moscow's decision to base nuclear weapons in Cuba was intended in part to protect the isolated communist outpost, but here too deterrence failed in part because while the United States knew that Russia had planned to base nuclear weapons in Cuba, American officials did not know until 1992 that the former USSR (Union of Soviet Socialist Republics) had some 42 operational intermediate range nuclear weapons already on the island. Deterrence received its greatest test early in the 1970s, when the Nixon administration readied the nation's nuclear strike

forces to keep the Soviet Union from intervening in the 1973 Arab-Israeli War. Whatever his reason for resorting to nuclear deterrence—some suggested that it was an effort to deflect the nation's attention from Watergate—the gambit worked and the Soviets stayed out.

Post-Cold War Deterrence

Deterrence has survived the Cold War's end and while mutually assured destruction no longer dominates the geopolitical landscape, the doctrine still plays a role in shaping the relations between rival nuclear states such as India and Pakistan and no doubt moderates the behavior of new nuclear powers such as North Korea.

While successful in moderating the behavior of nuclear states, many of the inherent limitations of conventional deterrence have reemerged since the end of the Cold War. Despite Washington's military dominance in 1990, Iraq invaded Kuwait, confident that the United States would not intervene. Eleven years later, American power failed to deter al Qaeda, despite America's demonstrated commitment to military intervention in the Middle East. Deterrence's second critical failure in just over a decade quickly led to a decreased reliance on the heretofore favored policy and the rise of a new American defense doctrine, that of preemption: Striking an enemy before it attacks. The shift from deterrence to preemption in part explains the U.S. decision to invade Iraq rather than to rely on deterrence. By 2003, the architects of American foreign policy believed that the Republic could best be protected by the new policy of "confronting the worst threats before they emerge," rather than the decades-old policy of deterrence whereby the United States and others sought to keep the peace by "producing, in the mind of the enemy, the fear to attack."

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See also Japan; Korean War (1950–1953); World War II

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DIRECT FIRE

U.S. Joint Publication 1-02 defines *direct fire* as “fire delivered on a target using the target itself as a point of aim for either the weapon or the director” (Department of Defense, 2010, p. 97). Put another way, direct fire is the use of any weapon to attack a target that is in the line of sight of the person/crew of the firing weapon or system using the weapon’s sights to aim at the target. Projectiles fired from direct fire weapons usually have relatively flat trajectories. This entry examines techniques, advantages, and disadvantages of direct fire.

Some weapons can utilize either direct or indirect fire to attack a target, such as artillery, mortars, or machine guns. In such cases, the key factor in differentiating between direct and indirect fire is whether or not the weapon is sighted directly at the target. If so, then this constitutes direct fire.

There are several advantages of employing direct fire. Direct fire is generally more accurate, particularly in terms of first-round effects, because the shooter can easily align the weapon with the target. The shooter can observe the effect of the rounds on the target and quickly make any necessary adjustments. The employment of direct fire is not without some potential disadvantages. The most important disadvantage is that the shooter may be exposed to direct fires employed by the target. In addition, the shooter’s weapon may have a signature that betrays the shooter’s location to the target.

Before the First World War, nearly all of the fires on the battlefield consisted of direct fire. This changed as the massive firepower of World War I armies caused each of the combatants to attempt to protect their artillery. Artillery pieces were moved to the reverse slopes of hills so that enemy artillery could not easily observe and attack them. Artillery

placed in defilade (protection provided by an obstacle, such as a hill, etc.) was safer but required observers to communicate where rounds were landing and to send corrections back to the firing battery. It was through this process that artillery became primarily an indirect fire weapon. World War I also saw the proliferation of other indirect fire means such as mortars. Even machine guns were occasionally used in an indirect fire role.

In modern conflicts such as Iraq or Afghanistan, where wars are conducted among the people, direct fire has taken on a renewed importance. The indiscriminate use of massive firepower can be extremely effective during conventional fighting, but it can also be counterproductive while fighting insurgents taking cover amid civilians. Direct fire is often more precise and more easily controlled than indirect fire. In addition, direct fires generally produce less collateral damage than relatively imprecise area fire weapons such as artillery and mortars. As a result, in counterinsurgency operations where protection of the population is an important goal, direct fire can make a significant contribution to mission success.

Proper direct fire planning is essential in both the offense and the defense. In the offense, units must be aware of the sectors for which they are responsible, even while on the move. This allows a unit to maintain security and to be prepared for enemy attacks at all times. For units on the march, there are a number of methods of assigning sectors of fire, such as the clock method or quadrants.

In the defense, direct fire plans must be carefully coordinated at every level to ensure that there are no gaps in a unit’s fire plan. Any areas that cannot be covered with direct fire are referred to as “dead space” or “dead ground.” If dead space is identified during direct fire planning in the defense, then indirect fires should be placed in such areas. Direct and indirect fires must also be carefully integrated with the obstacle plan to provide an effective defense.

There are a number of effective techniques used in orienting direct fires. It is possible to select prominent terrain features that are clearly distinguishable, even at night, and designate them as target reference points (TRPs). These TRPs can provide known points that permit troops to effectively engage enemy targets. TRPs may also be used as a means of distributing fires across a unit’s sector of fire.

The use of TRPs and other methods for controlling direct fires also helps prevent fratricide. This is particularly important given the increasing range and lethality of modern weapon systems. Fratricide is also often referred to as “friendly fire” or “blue-on-blue” engagements. There are a number of methods of preventing friendly units from accidentally engaging other friendly units with direct fire. These methods vary in effectiveness. For instance, infrared lights may be used to indicate the position of friendly elements. Such IR lights are often easily visible to other ground units in close proximity and even to attack helicopters that may be in support. The ability of fixed-wing aircraft to identify these infrared lights is more problematic as visibility depends on a variety of factors.

Direct fire is a critical element of the fires planning of any military force. Direct fire has taken on a renewed importance in the current operating environment as military forces attempt to root out enemy combatants attempting to hide among the civilian populace. Accurate direct fire results in less collateral damage and accidental civilian casualties than other, less precise, fires available to modern armies and can make a significant contribution to mission success.

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See also Friendly Fire; Indirect Fire; Tactics, Ground Forces; World War I

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DISABILITY

Disability, or the social consequences of physical or mental impairment, is a product of all military conflict. For as long as armies have fought wars, combatants have returned home bearing the physical and emotional scars of battle. This entry discusses advancements in caring for wounded U.S. service members, procedures for evaluating disability, and criticism directed at the Department of Veterans Affairs (VA) regarding posttransition care.

Background

Since the late 19th century, military physicians and scientists have made great strides toward limiting the numbers of troops either killed or permanently disabled because of wartime injury and illness. In World War I, advances in battlefield evacuation and emergency trauma care saved the lives and limbs of countless wounded men. In World War II, the introduction of penicillin and sulfa drugs reduced death rates even further, allowing war-injured combatants to fight off infections that would have been fatal only a few years earlier. In the Korean and Vietnam Wars, the use of evacuation helicopters and Mobile Army Surgical Hospitals dramatically decreased the transit time between a combatant’s point of injury and the site of definitive care—a key step in the reduction of permanent disability. Today, the Department of Defense (DOD) and the VA, working alongside civilian contractors and nonprofit organizations, have developed a wide range of assistive technologies and social programs to minimize the long-term effects of physical and psychological trauma. Despite such efforts, however, the era of disability-free warfare—predicted by military scientists as far back as the late 19th century—remains a distant fantasy. Since the start of the Global War on Terrorism in 2001, more than 30,000 U.S. troops have been wounded in combat, more than half of them requiring immediate medical transport back to the United States. To add insult to injury, the latest generation of disabled veterans continues to face many of the same

bureaucratic and institutional barriers that plagued their 20th-century counterparts.

Treatment and Recovery

For U.S. forces fighting in Afghanistan and Iraq, traumatic injury—both physical and mental—remains a constant hazard. To the surprise of military planners in Washington, both Operation Enduring Freedom and Operation Iraqi Freedom quickly devolved from mobile wars of maneuver into grinding antiguerrilla campaigns characterized by the use of “irregular” tactics on all sides. Unable or unwilling to wage war by conventional means, Afghan and Iraqi insurgents increasingly turned to homemade bombs and other improvised explosive devices—known in military jargon as IEDs—to shred the bodies of the American occupiers. In addition to extensive soft tissue damage, IED victims frequently suffer fourth degree burns, internal bleeding, and traumatic brain injury—sometimes referred to as the “signature wound” of the Global War on Terrorism. Some 50% of IED casualties exhibit prolonged headaches, memory loss, cognitive problems, and other symptoms of traumatic brain injury. Moreover, because the destructive force of IEDs is focused largely on their victims’ extremities, more than 500 Americans have returned from Afghanistan and Iraq as amputees, their bodies forever marked by wartime trauma.

Against this backdrop, the U.S. Military Health System has implemented a two-phase campaign to minimize the number of combat personnel permanently disabled through military service. The first phase focuses on saving the lives of U.S. casualties and optimizing their chances of functional recovery. It begins on the battlefield, with combat lifesavers or field medics providing U.S. casualties with immediate medical treatment. Once evacuated from the line of fire, wounded combatants move through additional levels or “echelons” of care, depending on the severity of their injuries. The first stop is usually a nearby aid station, where a small forward surgical team stabilizes the patient for further travel. From there, wounded service members are transferred to an army combat support hospital, a navy hospital, or an air force theater hospital, where military surgeons administer further treatment—such as reconstructive surgery and transfusion—before shipping them out of the combat theater. En route to

the United States, most injured Operation Enduring Freedom/Operation Iraqi Freedom troops make a brief stop at Landstuhl Regional Medical Center in Germany, the U.S. military’s largest overseas medical facility. Thanks to improvements in transportation, communications, and organization, the medevac process is remarkably efficient. During the Vietnam War, U.S. casualties typically waited 2 weeks or longer to receive definitive, off-continent care. Today, the same level of treatment is available in less than 13 hours.

Besides accelerating casualty evacuations, the U.S. military has taken numerous steps to minimize the legacies of traumatic injury. Each branch of the armed forces sponsors its own support group to assist combat casualties throughout the recovery process. In the early 2000s, military scientists introduced a series of fast-acting hemostatic bandages and tourniquets to reduce battlefield hemorrhage, one of the most common causes of combat fatalities in Afghanistan and Iraq. More significant still, in May 2004, the joint armed forces initiated the military’s first integrated system of in-theater trauma care. Based on civilian trauma systems developed in the aftermath of the Vietnam War, it was designed to streamline the casualty treatment process by eliminating structural redundancies and improving echelon-to-echelon communication. To complement such efforts, the military also developed a variety of instruments, including the Joint Theater Trauma Registry, a web-based medical database, to collect and manage information about combatants’ injuries.

Some of the most noteworthy medical achievements of the Global War on Terrorism have come in the field of prosthetics. Since 2001, researchers at the Defense Advanced Research Projects Agency’s Revolutionizing Prosthetics program and other prosthetic laboratories have introduced a number of high-tech artificial hands, feet, and limbs, many embedded with electronics to facilitate fluid motion and fine-tuned control. A follow-up to their popular C-Leg (first developed in the mid-1990s), Otto Bock HealthCare’s latest design incorporates microprocessors and hydraulic cylinders to anticipate users’ movements and sense changes in terrain. Many Operation Enduring Freedom/Operation Iraqi Freedom amputees undergo physical therapy at Walter Reed’s Military Advanced Training Center, a 31,000-square-foot training and rehabilitation center located in Washington, D.C. One of the

largest facilities of its kind, the Military Advanced Training Center features a state-of-the-art gait lab, where military orthopedists use video imaging to record amputees' movements while wearing their prosthetics. In addition, the center hosts virtual reality simulations in which patients learn to readapt to their new lives as veteran amputees.

Transition

On conclusion of their medical treatment, many severely injured patients prepare to enter the second phase of the Military Health System's integrated program for casualty care: the transition to civilian life. In military parlance, *transition* generally refers to the separation of personnel either from combat status or from active-duty service altogether. The DOD has instituted a multistage Disability Evaluation System to assess if a service member's injuries warrant transition and, if need be, disability compensation. First, a Medical Evaluation Board, usually composed of two or three military physicians, decides whether an injured service member can resume his or her military occupational specialty. If that is not the case, a three-member Physical Evaluation Board convenes to determine if the injured party is fit to continue in military service. The Physical Evaluation Board also assigns the injured service member an official disability rating based on a schedule published by the VA.

Although the VA doesn't offer a specific definition of disability, its ratings schedule is designed to quantify both the loss of bodily function and the degree to which a service-connected condition negatively affects an individual's capacity for social and economic readjustment. Ratings are expressed as percentages of 10, and they range from 0% to 100% (e.g., 100% disability), depending on the severity of impairment. On separation from service, veterans with ratable disabilities are qualified for an array of federal benefits, including vocational training, psychological counseling, and monetary compensation. Besides treatment at a VA medical facility, some disabled veterans are eligible for small grants toward the purchase of specially adapted housing, clothing, and automobiles. The VA also provides domiciliary and nursing home care for disabled veterans undergoing rehabilitative training or in need of long-term medical assistance.

In recent years, the VA and DOD have taken a holistic approach toward the issue of disability

transition. All major military hospitals staff transition assistance teams and the VA offers a variety of work-study and educational programs to help disabled veterans readjust to civilian life. Both the DOD and the VA host websites and informational hotlines dedicated to disability assistance, and the entire Military Health System places great emphasis on the social and psychological obstacles facing newly disabled veterans, including those suffering from posttraumatic stress disorder. Located in more than 200 communities across the United States, VA-sponsored Vet Centers offer a range of counseling and outreach services for disabled veterans and their families. VA and military personnel also work closely with private veterans' groups such as the Disabled American Veterans and the Wounded Warrior Project to provide support for disabled veterans throughout the transition process and beyond.

Problems and Legacies

Despite the VA's efforts, however, the federal government's treatment of disabled combatants remains seriously flawed, particularly when it comes to delivering posttransition compensation and care. Since the start of the Global War on Terrorism in 2001, disabled veterans and their families have encountered a number of problems negotiating the vast VA bureaucracy, even with the help of government-appointed counselors. Disability claims routinely take months to process, and the typical wounded combatant has to fill out more than 20 forms to receive disability benefits. Many veterans believe that the VA disability ratings schedule is too rigid, downplaying certain kinds of "invisible injuries," and the armed forces have been slow to recognize the long-term effects of traumatic brain injury on combat casualties returning from overseas. No less troubling, the Military Health System has been plagued by scandal at all levels. In February 2007, *The Washington Post* reporters Dan Priest and Anne Hull published a series of devastating exposés of conditions at Walter Reed Medical Center, the nation's premier treatment facility for disabled combatants. They found patients living in squalid, vermin-infested rooms, waiting desperately to receive care. Psychologically traumatized soldiers, including some with severe cognitive and memory problems, were forced to navigate the large complex with little assistance from staff, and many patients accused the

federal government of systematic neglect—a complaint echoed by disabled veterans at military hospitals and treatment centers across the United States.

In the wake of the Walter Reed scandal, the U.S. military and the VA have taken substantial steps toward eliminating bureaucratic red tape and fostering a culture of responsibility among those charged with disabled veterans' care. Today, most disabled service personnel can expect top-notch care at every step in the treatment process—from the moment of injury to the transition to civilian life. Nevertheless, there is little to suggest that military physicians and scientists will be able to eliminate disability from the calculus of American war making in the near future. Even in an age of “virtual warfare,” the military continues to place thousands of troops in harm's way on a daily basis. More important, because disability is as much a product of social environment as physical and psychological trauma, neither technical advancements nor rehabilitation programs can ever fully eliminate the hardships long associated with permanent bodily impairment. In the end, the only way to solve the problem of service-connected disability is to abandon war as we know it.

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See also Benefits, Veteran; Global War on Terrorism; Iraq War (2003); Medical Disability, Veteran; Medicine, Veterans; Traumatic Brain Injury; Veterans Affairs, Department of; War in Afghanistan; Wounds and Injuries

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DISCHARGE AND SEPARATION

The Department of Defense defines *separation* as a general term, “discharge, release from active duty, release from custody and control of the armed forces, transfer to the Individual Ready Reserve, and similar changes in active or reserve status.” Thus, “separated” individuals may or may not be completely relieved of their service obligations—they may still be placed in a reserve status and recalled to duty if they are separated for administrative reasons before they have completed the terms of their original enlistment contract.

Discharge, as a subset of separation, is more final. The Department of Defense defines it as “complete separation from all military status gained through enlistment or induction.” Note that *retirement* is different from *separation* or *discharge* as discussed in this entry.

All separating service members receive counseling from their service's Transition Assistance Program at least 90 days prior to their departure to advise them of the myriad programs available to help ease the transition to civilian life. A “Pre-separation Counseling Checklist” attempts to ensure that this counseling is thorough. Legislation requires placement of this checklist in all personnel records.

Separations may be voluntary or involuntary, administrative or punitive. Reasons for separation of enlisted personnel as outlined in Department of Defense documents governing the process include the following:

1. Expiration of service obligation
2. Selected changes in service obligation
3. Convenience of the government
4. Disability
5. Defective enlistments and inductions
6. Entry-level performance and conduct
7. Unsatisfactory performance
8. Drug abuse rehabilitation failure
9. Alcohol abuse rehabilitation failure
10. Misconduct

11. Separation in lieu of trial by courts-martial
12. Security
13. Unsatisfactory participation in Ready Reserve
14. Secretarial Plenary Authority
15. Reasons established by military departments
16. Weight control failure

Reasons for separation of commissioned officers include the following:

1. Substandard performance of duty
2. Acts of misconduct or moral or professional dereliction
3. Retention is inconsistent with the interests of national security
4. Separation in cases involving extensive confinement
5. Multiple reasons

Both of these lists are, of course, subject to change. Homosexuality, for example, recently ceased to be a reason for involuntary discharge with the repeal of the “Don’t Ask, Don’t Tell” policy implemented under President Bill Clinton. The Don’t Ask, Don’t Tell law, formally known as Title 10 of the U.S. Code, Section 654, was established in 1993. It allowed gay men and women to serve in the military provided they concealed their sexual orientation. On December 22, 2010, President Barack Obama signed legislation that set conditions for the repeal of Don’t Ask, Don’t Tell. All active-duty, selected reserve, and civilians who supervised military personnel received training before the law was officially repealed effective from September 20, 2011.

Again, separations/discharges are, for the most part, categorized as administrative or punitive. Administrative separations/discharges are generally characterized in the three following ways:

1. *Honorable*: The service member’s career met the standards of acceptable conduct and performance of duty for military personnel.
2. *General (Under Honorable Circumstances)*: The service member’s career was “honest and faithful”; however, the negative aspects of the individual’s performance outweigh the positive.
3. *Under Other Than Honorable Circumstances*: The service member separated based on a

pattern of undesirable behaviors, for example, habitual abuse of power or endangering the welfare of others.

Remember that individuals being separated with honorable or general characterizations may in some circumstances still be recalled to duty.

There are circumstances in which a service member is completely released of any obligation to the military *without* receiving one of the above three classifications. This is known as an “uncharacterized separation.” These uncharacterized separations include entry-level separations (those initiated while a service member is still in the first 180 days of service, also known as “trainee discharges”); voided enlistments or inductions (e.g., for those found to be younger than 17 years; those who are insane, intoxicated, or otherwise impaired at time of enlistment; or those found to be a deserter from another service); or separation by being dropped from the roles of the service (a sort of catchall for all other uncharacterized separations).

Punitive separations are discharges levied after conviction by the courts-martial (the military judicial system). They are characterized in the three following ways:

1. *Bad conduct (enlisted personnel)*: A service member receives this type of discharge as punishment for bad conduct rather than as a punishment for more serious offenses of either a civil or military nature. This characterization is less severe than a dishonorable discharge.
2. *Dishonorable (enlisted personnel)*: A service member receives this, the most severe punitive discharge, after having been convicted of offenses usually recognized by the civil law as felonies or of some other military offenses requiring severe punishment.
3. *Dismissal (commissioned officers only)*: Officers receive dismissals after being convicted of offenses usually recognized by the civil law as felonies or of some other military offenses requiring severe punishment.

“Other than honorable” administrative discharges and all punitive discharges result in the loss of some or all Veterans Affairs benefits and veterans’ civilian employment preference, under which veterans receive priority placement over nonveterans in

federal and other civil service jobs. Furthermore, civilian employers will often request a copy of a veteran's DD 214, or "Certificate of Release or Discharge from Active Duty." This document provides a complete overview of one's military service, to include length of service, a chronology of significant personnel actions, documentation of foreign service, an accounting of awards and education, characterization of service, and reason for separation. Providing the DD 214 can prove problematic for individuals who wish to cite their military service but received an "other than honorable" administrative discharge or any punitive discharge. Individuals can complete DD Form 0293, the "Application for the Review of Discharge from the Armed Forces of the United States," should they want to apply for a change in the characterization or reason for military discharge issued to them in an attempt to clear their name or regain veterans' benefits.

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See also Benefits, Veteran; Court-Martial; "Don't Ask, Don't Tell"; Gays and Lesbians; Recruitment, Enlisted; Recruitment, Officer; Retirement; Stop-Loss; Veterans Affairs, Department of

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DIVERSITY

The U.S. Department of Defense (DOD) defines *diversity* as "the different characteristics and attributes of individuals" and *diversity management* as "the plans made and programs undertaken to identify in the aggregate the diversity within the Department of Defense to enhance DOD capabilities and achieve mission readiness." This entry discusses the types of diversity—nationality/ethnic group, racial, religious, gender, and sexual orientation—among U.S. troops from the American Revolution to the present and looks at the continuing commitment of the U.S. military to embrace diversity.

Diversity and the Early 19th-Century Army

Diversity is now viewed by military and civilian officials as essential to maximizing the effectiveness of today's all-volunteer armed forces, but diversity has not always been viewed as a positive attribute. For much of American history, military officials strived to keep the armed forces as White as possible and resisted attempts to allow other groups to serve. At least 5,000 African Americans served in the American Revolution, for example, but Blacks were barred from the militia in 1792 and from the army in 1820, when service was restricted to free White males between the ages of 18 and 35 years.

Military service was characterized by poor pay and living conditions and little chance for advancement, and few White Americans volunteered for service. Therefore, the military depended on significant numbers of immigrants, primarily German, Irish, and English, to fill the ranks. Despite periodic attempts to limit or ban foreign enlistees, the percentage of immigrants in the army continued to rise steadily until the Civil War. From June 1821 until the end of 1823, approximately, 25% of army enlistees were foreign-born, and in 1836–1837, it was nearly 40%. In 1852–1853, 3,516 of the 5,000 men recruited for the army, or roughly 70% of the total, were foreign-born: 2,113 came from Ireland, 678 from Germany,

306 from England, 126 from Scotland, and 293 from various other European countries.

The changing ethnic nature of the nation, and of the military, became apparent during the Mexican War, 1846–1848, when numerous Irish Catholic immigrants joined the army. In recognition of this, President James K. Polk, with the aid of Archbishop John Hughes of New York, appointed two Jesuit priests, John McElroy and Anthony Rey, as the first Catholic chaplains in the U.S. Army. Indeed, in January 1847, Rey became the first Catholic chaplain to die in service.

The Civil War

During the Civil War, more than 516,000 immigrants, accounting for nearly 24% of Union manpower, volunteered for service. German immigrants were most numerous, with more than 200,000 serving in the Union armies, followed by the Irish with more than 150,000. There were also significant numbers of Italians and Scandinavians. Many immigrants and first-generation Americans served in ethnically cohesive units, such as the famous Meagher's Irish brigade, or the 39th New York Infantry, known as the Garibaldi Guard, and composed largely of Italian Americans from New York City. The 9th Ohio, 9th Wisconsin, and 74th Pennsylvania regiments, to name just a few examples, were made up entirely of German Americans. Though there were Irish, Germans, and Italians in their ranks, the Confederate armies did not have the same ethnic diversity as did the Northern forces, with most rebel soldiers claiming British ancestry. There are only 19 Scandinavians known to have served in the Confederate army, for example.

There was religious diversity as well. Though the vast majority of soldiers on both sides were Protestant, there were hundreds of thousands of Catholics and an estimated 10,000 Jews serving in the war—about 7,000 in Union forces. This diversity was represented among the Civil War chaplains, though somewhat unevenly. Approximately 3,000 chaplains administered to Union forces and somewhere between 600 and 1,000 to the Southern armies. The vast majority were from Protestant denominations. There were more than 500 Methodist and 300 Episcopalian chaplains in the Union army, for example, but only 40 Catholic priests. In 1862, the war did see the appointment of

the first Jewish and African American chaplains in the Union Army as well.

The presence of Black chaplains attested to the racial diversity of the federal forces. In July 1862, Congress lifted the ban on Black enlistments, and eventually more than 186,000 African Americans served in the Union Army and another 30,000 in the navy. African Americans in the navy served in integrated crews, but the Black soldiers, the U.S. Colored Troops and those in state units like the 54th Massachusetts, served in segregated units, under White officers. About 36,000 African Americans died in the war, but they provided invaluable manpower for the North. Though individual African Americans fought for the South, the Confederacy never raised any Black combat units.

Native Americans, however, served in relatively large numbers on both sides during the Civil War, building on a tradition of Indian service in some capacity in the military since the American Revolution. Oneida and Tuscarora warriors fought with General Horatio Gates's forces at Saratoga in 1777. More than 1,000 Native Americans, mostly Creeks, Cherokees, and Choctaws, served in approximately 100 organized units during the War of 1812. There were also units of Chickasaw, Shawano, and Creek Indians serving under Andrew Jackson in the Creek Indian War of 1813–1814. From 1815 until 1846, Indian allies fought with the army against other Native American tribes, most notably, the Choctaw and Creek in the First and Second Seminole Wars in 1817–1818 and 1836–1842. The Menominee and Potawatomi served alongside the army in the 1832 Black Hawk War, and in 1836, Creek Indians loyal to the U.S. government fought their own kinsmen in the Creek War. At least one company of Indians fought in the Mexican War.

Initially, the Confederate states managed to raise four regiments of Cherokee, Creek, Chickasaw, and Seminole from the Indian Territory (Oklahoma) in 1861. The U.S. Army would manage to win back the bulk of these tribes over the course of the Civil War, and approximately, 3,600 Cherokee, Creek, Chickasaw, and Seminole served in the Union Army organized into three regiments. For the Cherokee, it was a true Civil War with members of that nation serving on both sides of the conflict. Individual Native Americans also served in regular formations in both armies.

The Civil War also saw the first known Asian Americans to serve. There were not many—only

50 or so in the army and another 36 in the navy have been identified. Most were Chinese Americans, often the sons of sea captains or missionaries.

The Post–Civil War Army

After the Civil War, Congress reduced the size of the army to prewar levels, averaging between 16,000 and 24,000 men for the next three decades. The army, however, did retain much of its diversity. The ranks were once again filled with immigrants, primarily German and Irish. Service in the Civil War had won a permanent place in the army for African Americans in the form of two infantry and two cavalry regiments. The military still used and depended on Indian scouts in their wars against Plains and Southwest Native American nations, and they even accompanied General J. Pershing into Mexico in 1916; the Indian Scouts were not officially disbanded until 1947.

World War I

During World War I, the government celebrated ethnic and racial diversity and used it to help fuel support for the war effort among various groups. The New York 77th or “Melting Pot” Division, for example, composed of recruits with Italian, Jewish, and other immigrant backgrounds, was highly publicized by authorities to attract more ethnic support for the war. More than 367,000 African Americans served in the war. The vast majority were in service and supply units, but two all-Black combat divisions, the 92nd and the 93rd, were raised and saw action on the Western Front. The Great War also saw the first time African American men were trained in large numbers as commissioned officers. All of the senior and staff officers of the Black divisions were White, but the company grade officers were largely African Americans; most of them graduates of Camp Des Moines, the first Black officers' training camp in American history.

More than 12,000 Native Americans served in World War I. There was no deliberate attempt to concentrate them in all-Indian units, but because many were federalized National Guard units, such as the 36th Texas-Oklahoma National Guard Division, this was often the case. The 142nd Infantry Regiment, for example, contained more than 600 Native Americans in its ranks.

Diversity paid dividends for the American Expeditionary Force in Europe. The use of Navajo “code talkers,” relaying tactical information and intelligence in an “unbreakable” code based on their native language in World War II, has been highly publicized, but the practice actually began in World War I. The 142nd had a staff of 18 Choctaw Indians relaying messages, and other units employed Cheyenne, Comanche, Cherokee, Osage, and Lakota Indians in the same capacity.

Gender diversity in the armed forces would also occur in World War I. For the first time in history, the U.S. Navy and Marine Corps began recruiting women, and more than 13,000 would eventually serve, most of them in clerical duties, but in uniform and as official members of the service. The army also employed women; they, too, were in uniform but considered were civilian employees, and it would take decades before their service was fully recognized. By the end of the war, more than 25,000 American women had served in Europe.

World War II

During World War II, the government in conjunction with the entertainment and publishing industries again sought to promote diversity in the military as a means of promoting the war, and distinguishing the U.S. ideologically from its enemies. *Life* magazine and other popular journals ran stories praising women and minority personnel in the military. The diversity the military and private sector did the most to promote, however, was the belief that most military units and ships' crews were microcosms of American society—various ethnic groups thrown together but working toward a common cause. Hollywood helped with its portrayal of the typical “All-American Unit,” in war movies, which generally featured a cross section of American cultural and religious diversity. The ethnic groups celebrated were all White—from Jewish and Italian Americans from New York to the ubiquitous Texan. The reality, however, was that most minorities would serve in segregated units.

During World War II, President Franklin Roosevelt and Army Chief of Staff General George Marshall pursued an official policy of maintaining racial segregation in the military but providing increased opportunities for minorities. The Selective

Service Act of 1940 prohibited discrimination based on race or color, and in 1942, the president ordered the previously all-White Marine Corps to begin accepting Black recruits and the navy to allow minorities to serve as more than just cooks and stewards. There were Black pilots in the U.S. Army Air Forces, Black tankers in General George S. Patton's army, and an all-Black combat division, the 92nd, in the European theater of operations.

More than 20,000 Japanese Americans served in World War II, and they also fought in segregated units, the most famous being the highly decorated 442 Regimental Combat Team, which saw service in the European theater of operations. American policy generally prohibited posting Japanese Americans to the Pacific theater, so with few exceptions, most did their wartime service stateside or in Europe.

American racial policies were not absolute, and members of some ethnic groups were not segregated. It has been estimated that more than 75% of the 20,000 Chinese Americans who served in the war did so in integrated units. More than 44,000 Indians served in integrated units, but often in formations with substantial numbers of other Native Americans. They served with distinction in both major theaters of operation, in a wide range of Military Occupational Specialties, but as in World War I, many were employed as code talkers. The Navajo code talkers used by the army and Marine Corps in the Pacific theater are the most famous, but Indians from several nations were employed in this capacity in the European theater of operations as well. The 4th Infantry Division in Europe had Comanche code talkers, for example.

World War II saw expanded opportunities for women in the military, though the army initially fiercely resisted inducting women. In 1942, the army agreed to the creation of the Women's Army Auxiliary Corps, which allowed women to serve alongside the army, as auxiliaries, but not quite full members of the service. It was not until July 1943, and with considerable support from Army Chief of Staff General George Marshall, that women were officially inducted as members of the army in the Women's Army Corps. More than 150,000 women would serve in the Women's Army Corps in a wide variety of noncombat occupations, though most were involved with clerical or communications work. Women could serve as full members of the

U.S. Navy as well. In August 1942, the navy activated the Women Accepted for Volunteer Emergency Service. More than 84,000 women served in the Women Accepted for Volunteer Emergency Service, 8,000 as officers.

Post-World War II: The Military Embraces Diversity

Two events occurred in 1948 that would help ensure a more diverse military. In July, President Harry Truman issued Executive Order 9981, mandating fair and equal treatment and opportunity regardless of race for all in the military, effectively ending segregation in the armed forces. Women also became a permanent part of the military that year with the passage of the Women's Armed Services Integration Act.

After initially resisting, military authorities embraced integration and equal opportunity—for males—seeing it as a valuable tool in increasing military efficiency and as an excellent Cold War propaganda. By the beginning of direct American involvement in Vietnam, the military was probably the most integrated and diverse institution in the United States. During the war in 1969, Secretary of Defense Melvin R. Laird established the Domestic Action Council and empowered it to develop race relations programs for implementation throughout the armed forces. That same year, the DOD issued the first Human Goals Charter for Military and Civilian Personnel. The charter committed the Pentagon to providing equal opportunity and advancement based on ability to all Defense Department personnel regardless of race, creed, or color. The charter has been renewed and expanded by every secretary of defense since.

The All-Volunteer Armed Forces

Initially, diversity, like integration, was imposed on the military largely for civilian, political, and cultural reasons and was not viewed by military authorities as enhancing their martial capabilities. This changed with the advent of the all-volunteer armed forces after the Vietnam War ended in 1973. No longer able to make up manpower shortages through the draft, the military needed to appeal to a wide array of civilians to sustain their force levels and attract enough recruits with the necessary skills and education.

The unpopularity of the draft and of the Vietnam War had led to a sharp decline in the number of minorities either enlisting or reenlisting in the military, and racial friction and violence had convinced African Americans, in particular, that the military was in fact no better than civilian society. But a variety of factors, including high civilian unemployment rates, the end of the war, and racial reform within the military once again made military service attractive. Critics were soon arguing that it was too attractive and that minorities were enlisting in disproportionate numbers. By 1983, African Americans composed 33% of the army's enlisted strength, 22% of the Marine Corps, 14% of the air force, and 12% of the navy.

Women became another major source of recruits for the all-volunteer armed forces. Roughly 265,000 served in uniform during the Vietnam War years, but they never made up more than a fraction of the armed forces' enlisted strength. But in 1967, President Lyndon Johnson signed legislation that abolished the 2% limit of women in the armed forces and eliminated remaining promotional barriers. By 1983, women made up nearly 10% of the army's enlisted strength. Today, more than 200,000 women account for 15% of the military's strength. Black women in particular proved to be a valuable source of new recruits into the all-volunteer armed forces. By 1983, they accounted for 20% of the enlisted women in both the army and the air force, 23% of the female strength of the marines, and 18% of the navy's.

According to the Defense Manpower Data Center in 2010, males accounted for approximately 86% and women 14% of the total enlisted strength of the armed forces. Women, however, were 16% of the officer corps. White and African American males at 62% and nearly 18%, respectively, make up the bulk of U.S. defense forces, with Latinos accounting for 12% and Americans of Asian and Pacific Islander heritage accounting for 4%. African Americans and Latinos were underrepresented in the officer corps: White males accounted for 77% of all officers, with 8% African American and 5% Latino. The numbers for both officers and enlisted vary according to service branch.

Sexual Orientation and Don't Ask, Don't Tell

Sexual orientation in the military has been far more difficult to track than ethnicity. For much

of American military history, homosexuals have been actively persecuted and discharged from the military. In 1993, Congress adopted and the armed forces implemented a policy of "Don't Ask, Don't Tell" (DADT) with regard to gays in the military, under which the Pentagon could not ask military personnel their sexual orientation but would discharge gays if their orientation became known. Between 1997 and 2007, nearly 10,500 service members were separated from the military under this policy—the majority occurring before the terrorist attacks of September 11, 2001. DADT was always controversial and never satisfied either supporters or opponents of gays in the military. In December 2010, despite Republican-led filibusters in the Senate, both houses of Congress voted to repeal DADT. President Barack Obama signed the bill on December 22, and DADT was officially terminated on September 20, 2011.

Military Success in Retention

The armed forces not only proved adept at attracting women and minorities to the military, they also proved relatively successful in retaining them. There were several reasons. The armed forces may inherently avoid social and cultural change whenever possible, denying their role as a "social laboratory," but they are also very pragmatic institutions, and they needed recruits. The need for volunteers can often lead to innovation and embracing ideas that were once anathema to the chain of command. Days after the repeal of DADT, marine recruiters were canvassing a gay community center in downtown Tulsa, Oklahoma, for possible recruits.

Most important, all of the uniformed services embraced affirmative action so successfully that they once again became a model for civilian society to emulate. Military officials were also so shocked by the racial animosity and violence that characterized the military in the later years of the Vietnam War that they made equal opportunity and the elimination of racism key priorities for the postwar armed forces. They maintained high standards in recruiting and training, clearly articulated the military's policies and goals to its personnel, and demonstrated that they were serious about diversity and had the power to reward those who complied and punish those who did not. The DOD and all of the service branches created numerous programs designed to help women

and minorities take advantage of opportunities to rise through the system. The military raised recruiting standards and emphasized educational opportunities over monetary bonuses. By the mid-1990s, 99% of Black and 97% of White army-enlisted personnel were high school graduates. Enlistees lacking a high school diploma or wishing to further their education could attend army development academies for economically disadvantaged recruits.

Women and minorities were now part of the command structure, though their numbers were still disproportionately less than in civilian society. Women had been commissioned as officers through officer candidate schools since World War II, but it was not until 1975 that women were finally allowed to attend the Service Academies, and in 1980, 217 out of the 327 women who initially began, graduated from West Point. By 1995, women made up 11.5% of the Army's officer corps and 13.3% in 2009. By 1989, African Americans made up slightly more than 6% of the officer corps. The army with 10.6% had the highest number of Black officers, the air force and marines both with around 5%, and the navy the lowest with 3.6%. That year, Colin Powell became the first African American to hold the position of chairman of the Joint Chiefs of Staff.

Like Powell, many women and minorities were in senior positions. At the beginning of the 21st century, the secretary of the army, Louis Caldera, was of Latino heritage; Al Maldon, assistant secretary of defense for manpower, was African American as was the commander, U.S. Army Forces Command, General Larry Ellis. The chief of staff of the army, General Eric Shinseki, was of Japanese American ancestry. The navy's first Black full admiral, J. Paul Reason, had just retired and stepped down as commander of the Atlantic Fleet. In 2001, Coral Wong Pietsch became the first Asian American woman to hold the rank of brigadier general in the U.S. Army, and there were nine Black admirals, including one woman, in the navy. In 2007, General William E. "Kip" Ward assumed command of the new U.S. Africa Command, and the following year, General Ann E. Dunwoody became not only the first female four-star general of the United States but also the first to hold a major army command as commanding officer of the Army Materiel Command. Success, however, is still limited, and women and minorities are still underrepresented throughout the officer corps and especially in the senior ranks.

Religious Diversity

Tracking the religious diversity of members of the armed forces is more difficult than establishing race or gender, because disclosure is not mandatory. About 70% of military personnel self-identify as Christian. The majority of military personnel are Protestant, but the largest single denomination, with 284,000 adherents, is Roman Catholicism; "no preference" is the next most popular response. The DOD estimates that there are about 4,000 Muslims and a similar number of Jews in the military.

There were 3,045 chaplains in the military in 2011, and 90% of them were Christians. Most were from a Protestant denomination, but the military has become more sensitive to the various religious and cultural needs of its personnel. The army brought Rabbinical chaplains in for holidays for Jews serving in Iraq, for example, and has expanded the number of rabbis and Muslim imams available. In 1999, there were two Muslim chaplains for the army and two in the navy. A year earlier, the first permanent Islamic mosque, the Masjid al Da'wah, opened at Norfolk Navy Base in Virginia. Within 4 years, there were a dozen Muslim chaplains serving the needs of Muslims in the armed forces. There is also now a Buddhist chaplain, and the military is exploring adding Hindu and even possibly Wiccan chaplains. A more problematical group is the atheists. There are currently several chapters of Military Atheists and Secular Humanists, and they are seeking their own representation among the chaplain corps.

Though problems have emerged, particularly of sexual harassment of female military personnel, the military has been relatively successful in keeping racial and gender friction to a minimum, and there have been no large-scale racial problems such as what plagued the military in Vietnam. A 2006 Pentagon study found that while three fourths of minority personnel reported experiencing some form of racist behavior, it was generally in the form of racist jokes or disparaging remarks. In 2009, a leading Muslim veterans' affairs organization claimed that it had received no complaints of religious harassment from Muslims in the armed forces.

Women and Diversity

Last but not least, the military has removed substantial barriers to women in the armed forces. In many respects, the turning point for women was the

1991 Persian Gulf War in which more than 40,000 women served. Congress that year allowed women to serve in combat aircraft in the air force and navy and repealed restrictions on women on navy combat vessels 2 years later. By 1994, 92% of the Military Occupational Specialties in the military were technically open to women. The air force and the navy allow women to serve in combat with few restrictions, and in January 2013 Secretary of Defense Leon Panetta formally announced the end of the Combat Exclusion Policy, legalizing female service in frontline combat units. Even before this development, however, many women saw their share of combat and casualties. Thirteen U.S. servicewomen were killed in the 1991 Persian Gulf War, 21 were wounded, and 2 became prisoners of war. From 2001 to 2008, more than 220,000 women served in Iraq, suffering 104 killed and more than 600 wounded.

Continuing Commitment to Diversity

In 2008, the DOD directed the RAND Corporation to prepare a study helping them develop “a strategic plan to accelerate its effort to achieve greater diversity among its active duty and civilian leadership.” The RAND study was part of the current emphasis on diversity at the highest levels throughout the military establishment. In recent years, the DOD and every service branch have reorganized and expanded their Diversity Affairs organizations at their most senior levels. The air force developed its Equal Opportunity Office and the Strategic Diversity Integration Office, and in 2004, the navy established the Navy Diversity Directorate to coordinate and increase its diversity efforts. In 2006, the army created the Army Diversity Office and launched its Diversity Task Force the following year. The Defense Department in 2009 announced the formation of a 22-member Military Leadership Diversity Commission to evaluate and assess its equal opportunity and diversity policies.

James Edward Westheider

See also Afghanistan; African Americans; All-Volunteer Force; American Revolution; Arab Americans; Asian Americans; Chaplains; Civil War, American; Diversity; “Don’t Ask, Don’t Tell”; Gays and Lesbians; Indian Wars; Iraq; Latinos; Morale; Native Americans; Persian Gulf War; Vietnam War; Women; World War I; World War II

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DIVISION

A division is a military formation normally consisting of 10,000 to 15,000 soldiers and commanded by a major general. For most of the 20th century,

divisions served as the smallest combined arms unit capable of independent operations with a variety of combat and service support forces. In most armies, divisions were composed of several regiments or brigades, and in turn, several divisions formed a corps. This entry discusses the history of divisions in the U.S. military, and the makeup, organization, and reorganization of divisions in the U.S. Army and Marine Corps.

Early History

Divisions have constituted a significant type of military organization in the West since the mid-1700s. The idea originated with the Royal French Army to divide a field army into self-contained “divisions,” which, for a limited time, could both march and fight independently. The French marshal de Broglie experimented with divisions composed of several brigades in the Seven Years’ War.

General George Washington ordered the army at Boston to be organized into three divisions of two brigades on July 22, 1775. While initially organized as administrative general officer commands, both divisions and brigades, composed of several habitually assigned infantry regiments and an artillery battery, evolved into semipermanent tactical organizations capable of operating jointly or separately. As the war progressed, Washington maneuvered the divisions independently to conduct operations away from the main army.

The U.S. Army continued to use divisions as a wartime formation during the 19th century. The army employed ad hoc divisions during both the War of 1812 and the Mexican-American War. Influenced by Napoleonic tactics, during the American Civil War, both sides employed divisions as the intermediate tactical headquarters between brigade and corps.

Following the hasty organization and deployment for the War with Spain, the army created its first peacetime combined arms division, the “Maneuver Division,” in March 1911. However, it was not until June 8, 1917, that the army formed its first permanent division, the 1st Expeditionary Division (later the 1st Infantry Division). During World War I, the U.S. Army designed its “square divisions” for sustained battle with some 28,000 men assigned. Forty-three Infantry Divisions served in Europe during World War I, including the 2nd Division with a Marine Brigade.

World War II and Korean War

During World War II, the United States fielded an array of divisions. The army employed 66 “triangular” infantry divisions, composed of three infantry regiments and nine infantry battalions, as a lean but standardized building block of more than 14,000 organic or permanently assigned personnel for global war in both European and Pacific theaters. Sixteen Armored, five Airborne, one Mountain, and one Cavalry Division (serving dismounted) rounded out the U.S. Army’s combat divisions. By 1944, 14 of the Armored Divisions were flexible organizations of almost 11,000 men with three each tank, armored infantry, and self-propelled artillery battalions organized under three combat commands. In the Pacific, the U.S. Marine Corps also provided six large divisions of more than 20,000 men designed as the ground combat element of Marine Air Ground Teams for amphibious operations.

Based on lessons learned in World War II, the army reorganized its infantry divisions for the Korean War. While the divisional structure retained three infantry regiments, the eight infantry divisions that fought were larger at approximately 19,000 and included an organic tank battalion. After Korea, the army flirted with a radical redesign for nuclear war, the Pentomic Division. This structure reduced the size of infantry divisions back to 14,000 men, replaced the previous structure with five battle groups of five rifle companies each, but added organic nuclear-capable artillery and an aviation company.

By the early 1960s, the army restored flexibility by returning to a more traditional design with the Reorganization Objective Army Division, employing three brigades as the intermediate echelon between a variable number of infantry, mechanized infantry, and tank battalions, and the division headquarters. Reorganization Objective Army Division had a fixed base that included Division Artillery, Division Support Command, and a combat aviation battalion. The U.S. Army fought the Vietnam War with five Reorganization Objective Army Divisions Infantry and two Airmobile Divisions. The Airmobile Division was developed based on results of the 1962 Howze Board to provide more than 400 helicopters in an aviation group to provide mobility, fire support, and reconnaissance to the infantry battalions.

Following Vietnam, the army briefly experimented by reorganizing the 1st Cavalry Division

as a Triple Capability Division. This unit had one armored brigade, one airmobile brigade, and one air combat cavalry brigade. By 1975, however, it was converted to a standard armored division. During the 1980s, the army added the Light Infantry Division as a new design at just over 10,000 personnel for a more strategically mobile variant of the “heavy” division of nearly 20,000 authorized personnel.

The Post–Cold War Era

Between Operation Desert Storm in 1991 and Operation Iraqi Freedom in 2003, divisions remained the army’s basic combined arms building block, with standardized units capable of being tailored in accordance with operational conditions. Divisions primarily conducted tactical operations and were intended to be self-sustaining. Corps normally controlled two to five divisions of any type and combination. Ten Regular Army and eight National Guard divisions (armored, mechanized infantry, light infantry, airborne, and air assault)

existed in the U.S. Army force structure prior to 2003, each type with its own unique capabilities and limitations.

Marine divisions have remained structurally unchanged since World War II. Larger than their army counterparts at approximately 20,000, they have retained their traditional three infantry regiments, an artillery regiment, and other divisional support troops. During operations, the three active Marine divisions normally serve as the ground combat element for a Marine Expeditionary Force, contain no organic aircraft, and are dependent on the Marine logistics group for service support.

Beginning in 2003, to gain operational flexibility, the U.S. Army reorganized all of its divisions. Under the modular force, divisions lost all of their organic units. Division headquarters became standardized and self-contained units capable of controlling any combination of independent brigade combat teams and support brigades tailored for each specific mission. While divisions have become more capable of performing as joint and multinational task forces like

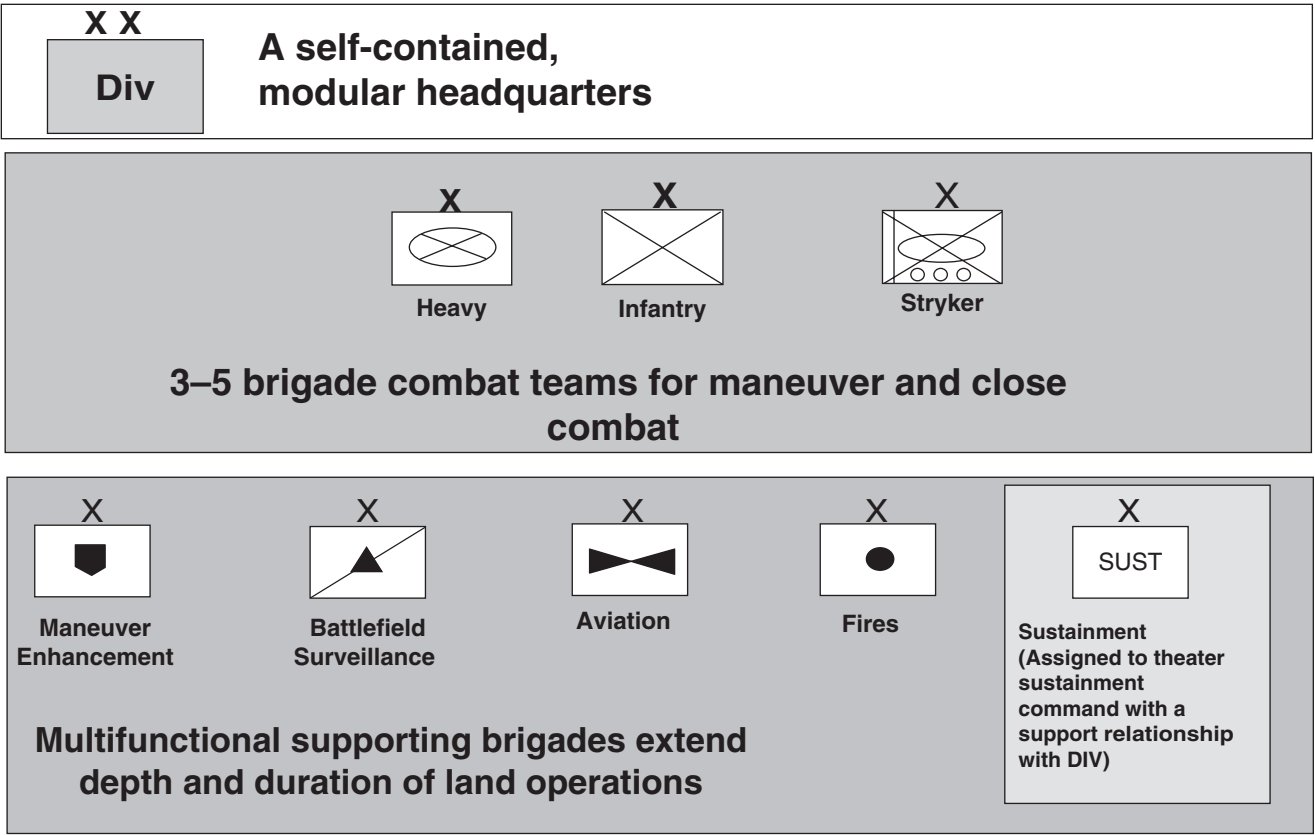


Figure I Modular Division Menu

a corps, divisions remain the army’s primary tactical headquarters for command and control of brigade combat teams. Employed during Operations Iraqi Freedom and Enduring Freedom, modular divisions have effectively controlled up to nine maneuver brigades and more than 39,000 personnel while conducting counterinsurgency operations (Figure 1).

John A. Bonin

See also Brigade; Regiment; Tactics, Ground Forces

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“DON’T ASK, DON’T TELL”

“Don’t Ask, Don’t Tell” (DADT) was the policy enacted in November 1993 to address gays and lesbians in the U.S. military. Technically, the law is Title 10, section 654, of the U.S. Code “Policy Concerning Homosexuality in the Armed Forces,” but it is commonly referred to as DADT. (Title 10 of the U.S. Code provides the legal framework for all aspects of the military. A subset of Title 10 is the Uniform Code of Military Justice, which regulates the behavior of service members.) DADT represents a policy compromise between President Bill Clinton and a recalcitrant Congress and military leadership. It was supposed to separate out a person’s behavior rather than personality. Specifically, soldiers can be homosexuals so long as they don’t engage in homosexual activity. As often happens with compromises, the end result was worse than what existed before. This entry discusses the evolution of DADT, from its inception to its repeal.

Background

Historically, starting with the American Revolution, homosexual activity within the military has been punishable by separation (usually dishonorable) from the military. In 1916, the Articles of War was the first time sodomy was explicitly deemed a crime under military law, although only in cases of assault. In 1920, consensual sodomy was deemed a crime. Throughout World War II, and due to the massive numbers of soldiers in the military, policies toward homosexuals went through numerous different iterations. Of particular note, by the end of the war, the focus of the regulations excluded soldiers who could be labeled as homosexual, even if they did not engage in said behavior. The Cold War was marked by an even tighter crackdown on homosexual servicemembers, both within the military and the broader government, because it was feared that gays and lesbians were susceptible to blackmail. In the wake of Vietnam and in the shadow of the social and cultural changes within American society, the military changed tactics to exclude gays and lesbians on moral grounds. However, at a commander’s discretion, a soldier could be retained if the soldier had a strong record and was deemed worthy. At the end of President Jimmy Carter’s presidency a new

Department of Defense (DOD) policy was set forth. Specifically, homosexuality was determined to be no longer compatible with military service, and if someone was deemed a homosexual, the person would be discharged. The one caveat to this new policy was that, except in cases of criminal activity, discharges would be honorable. It is against this backdrop that presidential candidate Bill Clinton promised on the 1991 campaign trail that if elected, he would issue an executive order repealing the ban on gays in the military.

The Making of a Compromise

After winning the election, it appeared that Clinton was going to follow through on his promise. However, right from the start, he ran into stiff resistance from Congress and the military leadership. The two most vocal opponents of lifting the ban were chairman of the Joint Chiefs Colin Powell and Georgia Democratic senator Sam Nunn. Nunn, as chair of the very powerful Senate Armed Services Committee, seemed determined to assert his power against Clinton. Powell, Nunn, and others took the debate to the public. This allowed conservative Christian groups that believed that homosexuality is morally wrong to mobilize and bring a cascade of voices against repealing the ban. Under unrelenting pressure, Clinton decided to delay issuing his executive order for 6 months while the issue could be studied. During this time, both the House and Senate held hearings on the issue. Interestingly, throughout the hearings, a new rationale for excluding gay and lesbian service members emerged. During his testimony, Powell agreed that gays and lesbians no longer represented a security threat. However, he and others felt that these service members were a threat to discipline, unit cohesion, and privacy. More important, it was felt that lifting the ban would be a risk to the safety of gay and lesbian service members themselves. Furthermore, during the hearings it was stated, or more appropriately threatened, that if the ban were lifted, there would be a mass exodus from the military. This line of argument had similar rationales as the racial exclusions and discrimination perpetrated against African Americans until the armed forces were desegregated in 1949. Therefore, it was no surprise that the famed military sociologist Charles Moskos was brought in to both testify and consult.

Moskos, who was opposed to lifting the ban, built his career doing research on racial integration within the military. Throughout the hearings, he came up with the initial idea of separating service from actions. Moskos drafted up the outlines of a compromise plan that allowed gays and lesbians to serve so long as they kept quiet about their sexuality. He is also credited with coining the term *Don't Ask, Don't Tell*. Moskos sent the plan to Nunn, who became the sponsor of this plan.

Moskos and sociologist Laura Miller conducted two surveys of enlisted service members throughout 1992. There were some methodological flaws in the sampling; however, 471 men and 470 women were interviewed. The results showed that nearly 80% of men and 40% of women were opposed to ending the ban. The reasons included views on morality, cohesion, effectiveness, discipline, and general fear. Public opinion was even more difficult to judge as surveys by the *Los Angeles Times* and Gallup showed Americans split. As the hearings went on, the Clinton administration was put on the defensive, and Clinton seemed to lose the will to see this through to the end. As a result, he reached out to the military and sought a compromise. Some critics blame Clinton for not taking this step earlier. The compromise, heavily influenced by Nunn, centered on Moskos's "DADT" idea. Thus, on July 19, 1993, Clinton announced the new policy.

The Failures

As with many compromises, there were few winners and plenty of losers. The gay and lesbian community felt betrayed by Clinton, accusing him of letting politics stand in the way of progress. A closer examination shows that the Clinton administration did not give this issue the full attention necessary. Apart from not engaging the military leadership early and often, it did not assign senior policy people to work on the issue. Perhaps more damning was that the RAND Corporation was tasked with studying the issue of gays and lesbians in the military at this same time. Their conclusions found that homosexuality had no real impact on military service. Yet this report was all but ignored by the Clinton administration and Congress. Regardless of how the policy came to being, it was nothing short of an abject failure. Discharges of gays and lesbians doubled between 1994 and 2001. In the aftermath of the attacks on

the United States on September 11, 2001, and given the strain put on the forces with the drawn-out wars in Iraq and Afghanistan, the number of discharges has tapered off. However, there were numerous examples of misapplication or misuse of DADT to rid the military of gays and lesbians. Evidence suggests that DADT made it easier to persecute gays and lesbians in the military.

The Repeal

Supporters who wished to repeal DADT pointed to the experience of foreign militaries. More than 20 of America’s allies allowed gays and lesbians to openly serve without disrupting unit cohesion, including Britain, France, Israel, and Canada. Critics (including Moskos) counter that it is impossible to compare foreign militaries and the U.S. military. They argued that the U.S. military was of different size and scope than other militaries with different societal factors at play. Yet, in light of recent technological

advances that dramatically altered the ways units are formed, the unit cohesion argument held little merit. In fact, that argument came to sound quite similar, and equally as outdated, to those made to prevent African Americans and women from being fully integrated in past decades.

Barack Obama, as part of his 2008 run for president, made the DADT repeal one of his campaign promises. Unfortunately, once elected, President Obama moved slowly toward ending the ban. On taking office, he committed to ending the ban but provided few details on when or how. He rebuffed pressure to end DADT through an executive order, essentially a backdoor legal maneuver. Instead, he chose to force Congress to change the law. Finally, in 2010, with solid Democratic control of Congress, Obama laid out a formal plan for overturning the legislation. The House of Representatives voted 234 to 194, mostly along party lines, to end DADT as part of the Fiscal Year (FY) 2011 National Defense Authorization Act. The House did not directly repeal



Chairman of the Joint Chiefs of Staff Admiral Mike Mullen is applauded during a bill signing ceremony for the Don’t Ask, Don’t Tell Repeal Act of 2010 at the U.S. Department of Interior in Washington, D.C., December 22, 2010. Mullen had endorsed the repeal by stating, “Speaking for myself and myself only, it is my personal belief that allowing gays and lesbians to serve openly would be the right thing to do. No matter how I look at this issue, I cannot escape being troubled by the fact that we have in place a policy which forces young men and women to lie about who they are in order to defend their fellow citizens.”

Source: Official White House photo by Pete Souza.

the policy itself but instead gave some measure of control back to the DOD. The bill asked the DOD to complete a report on the potential impact that repeal of the legislation would have on the military. If the report determined no major issues, then the law would automatically repeal after 60 days. However, the DADT repeal hit significant opposition in the Senate. Senator John McCain (R-AZ) led a filibuster to prevent Senate approval of the FY 2011 National Defense Authorization Act in September 2010.

The prospects for overturning DADT were further dimmed after the November 2010 midcycle elections. Republicans gained control of the House of Representatives and shrank the number of Democrats in the Senate. Taking advantage of the "lame duck" congressional session, in December, Obama and the Congress voted on a stand-alone measure to repeal DADT. The House passed the measure 250 to 175, and the Senate passed it by a margin of 65 to 31. President Obama signed it into law on December 22, 2010. The law charged the DOD with developing a plan for implementing repealing DADT without harming military effectiveness, unit cohesion, and recruiting or retention efforts. Once these conditions were met and approved by the president, DADT would expire after 60 days. The DOD spent the first half of 2011 preparing for the end of DADT, including extensive training. On July 22, 2011, President Obama signed off that the conditions had been met. Two months later, on September 20, 2011, the policy known as DADT expired.

While DADT is no longer a policy, a number of issues have emerged. For example, what should the DOD do with service members who were discharged under the DADT policy? The DOD decided it would allow those discharged under the former law to reapply and rejoin the military. However, it did not offer compensation for those who were discharged under the law. This has led to a series of legal challenges that still require resolution. Other issues include same-sex marriages. Military chaplains were authorized to perform same-sex marriages if it was in line with their religious tenets. Furthermore, same-sex marriages were authorized to take place on military bases. However, both of these provisions were challenged by congressional critics in the FY 2012 National Defense Authorization Act. Also, the House attempted to ban same-sex marriage activities from occurring on military bases and being performed by chaplains. This effort fell short, but it is likely to come up again. Finally, the Senate put forth an amendment to remove the prohibition

of sodomy, Article 125, from the Uniform Code of Military Justice. The sodomy act has unfairly been used as a discharge tactic against homosexual service members over the years. This amendment, seeking to clean up vestiges of antihomosexual laws, ran into some language difficulty. Article 125 also prohibits acts of bestiality, so the removal of the article itself would have created the perception of legalizing bestiality. The authors removed the amendment and plan to resubmit a clearer version in the future.

Ultimately, the decision to allow gays and lesbians to openly serve came when society was ready. The U.S. military is simply a reflection of broader social and cultural norms. Several high-profile gay and lesbian service members, a new generation of service members with greater exposure and tolerance toward gays and lesbians in society, and evidence from the wars in Iraq and Afghanistan suggested that repealing DADT would have little or no negative effect. This also confirmed that DADT was more of a political issue rather than a military one. In fact, the reaction to DADT's repeal has been a collective yawn. In distinct contrast to the early 1990s, the military, the public, and even the lawmakers do not seem nonplussed by the repeal. In nearly all the national polls, approximately three quarters of respondents are supportive of gays and lesbians openly serving in the military. Some conservative presidential candidates attempted to use it as a wedge issue in the 2012 Republican primary, but their efforts received little attention or support. In an era where positively portrayed homosexual characters are common on television shows and in movies and high-profile celebrities announce their sexuality publically all the time, a policy banning gays and lesbians from openly serving in the military not only seems quaint and outdated but also is completely out of sync with the majority of American society.

Hugo Evans

See also All-Volunteer Force; Civil-Military Relations; Morale; Small Unit Cohesion

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DRAFT

See Conscription; Recruitment, Officer

DRILL AND CEREMONY

The military term *drill and ceremony* refers to two different events that are interrelated and complement each other. The first, *drill*, concerns the methods by which an officer, noncommissioned officer, or other unit commander moves personnel from one place to another in an orderly fashion by the use of verbal commands. The second, *ceremony*, refers to the various ceremonies used by military (U.S. Army, Marine Corps, Navy, Air Force, and Coast Guard) and civilian organizations to promote a unit's esprit de corps, self-esteem, cohesion, and morale. Ceremonies include events such as promotions, changes of command, award presentations, military reviews, retirement of various personnel, and funerals. Drill and ceremony, also known as D&C, most notably applies to military branches, but it also applies to other groups that have a need for precision movement and other ceremonial activities such as marching bands, police departments, and fire departments. This entry examines the history of drill and ceremony and its role in military training today, ceremonies such as honor guards, and military bands.

Drill

Origins

Early military drill instructions were written by the Roman writer Publius Flavius Vegetius Renatus and included in his work *De Re Militari*. A more

famous ancient work *The Art of Warfare*, written by the legendary Chinese general and philosopher Sun-Tzu, has become the most widely read textbook on the conduct of warfare in military history and continues to be read by modern military and business leaders around the world today. Commanders in the Roman army utilized various forms of drill to maneuver and deploy their forces for battle and to also change formations during the fighting. The effective use of weaponry directly evolves from various forms of drill, such as the use of the sword, pikes, loading and firing of firearms, and the loading and firing of artillery. Fought in 480 BCE between a loose coalition of Greek city-states and the Persian army, the Battle of Thermopylae demonstrated how various drill tactics could change the outcome of battle when properly executed. The tactics used in the wars of the 17th, 18th, and 19th centuries were based almost entirely on how proficient military commanders were at maneuvering their respective forces on the battlefield so as to engage and defeat their enemy. During the American Civil War, Union lieutenant colonel Joshua Chamberlain, a college professor from Maine who lacked professional military training, ordered a bayonet charge to repel an attack by Confederate forces at the Battle of Gettysburg. For his troops to execute such a maneuver, they would have first practiced this tactic through repeated drill. In the military forces of the United States, the development and use of various drills and ceremonies date back to the assignment of Friedrich Wilhelm Ludolf Gerhard Augustin von Steuben, more commonly known as Baron von Steuben, to the staff of Major General George Washington.

Friedrich Wilhelm Ludolf Gerhard Augustin Baron von Steuben

On June 14, 1775, the Second Continental Congress authorized the creation of the Continental Army and appointed George Washington as its commander with a commission as a major general. The new commander struggled with transforming the various amateur militia units into a cohesive professional military unit. Even with victories at Boston in 1775 and Saratoga in 1777, the Continental Army had barely avoided annihilation on several occasions during the first 2 years of the Revolutionary War and still lacked the military discipline needed to defeat a veteran, professional army such as that

maintained by the British. In December 1777, Washington moved the Continental Army to Valley Forge, Pennsylvania, to set up winter quarters. In February 1778, Friedrich Wilhelm Baron von Steuben, a Prussian military officer, arrived at Washington's headquarters. Bearing credentials from Benjamin Franklin suggesting to Washington that he might benefit from the officer's military experience, Steuben offered his services to the general. Realizing that his army desperately needed professional military training to defeat the British, Washington took a gamble and assigned Steuben the daunting task of organizing and training the Continental Army.

Aided by Brigadier General Nathanael Greene and Colonel Alexander Hamilton, Steuben immediately went about the task with vigor, beginning the army's transformation by first forming a "drill company" of selected soldiers from the army's fledgling ranks. Since Steuben could not speak English, all verbal commands were given in German, with the aid of a translator. Written commands and instructions were provided in French and then translated. As training progressed, Steuben compiled the first training manual for drill, titled *Regulations for the Order and Discipline of the Troops of the United States*. As Steuben's first group of soldiers became proficient, they were tasked to train other soldiers in the army utilizing the new drill manual and closely supervised by Steuben himself. These soldiers essentially became the first members of what would become the non-commissioned officers' corps, or NCOs. Soldiers learned quickly and became skilled at obeying verbal movement commands, loading and firing their weapons, and using the bayonet. When campaign season arrived in the spring, the ragamuffin army that had gone into winter quarters now emerged as a highly trained, professional fighting force. The modern drill and ceremony duties and training that are conducted by all branches of the United States military are based on those first efforts by Steuben to organize the training of the troops at Valley Forge. Congress formerly adopted the drill manual, nicknamed the "Blue Book," that he developed in 1792, and it has served as the basis for later drill and ceremony manuals that would be developed, including the most recent U.S. Army Field Manual FM 3-21.5, *Drill and Ceremony*.

Leadership and Recruit Training

When used as a military training tool, the conduct of drill and ceremony makes command opportunities available down to lowest ranks. Officers, noncommissioned officers, and other personnel of various ranks all receive training in drill and ceremony during their careers and take turns commanding groups of different sizes. Noncommissioned officers who desire to serve as drill sergeants and drill instructors within each military branch receive extensive training in drill and ceremony at their respective professional schools before they are allowed to train new recruits.

New recruits who arrive at one of the two U.S. Marine Corps Recruit Depots, at Parris Island, South Carolina, or San Diego, California, are introduced to their very first drill movement within seconds of stepping off the recruit bus. The famous "Yellow Footprints," painted on the surface just outside the bus door, are where each of the new recruits, male or female, learns to stand with chest out, chin in, feet planted at an angle of 45°, with thumbs along the seams of the trousers. Much to the chagrin of watchful drill instructors, the recruits rarely get it right the first time, but this is where the repetitive design of drill comes in, with each recruit mastering the skill before moving along to the next. Initial entry training in the U.S. Army, Navy, Air Force, and Coast Guard all introduce drill into the very first days of recruit training. Foreign to most new recruits, terms such as *Right Face*; *Left Face*; *About Face*; *Forward, March*; *To the Rear, March*; *Double Time, March*; and *Halt* all become second nature and become instilled within the recruit. Drill with a weapon involves a completely different set of commands such as *Shoulder, Arms*; *Port, Arms*; and *Stack, Arms*. In addition to the drills that recruits learn individually, Artillery crews learn basic and advanced drills concerning the loading and firing of artillery pieces. Armor crews learn various drills associated with the loading and firing of crew-served weapons on board various armed vehicles and tanks. Gun crews aboard ships in the U.S. Navy learn the drills required to fire the various crew-served defensive and offensive weaponry on board their respective ships.

During initial entry training, recruits who show great promise are placed into leadership positions and allowed to conduct various drills at the squad,

platoon, and company levels. Competitive drill events between military branches allow for personnel to further sharpen their leadership skills by competing against drill teams and individuals in front of their peers and collective leadership.

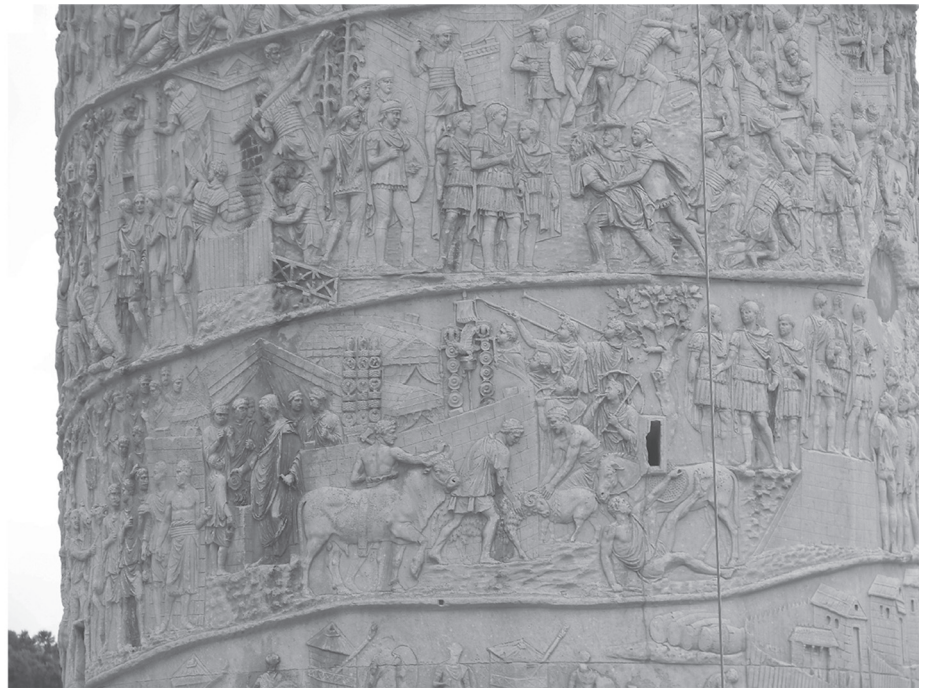
Ceremony

Origins

Since ancient times, military commanders have used various ceremonies to celebrate victories, display military strength, honor veterans, and bury the deceased. Still in use today by military forces around the world, these ceremonies include events such as promotions, change of command, award presentations, military reviews, retirement of various personnel, and burial honors and rites for deceased veterans. Today, nations from all over the world maintain special military units whose mission is to conduct distinctive ceremonial duties that include honor guards, color guards, drill teams, bands, weapon displays, and flyovers at sporting events by military aircraft.

Reviews, Parades, and Honor Guards

Reviews are ceremonies where members of a military force assemble to allow an incoming commander, military leadership, or other dignitaries to observe the unit. Reviews are usually done either by the movement of the unit in front of the reviewers or the unit remaining stationary while the reviewer passes by on foot or in a vehicle. Reviews were used at Valley Forge as a way to display the progress of the army during training and to instill pride in the soldiers. Parades have long been used to display the strength of an army, to celebrate an important anniversary or historic event, holiday, or to celebrate a significant military victory. In ancient Rome, victorious commanders were given a special parade known as a “triumph.” The commander would enter the city wearing specially selected clothing and riding in a chariot. His victorious legions marched in unison along with captured enemy prisoners and the spoils of war. During the American Civil War, both Union and Confederate soldiers marched off to war in parades. After the war came to a close in 1865, the victorious Union army used a combination of



Trajan's Column (left) commemorates Roman emperor Trajan's victory in the Dacian Wars. The reliefs of Trajan's Column (right) by Conrad Cichorius (Plate number I).

Source: Photos by Verlag von Georg Reimer, Berlin, 1896.

review and parade ceremonies as it marched down Pennsylvania Avenue before being deactivated.

Selected military units and individuals participated as honor guards in the Continental Army to show discipline and to provide a higher level of protection to the leadership and other assignments. At Arlington National Cemetery in Arlington, Virginia, select soldiers of the U.S. Army 3rd Infantry Regiment ("The Old Guard") serve in the Honor Guard for the Tomb of the Unknowns. All branches of the U.S. DOD have honor guards who are assigned to the burial details for personnel and veterans of the respective branches. Selected personnel from each of the military branches' honor guard units serve in ceremonies that involve the president of the United States or other upper-level government official. In Berlin, soldiers from the Soviet Union served as honor guards at the Soviet War Memorials in Treptower Park and Tiergarten from just after World War II until the mid-1990s, when agreements were made between Germany and Russia that the memorials would be maintained after Russian military forces withdrew.

Bands

Most military forces in the world today make use of military bands, and the armed forces of the United States are no different. The much renowned U.S. Army Band, also known as "Pershing's Own," is a world-class musical organization that provides musical support for military ceremonies involving the United States. Impressed with the European military forces' use of bands during World War I, Allied Expeditionary Force Commander, General John J. Pershing, established the U.S. Army Band in 1922. During World War II, this band served in the North African and European theaters, where it earned a campaign streamer for service during the Rhineland campaign. Military bands also coordinate with color guards for ceremonies that involve the presentation of a nation's flag and playing of its national anthem.

Funeral and Cemetery Duty

The U.S. Army maintains the U.S. Soldiers' and Airmen's Home National Cemetery in Washington, D.C., and Arlington National Cemetery in Arlington, Virginia. Drill and ceremony play an intricate part in the burial process for military veterans and government officials who meet the stringent requirements

for internment at Arlington. The U.S. Army's 3rd Infantry Regiment, more commonly known as "The Old Guard," has the honor and responsibility for providing ceremonial duties during the internment process. Depending on the rank of the veteran, ceremonial duties such as pallbearers, 21-gun salute firing party, playing of taps, burial flag presentation, caisson, band, escort troops, minute guns, gun salute, and the riderless horse may be provided. Specially selected soldiers known as the Honor Guard provide guard duties at the Tomb of the Unknowns at Arlington 24 hours a day, 7 days a week, regardless of weather, with hundreds of visitors attending the famous Changing of the Guard ceremony that takes place every hour from October 1 to March 31 and then every half hour from April 1 to September 30. In addition to meeting strict height, physical fitness, and other selection criteria, candidates must pass a written test, consisting of 100 randomly chosen questions concerning Arlington National Cemetery and Tomb of the Unknowns history, with a 95% or higher score.

Customs and Ceremony Unique to the U.S. Navy

After the Second Continental Congress authorized the creation of the Continental Army in June 1775, it also authorized the creation of the Continental Navy in October 1775. To help protect the captain and his officers on board the new ships that were being commissioned, the Congress also authorized the formation of the Continental Marines on November 10, 1775. Since a navy makes it home on board a ship that sails on the high seas, some interesting and very unique styles of drill and ceremony have developed over the years since its creation. When a new ship is commissioned and given its name, a ceremony typically takes place that involves the breaking of a bottle of wine or champagne on the ship's hull, dubbed "christening," and the ensuing launching of the vessel as it makes its way down its slipway into the water for the first time. As with the commissioning of a new ship, the decommissioning of an old ship also has a ceremony, but to a much more somber degree, and it is also laced with pagentry and parade.

Another customary ceremony for sailors, or other military service members on board, when they cross the equator for the first time is the time-honored "Crossing the Line" ceremony. Personnel who have never crossed the equator before are dubbed

“Pollywogs” until they complete their initiation and become known as “Shellbacks” or “Sons of Neptune.” A more common ceremony that most naval families are familiar with is that of “Manning the Rail,” a ceremony where a ship’s personnel line the rails of a ship to render honors to another ship or port as the vessel passes by. This ceremony is common for a ship as it leaves and returns to its port. Just as Arlington National Cemetery has military personnel assigned for burial ceremonies, ships in the U.S. Navy have details assigned to conduct “Burial at Sea” ceremonies. Burial at Sea has long been a tradition born out of the need to bury those who had died while at sea due to the lack of a morgue to preserve the body.

Conclusion

With roots strengthened by honor and tradition, drill and ceremony has a long and honored tenure within the ranks of all branches of the armed forces of the United States, as well as other civilian governmental institutions where precise movement of personnel and equipment from one place to another, or the need for the conduct of various ceremonies within those institutions exists. From the earliest writings of Publius Flavius Vegetius Renatus in *De Re Militari* to the latest updates in the current military manuals, drill and ceremony has always been an integral part of combat tactics and ceremonial rituals. With the development of the machine gun and improvements made to artillery during World War I, the time-honored tradition of long formations of soldiers, calmly marching toward each other in the face of gunfire, came to an end, and the new principles of “fire and maneuver” were introduced. However, “drill” and its counterpart “ceremony,” today, still play a vital role in teaching recruits discipline, mental toughness, honor, recognition, and tradition.

Richard B. Davis

See also American Revolution; Arlington National Cemetery; Cemeteries, Military; Culture, Military; Customs and Traditions; History, Military; Approaches to; Military Courtesy; ROTC; ROTC, Jr.; Training, Air Force Enlisted; Training, Air Force Officers; Training, Army Enlisted; Training, Army Officers; Training, Coast Guard Enlisted; Training, Coast Guard Officers; Training, Marine Corps Enlisted; Training, Marine Corps Officers; Training, Naval Enlisted; Training, Naval Officers; U.S. Air

Force Academy; U.S. Coast Guard Academy; U.S. Military Academy; U.S. Naval Academy; Virginia Military Institute

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DRUG INTERDICTION

Traditionally, the U.S. military has not been involved in the enforcement of civil law, but the major exception is in the instance of drug interdiction. Drug interdiction, or the intercepting of illegal drugs before they are sold, became a major federal issue in the 1970s, with the announcement of the War on Drugs, and continues to this day, both domestically and internationally. Military participation in drug interdiction rose dramatically in the 1980s and continues to this day, particularly with regard to intercepting drug smugglers. However, the legality of

using the military in the enforcement of the War on Drugs, as well as questions surrounding the nature of U.S. drug policy and enforcement in general, keep drug interdiction a controversial issue. This entry discusses the history of U.S. federal and military attempts at drug interdiction and the challenges that have faced the United States in the War on Drugs.

Background

The prohibition of drugs in the United States was largely a 20th-century development, and the first federal legislation on narcotics was the 1914 Harrison Narcotics Tax Act. Modern drug interdiction policy began with a small program known as Operation Intercept in 1969, in which Border Patrol agents inspected cars crossing the U.S. border from Mexico, hoping to curb marijuana smuggling.

The major turning point for federal drug enforcement arrived in 1970, with the passage of the Controlled Substances Act, part of the larger Comprehensive Drug Abuse Prevention and Control Act and Richard Nixon's start to the War on Drugs. The Controlled Substances Act was followed by a rash of subsequent legislation aimed at increasing punishments for drug possession while rooting out the drug trade in the United States. A major early step in the War on Drugs was the creation of the Drug Enforcement Administration as part of the Justice Department in 1973.

By the 1980s, the executive branch asserted new authority over the War on Drugs. In 1982, President Ronald Reagan announced the creation of an American foreign policy to aggressively root out the international drug trade. This marked the beginning of heavy use of the military to enforce U.S. drug laws. The 1988 creation of the Office of National Drug Control Policy (ONDCP) gave the executive branch a firmer grip on national drug strategy, and the ONDCP, through its director (known commonly as the Drug Czar), currently sets the national policy regarding drug use and law enforcement work against drug use.

The 1878 Posse Comitatus Act prohibits the use of the U.S. Army or U.S. Air Force in the enforcement of civil law unless specifically authorized by the Constitution or an act of Congress. In the 1980s, there were growing calls by political leaders to use the resources to combat the drug trade. In 1982, Congress lifted some of the restrictions imposed

on the armed forces and permitted the military to maintain and operate equipment on loan to federal law surveillance, train law enforcement agencies, and share information with civilian agencies. Since the 1980s, federal troops and federalized National Guard units have been periodically deployed to the border. Barred from formally arresting individuals violating criminal or civil laws, their role has been to act as observers for the border patrol. Both federal and National Guard units have assisted federal law enforcement officials by aerial surveillance.

Although air and ground surveillance has led to arrests of drug smugglers and the confiscation of illicit goods, there has been significant criticism. Military leaders fear that such deployments serve to divert the armed forces from the crucial mission of preparing to train for and fight major wars against foreign enemies. Outside of the military, critics have questioned the expense of these deployments, especially when National Guard units are federalized. Incidents along the Mexican border, such as when military units have come under hostile fire, have noted the continuing limitations imposed on active-duty service members who lack the power to arrest suspects.

Despite the massive amount of research, funding, enforcement, and public health campaigns, the numbers on the War on Drugs did not look good by the 1990s. In the 25-year period from 1972 to 1997, the number of federal prisoners rose dramatically, the amount of money spent on the issue increased, and while the number of adults self-reporting drug use dropped, the number of teenagers self-reporting drug use rose steeply. Criticism of the methods used by the federal government also became more prominent in the 1990s. The proportion of federal money spent on drug control had become more skewed toward law enforcement and incarceration instead of treatment options, and the number of African Americans being incarcerated for drug crime and suffering from adverse medical effects caused by drugs (especially hospital visits for overdose) remained higher than other ethnic groups, leading to allegations of racial inequity in the enforcement of the War on Drugs.

Current Application

Central and South America are the focal points for many drug interdiction operations, though the use of federal forces against the opium trade in Asia has

increased, particularly in Afghanistan. The Global War on Terrorism has thus in some ways complicated the issue of fighting the drug trade and the process of drug interdiction. A 2009 army posture statement issued in support of the National Guard Counterdrug Program stated, "As the mission continues to expand, the nexus between drugs and terrorism becomes more evident."

The Department of Defense is engaged in the drug interdiction process through several organizations, but the U.S. Coast Guard is currently one of the most effective agents for federal drug interdiction, due to both the high rate of maritime smuggling and the fact that the Coast Guard's status under the Department of Homeland Security grants it greater legality to operate in drug interdiction activities.

The Coast Guard patrols the shipping routes in waters referred to as the "Transit Zone," covering the Gulf of Mexico, the Caribbean, and the eastern Pacific. The Coast Guard has, between 1997 and 2012, seized 806,469 pounds of cocaine and 333,285 pounds of marijuana. However successful these numbers may sound, it is estimated that for the year 2007 alone, only 41.5% of cocaine and 25% of marijuana were intercepted globally.

Use of the National Guard is also key in the ONDCP strategy. One of the biggest problems currently facing the U.S. military in drug interdiction efforts is the ongoing Mexican drug war and concern over brutal cartel violence spilling over the Mexico-U.S. border. In 2006, President George W. Bush deployed National Guard troops to the Mexican border in Operation Jump Start, which lasted until 2008, in an attempt to keep drug smuggling and drug violence out of these states (with support from the U.S. Army South). In 2010, President Barack Obama again sent National Guard troops to the Mexican border.

More recently, the efficacy of the War on Drugs has been questioned publicly, most notably in a 2011 UN committee report that declared that the effort had failed. Efforts to curb the international drug trade have seen relatively little success worldwide, and policy recommendations to the Obama administration have stepped away from the term *War on Drugs* and issued new directives through the ONDCP. While some scholars claim that legalization of drugs would shift the public attention to treatment of addiction, the ONDCP is currently pursuing what it calls a

balanced drug policy to focus on public health concerns as well as the enforcement of drug laws.

Conclusion

While the United Nations and even the White House have acknowledged that the War on Drugs has failed, U.S. drug interdiction policy has, in practice, changed very little in the past two decades. What has changed is the escalation of the use of federal forces in the enforcement of drug policy. Furthermore, the 2010 publication of the Department of Homeland Security's Counternarcotics Doctrine reveals a long-term commitment to the use of the military in drug interdiction. In coming years, the ongoing turmoil in the Mexican drug wars, if it continues at its present rate, will likely continue to result in military intervention on the part of the United States. Thus, the major challenge facing the military and the federal government in drug interdiction policy is the three-pronged task of preventing drug violence from escalating, continuing or improving its interception of smuggled drugs, and emphasizing treatment options for drug abuse instead of prosecution and incarceration.

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See also Border Patrol; Coast Guard, U.S.; Homeland Security, Department of

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E

ECONOMY AND NATIONAL DEFENSE

Soldiers and civilians alike have long understood the close connections between economy and military capacity. Although the saying “an army marches on its stomach” is most frequently attributed to Napoleon, the importance of logistical support has been obvious since antiquity. Similarly, the financial underpinnings of armed forces have always concerned astute observers of the military. “The sinews of war,” said Cicero more than 2,000 years ago, “are infinite money.” In American history, certainly, there have often been very close connections between the broader economy and national defense. Although those connections may have become somewhat weaker in recent years than they were in the 20th century, for the foreseeable future soldiers and civilians will still be forced to grapple with difficult problems in the field of the economics of warfare. This entry examines the connection between the U.S. economy and the military.

In the economic and military history of the United States, World War II stands as the critical watershed. Easily the most costly of all American wars (in real terms), it was also the conflict in which the entire national economy was most fully dedicated to the production of military power. From the Revolutionary War through 1945, one can trace a trend of increasing integration between the armed forces and the national economy. After 1945, although the United States has continued year after

year to devote enormous resources to the military, those resources constituted a smaller part of the economy as a whole. Apparently, the age of “total war”—that is, conflict involving all-out mobilizations of national resources—has come and gone, even as the threat of horrifically destructive weapons remains.

Students of economy and national defense in the 21st century need to be aware of the historical specificity of this post–World War II mode of American military economy, in which defense costs are very high in absolute terms but fairly low in relative terms. In addition, there have been several related developments since the late Cold War, all of which are important for our understanding of the connections between the economy and the military and how those have changed over time. These include a continuing shift away from large forces and large production runs, increased industrial concentration in the defense sector, privatization of military services, and a heavy reliance on borrowing (deficit spending) to finance wars.

Historical Background: Up to 1945

For much of the period from the Revolution to World War II, the United States enjoyed what some historians have called “free security.” The Atlantic Ocean, in particular, limited the country’s vulnerability to incursions by European states, which were the most formidable military powers of the day. If not completely free, national security during this era tended to be cheap. During peacetime for much of the 19th century, the United States spent only about 1% of its national economic output (gross domestic

product, or GDP) on the military. Outside of wartime, the country maintained a relatively small and inexpensive military establishment that represented a relatively small economic burden. As late as the 1920s, after the dawn of what some called “total war,” the country was devoting well under 2% of its GDP to the military. Measured against what would come later, this seems like very cheap security indeed—too cheap, some have argued, to have done enough to discourage a second world war.

The remarkably low peacetime military outlays before World War II should not blind us, however, to the importance of the economic burdens of war during these years and their powerful legacies. The foundations of American political development, for example, were shaped by the miserable economic experience of the Revolutionary War. At least before 1781, when Superintendent of Finance Robert Morris succeeded in partially restoring its financial health, the American war economy had been marked by disorganization, as responsibilities shifted back and forth from the wartime national government to the various states. It was also wracked by severe inflation, caused by a heavy reliance on printing new money to pay for the war. In the postwar period, fresh memories of this chaos informed the federalists, who would champion a constitution that would offer the new nation a blueprint for more centralized political authority. Meanwhile, some of the nation’s early partisan divisions came over the question of how to treat war debt.

Among the significant reforms overseen by federalist administrations in the 1790s was the creation of a mixed military economy, in which the nation maintained several government-owned, government-operated (GOGO) factories and shipyards, while relying also on private contractors. By the middle of the 19th century, the combined efforts of the Springfield Armory and private firms had made the United States an international leader in small arms manufacture. Through the Civil War and well into the 20th century, the U.S. Navy Yards and other GOGO military-industrial establishments would continue to supply the armed forces with a significant fraction of the goods they required, especially in peacetime.

During this era, the United States got better at financing wars. During most peacetime years in the 19th century, the military absorbed close to half of all federal outlays. But because these peacetime expenditures were relatively small, they could

normally be covered by the government’s modest income, provided mostly by customs duties. War expenditures required special financial efforts. After the Revolutionary War, the nation was more successful at financing wars by borrowing, supplemented by taxes. During the War of 1812, the country managed to raise an impressive \$25 million in taxes, along with \$45 million in bond sales. The Mexican War itself was financed easily by modest Treasury borrowing and land grants to soldiers, but in its aftermath, as the army attempted to help manage the nation’s giant territorial gains, military outlays jumped. This military spending on the continental empire, combined with the Panic of 1857, meant that on the eve of the Civil War, the nation was already borrowing to finance its deficits.

During the Civil War, when as much as 20% of national economic output (on each side) was absorbed directly by the military effort, Americans experienced new levels of interdependence between the armed forces and the larger economy. In the South, a heavy reliance on imports and high inflation made the economics of the conflict somewhat reminiscent of the Revolutionary War experience. The North, however, was industrially self-sufficient; it succeeded in financing the war with a giant bond-marketing campaign, supplemented by the printing of greenbacks and the nation’s first income tax. The North’s million-man army was provisioned by thousands of private contractors, as well as by the long-standing GOGO plants, which expanded significantly in wartime. By the end of the war, Union soldiers alone had used roughly a million horses and mules, 100 million pounds of coffee, and a billion rounds of small arms ammunition, among other goods and services. In the years that followed the Civil War, financing war debt and funding veterans’ pensions absorbed a giant fraction of federal outlays. But the active military reverted to relative insignificance, economically speaking. As the United States became, by the end of the 19th century, the world’s largest national economy, it continued to record modest defense budgets.

While European states experienced the shock of “total war” in 1914–1918, the United States avoided an all-out economic effort, as well as mass casualties. It also enjoyed a wartime economic boom, thanks in part to its status as a leading supplier of the European combatants. During the less than 2 years in which the United States was actually at war, as it struggled to mobilize more than 4 million men and send half of

them abroad, the United States devoted only a little more than 10% of GDP to its own war effort. More than half of the cost of the war was financed with bond sales; nearly a quarter was covered by taxes, including an unprecedented set of progressive income and corporate taxes with top rates of well over 50%. The rest of the cost of war was covered by increases in the money supply (now managed by the new Federal Reserve System), which contributed to a doubling of prices. By 1918, when American shipbuilders, steel-makers, explosives manufacturers, and other companies were in high gear on war production, there were some new efforts at governmental coordination of the economy. In the case of the railroads, whose management was officially taken over by the government, this oversight was significant. In many other areas, including the work of the War Industries Board on the coordination of resource allocation and price levels, the effects were quite limited and short-lived.

American economic activity in the service of warfare peaked during World War II, which cost six times more than the nation's efforts during World War I. In 1943 and 1944, an entirely unprecedented 40% of GDP was going to the war effort. Many companies, including the leading automobile manufacturers, completely suspended their regular business by early 1942 and began to send 100% of their output to the military. By this time, the United States was easily the most productive national economy in the world; in addition to supplying its own forces of more than 10 million soldiers and sailors, it served as a major exporter of munitions to the United Kingdom and the Soviet Union. Remarkably, this enormous effort saw no significant dip in the living standards of civilians on the home front, many of whom enjoyed the fruits of another wartime economic boom in the form of record-high take-home pay. At the same time, the country managed to cover roughly 43% of the \$320 billion cost of the war with taxes—a larger proportion than in any previous war. This was accomplished via extremely high tax rates on corporations and individuals, modest increases in the money supply, and by extending the income tax to cover more than 40 million households, 10 times more than before the war.

Early Cold War and the Rise of the “Military-Industrial Complex”

After World War II, many Americans agreed that there could not be a return to the bare-bones defense

budgets that had prevailed for much of the country's history before 1940. The record of the 1930s seemed to show that more strength would be required in peacetime to deter potential aggressors. New technologies, including long-range bombers, missiles, and the atomic bomb, might radically reduce the defensive value of the oceans, as well as the time available to gear up for war.

Despite the widespread agreement about the need for a larger American military establishment after World War II, there remained great uncertainty and conflict over how big, and how expensive, it should be. In the late 1940s, the Truman administration called for annual defense outlays of around \$10 billion a year, or about 4% of GDP. This was too low for the Pentagon and the Congress, which passed budgets far bigger than the ones Truman requested. After 1949–1950, which saw the Soviet Union test an atomic bomb, the establishment of the People's Republic of China, and the outbreak of the Korean War, defense spending jumped, along, evidently, with American leaders' expectations about appropriate baseline levels. By the late 1950s, defense spending accounted for roughly 9% of GDP; it exceeded post-World War I outlays, in real terms, by a factor of 30.

Although the early-Cold War era was one in which the military absorbed exceptionally large economic resources, there was in fact a conscious effort during these years to create a smaller, lighter military force. Facing the Soviet Union and China as potential opponents, American leaders recognized that their greatest comparative advantage was now more in technological capability than in raw industrial capacity, population, or territory. This approach would continue into the 21st century. One of its early manifestations, included in the Eisenhower administration's “New Look” policy of the late 1950s, was a reliance on nuclear weapons as a counter to large Soviet conventional forces. By 1958, the North Atlantic Treaty Organization already held approximately 3,500 nuclear weapons. At its peak, the American stockpile would reach 32,000 warheads.

The high levels of military spending during and after World War II meant that preparations for war had bigger effects on the national economy than they had had in the past. Defense spending helped accelerate the development of the far West and the South, which previously had been much less industrialized

than the Northeast and Midwest. Defense dollars also had important effects on research funding in particular industries, including the fast-growing field of electronics and computing. During the 1950s, the Pentagon contributed roughly half of the budgets for research and development at IBM and for transistor research at Bell Laboratories. Meanwhile, the military served as the leading customer of the electronics industry; it also became a major source of funds for research universities.

As big annual defense budgets became the new norm, Pentagon officials, military contractors, and their congressional representatives were increasingly interested in maintaining public spending on weapons programs. This political dynamic was not entirely novel—it had existed to a smaller extent in the naval shipbuilding industry of the 1890s, for example, but it prevailed now to a greater degree than ever before. Among those who worried about the change was President Eisenhower, who used his farewell address in January 1961 to warn Americans of the need to “guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex.” For the next decade, this sort of criticism of the potential costs of the military economy was widespread, especially among observers on the political left. As military spending rose during the Vietnam War, such critics became increasingly vocal. By 1970, Senator William Proxmire, an energetic watchdog of military budgets, felt it necessary to publish a book warning Americans that “military spending in the United States is out of control.”

Unsteady Demilitarization of the American Economy in the Late 20th Century

Although concerns about Pentagon waste would continue well past the Vietnam War, there was an important shift, after that conflict, in the relationship between the military and the national economy. The Vietnam conflict itself had required a remarkably small piece (about 2%) of the national economic pie, which had grown significantly since the end of World War II. After the American withdrawal from Vietnam, there was a clear (if unsteady) decrease in the fraction of national output dedicated to the military. What had been a baseline rate of about 9% of GDP in the early-Cold War years now moved steadily downward, until by the end of the

20th century, it stood at about 3%. Although this would rise slightly after 2001, Americans in the early 21st century still enjoyed relatively modest economic burdens from defense, compared with those paid by their grandparents. This was a change in relative costs, not absolute ones: As the American economy grew, it could provide lots more butter without any significant sacrifice of guns. This was much less true of the Soviet Union, which by the end of the Cold War was devoting well over 10% of GDP to defense, twice as much as the United States.

As military costs became a less significant burden on the national economy as a whole, they also came to represent a significantly smaller fraction of all public spending. Thanks to the aging of the American population and the expansion of social welfare programs in the 1960s, “entitlements” like Social Security and Medicare became, by the end of the 1970s, the biggest items in the federal budget. By the year 2000, defense accounted for less than 20% of federal spending. This was a remarkable change from the early-Cold War years—and indeed, most of American history—when defense was easily the largest expenditure.

Although the absolute level of military spending remained high by most standards after Vietnam, the late 20th century saw several important qualitative changes in the relationship between the military and the economy. One reason for the decline in the relative cost of defense was the shift, after 1973, to a smaller, all-volunteer professional force. By 1998, the active-duty force was about 1.4 million people, down from 3.5 million in 1968. Equally important were substantial Pentagon budget cuts in the 1970s and 1990s, interrupted by the defense buildup during the administrations of President Reagan. The end of the Cold War, naturally, helped push defense outlays lower. In 1998, the Pentagon was spending a third less than it had when Reagan was preparing to leave office, 10 years earlier.

These developments in the late 20th century, combined with the trend toward economic globalization, created hardships for American military industries and their workers. In Congress and the military establishment, there were new fears about the erosion of the “defense industrial base,” which since World War II had supplied the armed forces with superior technology and equipment, translating American economic might into military capacity. Now American economic superiority was fading, as

was the health of military industries. Between 1989 and 1996, an estimated 1.5 million defense jobs disappeared. Especially for aerospace and naval shipbuilding firms, which tended to have little civilian business, the post-Vietnam and post-Cold War cutbacks were difficult; it was not easy to see how these firms could successfully manage the sort of “defense conversion” that many called for after the demise of the Soviet Union.

One result of this state of affairs in the 1990s was a significant economic concentration in the defense sector. It was a decade of mergers, the most important of which included that of Northrop and Grumman in 1994, Martin and Lockheed in 1995, General Dynamics and Bath Iron Works in 1995, and Boeing and McDonnell Douglas and Rockwell in 1996. By 2001, the U.S. defense sector was dominated by just five giants: (1) Lockheed Martin, (2) Boeing, (3) Raytheon, (4) Northrop Grumman, and (5) General Dynamics. (A sixth big player, BAE Systems, was based in the United Kingdom—one more sign of the importance of globalization.) These mergers suddenly concentrated the business of military contracting to unprecedented levels. As late as 1989, the combined defense sales of the 6th- through 10th-largest contractors had been 60% of the sales of the top five. By 1998, the sales of the second five equaled only 20% of those of the top five. During the first decade of the 21st century, there may have been some slight reversal of this development, as smaller upstarts such as General Atomics (a maker of unmanned aircraft) and Force Protection (armored vehicles) gained more orders. However, the defense sector remained much more concentrated than it had been in the past.

New Developments Since September 11, 2001

Although the wars in Iraq and Afghanistan and other military operations since the 9/11 attacks on the United States have pushed up Pentagon spending and caused changes in the organization of the military economy, many recent developments are consistent with the longer run trends that have prevailed since the era of the Vietnam War. These include the privatization of military production and services; a move away from big production runs of heavy weapons in an effort to create faster, networked forces; and the abandonment of efforts to finance wars through current tax receipts.

Although the privatization of the military industry and services has occurred for centuries, the Pentagon has pursued privatization more aggressively since the 1960s. One reason for this was the ascendancy of libertarian economics, which also influenced the shift to an all-volunteer force. During the Vietnam era, one important proponent of privatization was Secretary of Defense Robert McNamara, whose many attempted reforms of the procurement system included the privatization of the production of the army’s main battle tank. Meanwhile, the navy, which had run large GOGO shipyards for decades, came to rely less and less on its own facilities for the production of new ships and submarines. This privatization of the military industry was accompanied by the privatization of military services, a trend that by the end of the 20th century had come to attract public notice. By 2007, there were an estimated 180,000 people—including about 20,000 Americans—employed by private contractors in Iraq in support of the American war effort there. This development was fueled by the increasing popularity of privatization in the broader political economy, as well as the manpower shortages that came with the adoption of the all-volunteer force. As private contractors started to handle more of the job of logistical support, some of them, including Kellogg Brown & Root, entered the ranks of the most prominent firms in the defense sector. So too, by the turn of the century, did private security firms such as Blackwater. Although these security firms were relatively small and accounted for a tiny fraction of military spending, some observers regarded their rise as the sign of an important shift in the practice of American warfighting, which for decades had eschewed the hiring of mercenaries.

As the Cold War came to an end, military planners debated whether the world was on the verge of a new “revolution in military affairs,” comparable to the radical changes in warfighting that in the past had accompanied the rise of new technologies, including aircraft carriers and atomic weapons. Especially after the American success in the 1991 Persian Gulf War, there was a new emphasis on achieving superiority in speed and sensors, as opposed to manpower and heavy weapons systems. In 1995, for example, one influential student of American military procurement, Jacques Gansler, described an ongoing shift from World War II-style “attrition warfare” to a new “information-based warfare” that emphasized speed, agility, surveillance, and communications

networks. Such a change promised to take advantage of U.S. comparative economic strengths and be better suited to confronting post-Cold War enemies. Immediately on taking office in 2001, Secretary of Defense Donald Rumsfeld pushed the military to become smaller and more agile. While this approach seemed to pay dividends on the 21st-century battlefield, developments in Iraq after 2003 suggested that it may have complicated other important military enterprises, including postwar occupation.

One of the consequences of the shift toward what some called network-centric warfare was the acceleration of the post-World War II trend toward smaller military-industrial production runs. During the Iraq War, the navy had only about 280 ships, a third of the size of the fleet in the Eisenhower era. The air force still had nearly 1,000 F-15 and F-16 fighters in its active force, but just 85 of the new state-of-the-art F-22s. Whereas the United States had fought World War II using thousands of relatively cheap bombers, it now had just a handful of B-2s—which cost \$2 billion apiece. As the production of such ultra-expensive weapons systems came in smaller and smaller batches, the Pentagon started to spend more on sensors, robots, communications systems, and weapons with lower unit costs. Among these was the navy's new littoral combat ship (LCS), which was designed to be far lighter, faster, and cheaper than the ships it had ordered in the Cold War era. Another new weapons technology, already important by the time of the Iraq War, was the *unmanned aerial vehicle*, a term used to describe a variety of small, remote-controlled, pilotless aircraft. By 2005–2006, the small “Predator” drones, which cost only about \$4 million each, were flying missions at the rate of 2,000 a year. Such robots, presumably, will become an increasing part of military procurement in the future. However, even by the time of the U.S. withdrawal of combat troops from Iraq, their displacement of more traditional weapons systems was still limited. In the Pentagon's 2011 budget, for instance, the \$4 billion in proposed spending on all unmanned aerial vehicles represented about 2% of all outlays on weapons systems, and about a third as much as the military spent on its new F-35 manned fighter.

In the early 21st century, one of the most remarkable developments in the American approach to the economics of war was the complete abandonment of attempts to cover costs with increased taxes. Whereas special wartime taxes had paid for a large

fraction of the cost of the two World Wars, and close to the entire bill for the Korean War, in the early 21st century, the Congress and the White House chose to cut taxes, even as the nation embarked on a \$1 trillion (plus) war that would quickly become the second most expensive in its history, behind only World War II. After the country entered a deep economic recession in 2008, the fiscal consequences of this practice became more obvious. By 2010, the United States was facing annual budget deficits, for the foreseeable future, of \$500 billion or more. After overseeing a decade of higher military spending, the Pentagon seemed resigned to a new round of budget cutting, which promised to make the 2010s reminiscent of the 1970s and 1990s. However, exactly how much the military might be affected by any new push for fiscal conservatism, in comparison with the social welfare programs that had come to absorb more public dollars, remained unclear.

As the second decade of the 21st century opened, with military budget cuts looming and China's national economy on a path to overtake the United States in terms of sheer size and industrial capacity, it was easy to forget that for the moment America remained an unrivalled military-industrial giant. It had clearly been so since the end of the Cold War; since 1942 it had been the world's most successful practitioner of the art of converting national economic productivity and technological innovation into military power. Its future achievements in this field would evidently depend on difficult political struggles at home, as well as developments abroad that were even harder to predict or control.

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See also Appropriations, Military; Blackwater; Boeing; General Dynamics; Halliburton; Lockheed Martin; Logistics; Mobilization; Raytheon

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EFFECTIVENESS, COMBAT

Combat effectiveness is the ability of a military force to sustain itself and adapt to a continuously changing theater to ensure the success of its mission. The sustainment of troop strength and equipment readiness is vital in maintaining a state of combat effectiveness. The modern battlefield is abstract and in a state of continuous evolution. Traditionally, the effectiveness of a military force has been measured by its ability to close with, engage, and destroy its enemy. While this is relevant still, the nature of battle has evolved greatly over the past 20 years. Eliminating the threat

is no longer the isolated objective that determines the effectiveness of a force. Involvement in peacekeeping and counterinsurgency operations in the post-Vietnam era has tested the effectiveness of the U.S. military on levels exceeding that of direct action warfare. This entry examines factors important to combat effectiveness.

The U.S. military's foreign-based operations since 1990 have ranged from direct action combat to peacekeeping operations in their truest forms, requiring the military to maintain a high state of effectiveness on all levels. After 1989, major missions conducted by the U.S. military fit easily into the category of either peacekeeping or direct action warfare. This remained the case until the attacks of September 11, 2001, after which the two categories rapidly lost their definition and began to overlap. With the face of battle changing on a seemingly daily basis, the United States has learned through success and failure how to adapt to the current situation and maintain a fluid state of combat effectiveness.

While *combat* is the word that catches the eye first, *effectiveness* is the key word in the phrase. With the diverse nature of modern military operations for the United States, the ability to accomplish missions both in and out of wartime is essential. U.S. military effectiveness, wrote the historian Timothy K. Nenninger of the U.S. military leading up to its involvement in the First World War, was wholly dependent on American ability to adapt past wartime experiences to those of a world war. This holds more true in today's conflicts where the nature of the mission changes at a more rapid rate than it did at the beginning of the 20th century. It can be argued that while the United States made the necessary preparations for the World Wars and the Korean War, where combat effectiveness relied almost entirely on utilizing the most efficient means of killing the enemy, few changes were made when they were needed in Vietnam. Insurgent warfare affected U.S. operations as early as the Philippine War at the turn of the 20th century, and still the strategic changes necessary to counter the threat in Vietnam were widely ignored, allowing the same issue to go unaddressed until the darkest days of fighting in Iraq. The nature of U.S. involvement in world affairs today changes so frequently that the military must be able to identify these changes and be prepared to make modifications to its strategy. In short, the effectiveness of the U.S. military in history has been defined entirely by

its ability, or lack thereof, to identify the threat and take the necessary steps to overcome it with as little loss of life as possible.

Establishing and Maintaining Combat Effectiveness

Building a successful and effective force occurs at two essential levels. The first is the ground level where personnel are trained to maintain themselves and their equipment, remaining fully capable of mobilization while training for the task at hand. Ensuring that service members are at peak mental and physical readiness also occurs at this level. Highly trained personnel who can perform under varying circumstances make up the units fielded in combat and peacekeeping operations. However, the effectiveness of one unit depends solely on its ability to work with another. For example, an infantry platoon depends on an indirect fire element of mortars or artillery to support its mission.

Practical and realistic training is paramount in the doctrine of the U.S. military. The theory behind field training is to come as close to operational conditions as limits allow, by utilizing the same equipment and conducting the same mission types that service members are likely to encounter while operational, summed up with the phrase “train as you fight.” During wartime, information from the theater is relayed to stateside units so that the current operational environment can be emphasized in training. The current mission is generally the main focus, while a foundation in basic small unit tactics is regularly reviewed and maintained. During peacetime, similar training is done with the same emphasis on the most likely future conflict. The assets the U.S. military has at its disposal allow for such meticulous training to occur at all levels of organization that are vital parts of an effective force.

Joint operations conducted with several units occur at the second level of building effectiveness. Any unit, regardless of its internal readiness, is entirely ineffective without external support from other units. On every level, a unit requires services from external units in the form of food, water, ammunition, and intelligence. This can occur at a level as low as an infantry battalion resupplying one of its companies or as high as one nation assisting another. Referring again to the First and Second World Wars, American ground strategy only

succeeded because the United States first worked with Great Britain to free Atlantic merchant ships from the grip of German submarines.

Effectiveness in American Operations

While the United States has prided itself in its ability to effectively train and coordinate its military forces, the juxtaposition of direct action and peacekeeping operations that existed as time went on made maintaining effectiveness troublesome. Operation Desert Storm was perhaps the best example of U.S. engagement in direct action warfare in the sense that it consisted almost entirely of American offensive action. American air power set the stage within the first 48 hours by destroying Iraqi early detection radar and disrupting the enemy’s air defense network. Those strikes on key targets combined with the systematic elimination of the Kari (the command and control system of the Iraqi Air Force) gained coalition forces air superiority and cleared the way for the ground forces that followed. Vital to the success on the ground was coordination between ground forces and air assets so that enemy tanks and personnel could be found and eliminated, thereby decreasing risk to ground forces. Robert Cole maintains that the combination of strategic air power and tactical effort on the ground decisively produced the nearly bloodless victory for the United States in the Persian Gulf. The surge of modern technology on the battlefield forced stronger cohesion between branches of the military. In essence, the effectiveness of U.S. forces during Operation Desert Storm relied entirely on their capacity to adapt their personnel to the needs of the battlefield and to the innovations in battlefield technology. The ability of U.S. forces to coordinate efforts on a large scale to carry out the mission—often quite surgical in nature—led to the swift and decisive defeat of the Iraqi forces under Saddam Hussein. Air Force Lieutenant General David A. Deptula, when referring to the conduct of the U.S. military during Operation Enduring Freedom in 2001, emphasized the impact Desert Storm played on the future of combat effectiveness through joint force unity as a pivotal moment in wartime conduct. While the United States surged forward in battlefield effectiveness in and over Iraq in 1991, those honed skills would not come into large-scale use again for another decade.

For the remainder of the 1990s, the United States became involved in various peacekeeping operations across the globe. The effectiveness of the U.S. military depended on its ability to aid the people of particularly oppressed regions without the use of force. In 1992, the United States committed forces to Somalia in support of Operation Restore Hope, the mission being to aid those starving under the oppressive hand of warlord Mohamed Farrah Aideed. In theory, these missions were the polar opposite of direct action warfare, leaving the United States with explicit guidelines for furnishing effective forces and assets.

The terrorist attacks of September 11, 2001, led President George W. Bush to commit U.S. forces to Afghanistan and Iraq in 2001 and 2003, respectively. The two fronts became the main focus in the Global War on Terrorism (GWOT). Both invasions started in much the same respect as Desert Storm, with the formula of air, ground, and finally a combination of the two, but there the similarities ended. The following years in Afghanistan and Iraq, after the toppling of the Taliban and Saddam Hussein, brought on savage insurgent warfare that disrupted U.S. attempts to establish new governments in each country and kept the success of the missions at bay. Unlike Desert Storm, the coordination of overwhelming air power and conventional ground forces for direct action warfare was not enough to make the U.S. military effective in fighting insurgencies. It became clear that the U.S. policies on operational conduct needed rethinking.

Effectiveness and the Modern Battlefield

Coalition forces needed the population to assist in locating and disrupting insurgent cells to bring stability to surrounding regions. The effectiveness of the U.S. military depended on its ability to simultaneously dismantle the insurgencies and rebuild each respective country. The theory of counterinsurgency (COIN) emerged as a strategy focused on winning over the populace as the means to achieve the desired end results. The strategy was multifaceted, first requiring pressure to be kept on the insurgency so that insurgents would provide minimal interference with other operations. Next, the new governments of Iraq and Afghanistan needed to be established and in working order. This meant that the governments needed to manage legislation and their militaries independently before coalition forces

left them to fend for themselves. Finally, and perhaps most important, rapport needed to be built with the people. The challenge was making all three happen simultaneously, with one's success relying on the triumph of the other two.

General David Petraeus helped oversee the production of the U.S. military's counterinsurgency field manual, a work that initially received vehement criticism. The strategy put service members at greater risk by getting them out into communities for extended periods of time, earning public support for the governments. The risk was that by keeping the coalition forces exposed on the street, the probability of insurgent attack and ensuing casualties rose. Subject to further disapproval was decreased use of force. In theory, by limiting firepower to eliminate insurgent threats, collateral damage and civilian casualties could be kept to a minimum. The manual maintains that appeasing the sentiments of the populace is the key component, making the targeting of insurgents with excessive firepower counterproductive. Regardless of which side the locals supported, they would perceive the accidental killing of civilians and destruction of property as the fault of coalition forces, regardless of how many insurgents were killed in the process. While military officials often spoke out against the hazard to service members, defeating the insurgencies and rebuilding in Iraq and Afghanistan were cause for risk.

Friction over the use of COIN strategies in the GWOT arose as a result of the dissolving line separating direct action and peacekeeping operations. Prior to the GWOT, the post-Vietnam U.S. military committed itself to efforts that ultimately fell into one category or the other. The combination of both mission types in the GWOT differed from previous examples. When peacekeeping and direct action warfare became intermingled, indecisiveness over the most effective means of conducting operations in Iraq and Afghanistan resulted. After 4 years of trial and error, Petraeus and the COIN strategy became the signature method for both theaters of war. While COIN produced results in Iraq, the question remains as to whether the strategy that achieved success on urban Iraqi streets will prevail in rural Afghanistan.

Time will tell how effective the U.S. military is in the GWOT. Fighting insurgencies is perhaps the most fluid and unpredictable genre of warfare, and absolute flexibility is essential on all levels. Between 1990 and 2011, the United States has conducted

operations of varying sorts, under different circumstances. The effectiveness of the U.S. military has been tried by the changing of the battlefield and has had a generally positive result, but the line where combat ends and peacekeeping begins has blurred with time. In barely more than two decades, the battlefield has become more and more abstract, changing the needs of the forces involved and requiring an ever-fluid policy on how to maintain an effective force capable of accomplishing any mission. The military must now address the entire spectrum of its operations at once, making success difficult and, at times, indefinable. The future effectiveness of the U.S. military will depend entirely on its ability to work cohesively to evolve with warfare and to keep up with all of the finite aspects of missions to come.

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See also Combined Arms; Counterinsurgency

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EGYPT

Egypt, an Arab state located in the northeastern corner of Africa, serves as the bridge between the African continent and the Middle East. Egypt's population of 76.9 million makes it the most populous Arab state. Sunni Islam is the predominant religion, although the country also contains a sizeable Coptic Christian minority (9%). The capital city of Cairo is located on the banks of the Nile River. Egypt's arable land, less than 3% of the total area, is concentrated on the banks of the Nile and in the Delta region on the Mediterranean coast. The Suez Canal, nationalized

in 1956, is a key economic and strategic resource. Egypt's economy also draws on revenues from tourism and the export of oil and natural gas, as well as agricultural products such as cotton. This entry discusses Egypt's political system, armed forces, and foreign policy.

Political System

Egypt is a republic with a bicameral legislature. The military plays an important role in Egyptian politics, and all of Egypt's presidents from the 1952 revolution until the 2011 protests were military officers. The president wields great power, and Hosni Mubarak's reelection in 2005 with 89% of the popular vote, along with irregularities in the 2010 parliamentary elections, sparked debates about Egypt's lack of political transparency. The National Democratic Party, which came to power in 1978, severely limited the formation of viable opposition parties. Egypt's political system was transformed by the 18 days of protest in January–February 2011 that led to Mubarak's resignation after 30 years in office. The protests reflected Egyptian youths' increasing frustrations with limited economic opportunities and the oppressive Egyptian political system. In the aftermath of Mubarak's resignation, the Supreme Council of the Armed Forces assumed control of the government.

The Muslim Brotherhood, an Islamist organization founded in 1928, has historically been the most significant opposition force in Egypt. Formally outlawed before the 2011 revolution, the Muslim Brotherhood has since become a major political actor. Its Freedom and Justice Party won the largest number of seats in the November 2011–January 2012 parliamentary elections, while its nominee for president, Mohamed Morsi, won the June 2012 presidential election. The struggle between the Muslim Brotherhood and the Egyptian military for political power continues to be one of the most pressing issues in Egypt.

In recent years, militant Islamist groups have posed a threat to Egyptian stability, in particular the Jamaat al-Islamiyya and the Egyptian Islamic Jihad, which merged with al Qaeda in 2001. Terrorist attacks on tourist areas in Egypt, most notably at Luxor in 1997 and at a number of Red Sea resorts in 2004–2006, were a severe blow to Egypt's tourist



Map of Egypt.

Source: Central Intelligence Agency map courtesy of University of Texas Libraries.

industry. The threat of terrorism was cited as the main reason for the periodic renewal of Egypt's Emergency Law, continuously in effect from 1981 until May 2012. Human rights groups criticized the law for serving as a cover for human rights abuses and censorship, and the Egyptian public's resentment of the Emergency Law was one of the contributing factors to the 2011 revolution.

Foreign Policy and Defense

The Arab-Israeli conflict dominates Egypt's foreign policy. Egypt's reputation under President Gamal

Abdel Nasser was tarnished by its disastrous performance in the 1967 Six Day War. The Egyptian offensive in the 1973 October War was ultimately repelled, but Egypt's initial success in crossing the Suez Canal is still commemorated as one of the country's great military achievements. The signing of the Camp David Accords in 1978 and the Egyptian-Israeli Peace Treaty of 1979 led to Egyptian recognition of Israel and Israel's withdrawal from the Sinai Peninsula in 1982. Mubarak's policy of cooperation with Israel, notably in the 2008–2009 Gaza War, was unpopular with the Egyptian public. The 2011 Arab Spring led to a reassessment of Egypt's

role in this conflict, signaled by Egypt's decision to reopen the Gaza border.

Egypt has the largest military in the Arab world. Total active forces in 2006 numbered 468,500, of whom two thirds were conscripts, serving in four branches: (1) the army, (2) the navy, (3) the air force, and (4) the Air Defense Command. Egypt's army is composed of four armored divisions as well as eight mechanized infantry divisions. In 2005, military spending accounted for 3.4% of gross domestic product.

Egypt's army still maintains large stocks of Soviet-era equipment, but it has used the \$1.3 billion in U.S. military assistance received annually to purchase advanced American systems. This military aid, in addition to the \$28 billion in economic aid received since 1975, makes Egypt one of the greatest

beneficiaries of U.S. foreign assistance. A 1988 U.S.-Egyptian agreement established an Egyptian assembly plant for M-1A1 Abrams tanks, of which Egypt had 755 in 2006 out of a total of 3,855 tanks. The Egyptian navy has 4 Chinese-type 033 *Romeo*-class diesel submarines and a surface fleet composed of 10 U.S., Spanish, and Chinese frigates, as well as smaller craft. Egypt's air force possesses the fourth-largest fleet of F-16s in the world, totaling 220 F-16As-Ds. Operation Bright Star, a biennial U.S. central command-Egyptian joint training exercise first held in 1981, is the cornerstone of the U.S.-Egyptian military relationship. Egypt has participated in a number of peacekeeping operations around the world and provided one of the largest contingents to the coalition forces during Operation Desert Storm in 1991.



Egyptian army troops fire tear gas to disperse an antimilitary demonstration outside the defense ministry in Cairo's Abbasiya district on May 4, 2012. Heavy gunfire could be heard as clashes between troops and antimilitary protesters spread around the ministry building and street battles raged in side roads.

Source: AFP photo/Khaled Desouki/Getty Images.

Future Prospects

Today, Egypt faces a number of internal and external pressures tied to the 2011 revolution, including a deep economic crisis, episodes of sectarian violence, and an increase in crime rates. Egypt's postrevolution political debates reflect concerns about the long-term plans of Islamist groups, such as the Muslim Brotherhood and the more conservative Salafists, who have dominated recent elections. Questions remain as to whether the reforms undertaken since February 2011 will be enough to satisfy the demands of protestors and whether the military will peacefully cede control to a civilian government. Egypt's relationship with Israel and the Palestinians is also in flux, as Egypt is expected to take a more independent line that could clash with U.S. interests. Political instability in neighboring Sudan and tensions over access to the waters of the Nile are additional security concerns.

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See also Middle East Conflict

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ENGINEERS, COMBAT

Combat engineers are distinct components of the military engineering community who are assigned a specific military occupational specialty in the U.S. Army and U.S. Marine Corps. The attribute of *combat* in the title illustrates the focus of this specific discipline, one that integrates with and operates as part of ground combat forces. Combat engineers are organized, trained, and equipped to perform a broad range of combat support missions required by ground forces under combat conditions. These tasks support a maneuver unit's ability to conduct ground force tactics during combat operations, but combat engineers themselves are also trained to serve in a secondary role as infantrymen if required.

Combat Engineering Activities

The focus of the activities for combat engineers is direct combat support and providing engineering assistance to ground combat forces. Personnel assigned this military occupational specialty are taught a variety of skills ranging from construction and carpentry to demolition usage and land mine clearing. The gamut of combat engineering missions incorporates four principal concentrations: (1) mobility, (2) countermobility, (3) survivability, and (4) general engineering.

Mobility

Mobility is the ability of military forces to maneuver from position to position on the battlefield while retaining the capability to fulfill their primary mission. The overall objective of mobility operations for combat engineers is to ensure and maintain freedom of movement for maneuver units. In mobility operations, combat engineers are required to perform the following tasks:

- Conduct engineer reconnaissance
- Construct fixed and floating bridges
- Clear helicopter landing sites
- Improve beaches
- Provide technical engineer advice to ground forces
- Place and detonate demolitions
- Conduct obstacle breaching operations
- Conduct assault river-crossing operations
- Execute target demolition
- Detect mines by visual means or by using a mine detector
- Conduct route reconnaissance and clearance operations
- Conduct nonexplosive obstacle/debris removal

Countermobility

Countermobility is accomplished by reinforcing natural terrain through the construction of obstacles to disrupt, delay, or destroy the enemy. The primary objective of countermobility operations is to slow or redirect the enemy, increase time for target acquisition, and increase weapon effectiveness without affecting the movement of friendly forces.

In countermobility operations, combat engineers are required to perform the following tasks:

- Construct defensive positions for weapons and personnel
- Place mines/construct minefields
- Plan/Install obstacles and barriers, including wire
- Employ specialized demolitions

Survivability

Survivability is the ability of personnel, equipment, and facilities to continue to operate within the wide range of conditions faced in a combat environment. Survivability includes those aspects of protecting personnel, weapons, and supplies by employing good tactics, continuing fortification of existing bases, deception, camouflage, and constructing fighting and protective positions. Survivability operations will not completely eliminate vulnerability to fires on the modern battlefield or the effects of weather, but they can limit losses by reducing exposure to enemy weapons and the weather. In survivability operations, combat engineers are required to conduct the following tasks:

- Construct fighting positions for individuals and weapons
- Construct field fortifications, such as bunkers and combat outposts
- Employ specialized demolitions

General Engineering

Although construction and general engineering missions are understood to be a distinct subset of military engineering and not a primary responsibility of engineers assigned to combat units, combat engineers are able to perform some general engineering tasks. Activities such as vertical construction, concrete work, and expeditionary airfield construction are performed as missions dictate, but combat engineer capabilities to perform such tasks are often limited by their training and equipment and are designed only for temporary duration. General engineering is typically characterized by high standards of design, construction, and detailed planning and preparation, and it is performed by specially trained troops, such as those in Naval Mobile Construction Battalions or "Seabees."

General engineering normally serves more than just combat troops (e.g., logistical units), and the majority of tasks are performed in the rear area. In addition to some of the general engineering and construction missions listed above, combat engineers may be required to perform or assist in the construction of standard and nonstandard bridging, roads and airstrips, and soil stabilization projects.

Combat Engineering Equipment

Combat engineers are equipped with standard tool kits and sets, which include basic construction tools such as hammers, saws, drills, planers, and similar carpentry equipment; pioneer kits, which include tools and equipment that assist in obstacle removal and construction, such as axes, mattocks, rope and pulley systems, chainsaws, and tree-climbing gear; demolition sets, which include electrical and non-electrical firing devices, and electrical wire; breaching kits; and minefield marking equipment. These sets and kits are designed to be boxed and made available to those combat engineers at or near the front line of combat troops. In many cases, combat engineers will carry with them the most commonly used tools for the missions they are conducting.

Additionally, combat engineers operate large pieces of military equipment that facilitate their respective tasks and missions. The Assault Breacher Vehicle is formed from the chassis of an M1A1 tank and is designed to breach obstacles and ensure mobility. The Assault Breacher Vehicle is armed with a mine-clearing line charge, a rocket launched line of explosives designed to penetrate a row of mines, wire obstacles, or other obstacles. Combat engineers also employ a variety of robots designed to approach and interrogate potential explosive devices. Mine-resistant ambush-protected vehicles provide combat engineers a wheeled asset capable of withstanding explosive attacks from land mines or improvised explosive devices in route reconnaissance and clearance missions.

Combat Engineers in Operations Iraqi Freedom and Enduring Freedom

The rise of irregular threats against U.S. forces and the conduct of counterinsurgency operations during Operations Iraqi Freedom and Enduring Freedom have created new challenges to combat

engineering, but the principal activities of mobility, countermobility, and survivability remain vital to combat operations. Combat engineers of the U.S. Army and U.S. Marine Corps supported numerous combat operations by performing extensive route reconnaissance and clearance missions, which included exploding improvised explosive devices and conducting demolition raids. In this capacity, combat engineers deployed Route Reconnaissance and Clearance platoons, comprising vehicle-borne troops in mine-resistant ambush-protected vehicles, to ensure the safe passage along primary supply routes and roads potentially laden with improvised explosive devices. Using robots and minesweepers to detect potential explosives along frequently traveled roads, combat engineers ensured the mobility of U.S. forces throughout the military area of operations. Additionally, combat engineers built combat outposts and patrol bases and laid assault bridges to increase the military presence in the regions assigned and provide force protection measures to forces conducting military operations.

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See also Army Corps of Engineers

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ENVIRONMENT

Armed forces are responsible for managing considerable ranges of land, and as a result, they are among the largest environmental managers in the world. The U.S. Department of Defense (DOD) managed (in 2004) approximately 30 million acres (48,000 square miles) that contain an astonishing variety of natural and cultural resources in a wide and diverse range of environments, including prairies, deserts,

mountains, jungles, arctic tundra, reefs, inland waters, and oceans, that contained critical animal habitat, endangered flora and fauna species, and national and international archaeological and architectural treasures. To successfully integrate land stewardship responsibilities with training demands, and during operational deployments, armed forces employ a variety of methodologies. This entry discusses the efforts of the DOD to manage and protect natural and cultural resources.

Proper environmental management is integral to maintaining the integrity of training areas, particularly given the heavy weights and large size of modern tactical vehicles and extended operational ranges of many weapon systems. If the environmental impacts of training activities are not properly anticipated and deleterious effects are not properly mitigated, vegetation will be destroyed, the desired training environment will not be retained, and environmental damage such as soil erosion and landslides can render a training area impassable. Environmental impacts such as wildfires resulting from the detonation of military ordnance can prevent training from being conducted; desired tactical conditions such as woodlands, jungle canopies, cliffs to be traversed, and streams and rivers cannot be maintained, and training can be adversely affected.

Planning

Within the United States, environmental planning is guided by the National Environmental Policy Act of 1969, which requires that the effects of any proposed action(s) on the natural and human environment are taken into account before such an activity is permitted to proceed. The act's analysis and documentation might be as simple as a single-page memorandum determining that no effect is anticipated, to a single-volume environmental assessment that serves as a midlevel analytical document, to multiple-volume environmental impact statements that require years to prepare.

Management Measures

Water

Within the United States, the defining legislation for water conservation and protection are the Clean Water Act and the Safe Drinking Water Act. Compliance includes actions typical of any other

community in the United States, particularly to safeguard potable water sources and inland water courses. Among the biggest challenges faced by DOD have been fuel spills (particularly during field training by mechanized units) and fuel storage (particularly large-capacity underground tanks employed because of security considerations). In recent years, the DOD has taken additional measures to safeguard water resources.

Air

The Clean Air Act is the overriding legislation to protect air quality within the United States. Various types of military training and operational activities have the potential to adversely affect air quality, particularly smoke generation to obscure tactical movements, employment of a range of military munitions, and operation of aircraft and vehicles. As with water resources, sustainment of air quality has proven to be challenging for DOD, and recent initiatives have sought to improve practices to reduce or eliminate air emissions.

Natural Resources

Management of natural resources including flora and fauna is a part of the military's stewardship. In the United States, this is predominantly, but certainly not exclusively, done through compliance with the Endangered Species Act. Although it might appear that military training is incompatible with wildlife and habitat development and sustainment, the DOD is among the most active and successful government agencies in the protection and management of natural resources. For example, at the United States Military Academy in West Point, New York, the 16,000-acre training reservation is used intensively during the 3 summer months for the performance of Cadet Annual Field Training, but for the remaining 9 months of the year, it is essentially operated as a wildlife refuge. In the southeastern United States, DOD installations have been preeminently successful in supporting efforts to preserve and expand the population and habitat of the red-cockaded woodpecker, one of the first species to be formally listed as endangered, in 1970, and which is now no longer seriously threatened. This is only one of hundreds of similar success stories.

Most installations have agronomists and foresters on their staff to ensure that vegetation and natural

resources are carefully managed. Hunting is encouraged on most DOD installations with careful management and review, as a successful mechanism for managing and controlling animal populations. For example, in the northeastern United States, the beaver population has seen recent growth, with resulting expansion of the range of the beaver population, which has damaged and constrained training areas through dam construction and pond/swamp creation. DOD Natural Resource specialists coordinate closely with Range and Training staff to mitigate such occurrences.

Cultural Resources

Cultural Resource Management includes both archaeological and architectural resources and can even include historic landscapes. In particular, the preservation of historic structures, monuments, commemorative and interpretive plaques, memorials, and historic cannon plays an important role in the developing and maintaining of morale, esprit de corps, unit pride, and military tradition. At West Point, massive stone inscriptions of battle honors from the American Revolution and Mexican-American War line the Hudson River. Many military installations also contain the sites of historic fortifications, battlefields, or campaigns, particularly in Europe. These historic sites provide a ready opportunity for staff rides, tactical training, and military history instruction.

DOD Cultural Resources Management complies with a range of statutes, including the National Historic Preservation Act, the Archaeological Resources and Protection Act, and the Native American Graves Protection and Repatriation Act. Archaeological investigation is typically performed in advance of any ground-disturbing activities, and monitoring by professionally qualified archaeologists during such activities is also routine. Repairs, modifications, alterations, expansion, or demolition of historic buildings are also carefully reviewed, and comprehensive measures to protect the historic integrity of such structures are identified and fulfilled. The DOD has established written agreements with interested Native American or Indian nations or tribes for most installations to ensure that Native American considerations and concerns are identified and considered during the planning process for activities and incorporated into all installation events.

Hazardous Waste

Extended military activities over a range of time frequently lead to various forms of contamination of training areas. This might range from relatively simple contamination such as a high concentration of lead at a long-established rifle range to explosive residue being found within an impact area or more serious industrial pollution caused by industrial manufacture or testing of particularly hazardous materials such as nuclear, biological, or chemical weapons. Such conditions may threaten the health and welfare of soldiers and civilians training on or utilizing these grounds and facilities, or result in contamination from runoff or migration to adjacent population centers and communities.

Formerly contested battlefields frequently contain unexploded ordnance. Land mines litter modern battlefields throughout the world, particularly in Africa, Vietnam, and Afghanistan, and annually kill and maim thousands of civilians, many of them children. During her lifetime, Princess Diana of the United Kingdom was particularly renowned for her campaign for land mine elimination and removal. Even 135 years after the end of the American Civil War, an occasional Civil War buff is killed by an unearthed artillery projectile. In France and Belgium, it is not uncommon for unexploded chemical weapons containing hazardous substances such as phosgene, mustard, or chlorine gas to still be discovered, nearly a century after the end of World War I. French military explosive ordnance disposal teams still roam the countryside to safely remove unexploded ordnance. Doves, the Belgian Army's explosive ordnance disposal team, receives no fewer than 3,000 annual calls for assistance to remove hundreds of tons of shells, trench mortars, grenades, and other weapons still littering farm fields and neighborhoods from that conflict. Doves anticipates that another 70 years will be required to eliminate all of the unexploded ordnance just from World War I in their country.

In the United States, the primary legislation governing the treatment and disposal of solid and hazardous waste is the Resource Conservation and Recovery Act (RCRA) of 1976. RCRA has established national goals for the United States, which the DOD is responsible for compliance with. The goals are as follows:

- Protecting human health and the environment from the potential hazards of waste disposal
- Conserving energy and natural resources
- Reducing the amount of waste generated
- Ensuring that wastes are managed in an environmentally sound manner

RCRA provides for the management of hazardous materials and hazardous wastes from their point of generation, through transportation, use, and eventual elimination (through either treatment or disposal). Due to the extensive tracking requirements throughout the life cycle of all hazardous materials and waste, the overall process has become known as the "cradle-to-grave" system. As with all other users, the DOD adheres to stringent bookkeeping and reporting requirements on all aspects of hazardous materials and wastes. A related legislation is the Comprehensive Environmental Response, Compensation, and Liability Act, also known as "Superfund," which focuses on the remediation of known hazardous waste sites.

Because many materials that a military employs are inherently hazardous, compliance with RCRA and Superfund demand considerable attention from training activities and installations. Numerous older military installations have suffered from lack of careful environmental management practices in previous decades, and cleanup activities at some facilities are anticipated to continue for many years at considerable expense. For example, the historic Parrott Cannon foundry that operated in Cold Spring, Putnam County, New York, for most of the 19th and 20th centuries was once identified as a Superfund site because of extensive contamination, and the Marathon Battery Company Superfund Site required exhaustive archaeology and remediation before it could be returned to the community in 1993.

Tactical Deployments

Environmental management remains an important consideration even during active deployments. Failure to adhere to proper environmental management procedures has the potential to cause deleterious effects to the health and welfare of soldiers by improper storage and disposal of potentially hazardous wastes (e.g., batteries and fuel) and contamination of potable water sources; failure to manage water runoff and erosion can lead to damage to transportation and other infrastructure; and

destruction of vegetation can remove cover and concealment. Inadvertent or intentional destruction of heritage resources can also result in adverse information operations—warfare effects. For example, in the spring of 2001, the Taliban in Afghanistan destroyed ancient, massive Buddha statues in the Bamiyan Valley of Afghanistan against strong worldwide opposition. Facing invasion by the U.S.-led coalition in the fall of 2001, the Taliban subsequently found themselves without international supporters. In 2003, during the invasion of Iraq, the U.S. Marine Corps constructed a base directly atop Babylonian archaeological ruins and failed to safeguard archaeological treasures in the Iraqi Museum from looting. Both actions earned the U.S. enmity from a wide range of academic and media observers. Accordingly, the DOD has initiated various educational and training initiatives intended to prevent both intentional and inadvertent damage to environmentally and culturally significant properties. During combat operations, significant heritage sites or natural resource areas are identified during planning for operations, and are typically placed off-limits for weapon employment and tactical maneuvers. Such resource areas are also identified in advance so that measures can be taken to safeguard them following the conclusion of active military operations.

Conclusion

Environmental stewardship and management is an important but frequently overlooked aspect of military training, installation operation, and tactical deployments. Compliance with environmental laws, regulations, and policies is critical to protecting the integrity of training areas, and precluding damage from occurring to training areas that would prevent their repeated and regular use. Cultural resources on military installations can actually serve to facilitate military training and instruction, and to support military pride and traditions. During the 19th and early 20th centuries, militaries tended to pay little attention to environmental stewardship. However, modern militaries recognize that this is an important element of safeguarding their soldiers and the communities that soldiers and their families live in and of facilitating realistic training. Appreciation of significant and valuable resource areas (both natural and human-made) fosters a positive relationship with indigenous populations and directly

contributes to successful execution of population-centric counterinsurgency.

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See also Afghanistan; Defense, Department of; Iraq Insurgency (2003–2011); Iraq War (2003); Iraq War, Planning for; Marine Corps, U.S.; U.S. Military Academy

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ETHICS

In the context of this entry, *ethics* will be understood to refer primarily, though not exclusively, to *military ethics*. In the past, military ethics (when it was even considered at all as a distinct topic) was liable to be characterized ungenerously, as a kind of oxymoron—inasmuch as military force is often understood merely as indiscriminate and destructive violence ensuing when both the normal moral order and the rule of law have collapsed. Otherwise, military ethics would likely be described as a synonym for the “just war” theory, in turn misleadingly portrayed as a conversation of limited cultural and historical jurisdiction carried on among Christian theologians (primarily Roman Catholics of the medieval era in western Europe) concerning the permissibility of waging war in defense of the state.

Military ethics, however, is an enquiry distinct from that concerning the justification of war, which itself is not nearly as culturally or historically limited and formulaic as its practitioners and detractors alike quite often portray it. Broad, philosophical discussions concerning the morality of war, and its limited justification as a last resort for political conflict

resolution, can be found in various forms in virtually any culture or historical epoch. Properly understood, just war reasoning is a form of “ideal speech” or public discourse, encountered in many cultures throughout history, concerning one of the gravest and most important moral decisions any society can make: deciding to commit its soldiers and citizens to the risks of harm in war.

Military ethics, somewhat in contrast, should be understood in a more restricted sense as a species of professional ethics, similar in kind to discussions among practitioners (e.g., physicians, clergy, journalists, or lawyers, as well as those who advise, consult with, or study them) regarding professional probity, rectitude, aspirations for best practice, and the boundaries of minimally acceptable practice within their distinct professional community. These confusions about definition and domain arise naturally in the ambiguity inherent in the nature of ethics itself.

Ethics and Morality

In ordinary conversation or customary public discourse, the terms *ethics* and *morality* are often used interchangeably, as synonyms. Historically and etymologically, this customary usage is correct (as far as it goes). The two terms are derived from Greek and Latin words denoting more or less the same set of problems or questions regarding how one ought to live the best possible life, including “How should I act, what ought I to value, and what do I owe to others?”

Scholars sometimes invoke finer distinctions, defining *morality* as the various sets of answers one might give to the questions above, and *ethics* as the discipline that engages in the study and comparative analysis of the resulting theories or conceptions of morality generated by competing answers to these questions. In this sense, *ethics* is then defined as the philosophical examination of morality (or, more precisely, of different systems of morality, or varieties of *moral beliefs*).

In other contexts, as in the study of professional ethics, for example, the term *ethics* is reserved for the specific principles defining both best practices and the limits of acceptable practice within a profession (e.g., medical ethics, legal ethics, journalistic ethics, military ethics). *Morality* is then defined as the more general, universal, background set of

principles applying to each and every person, regardless of his or her professional stance. The domain of morality includes general principles such as *primum non nocere* (“first do no harm”); reciprocity or “the Golden Rule,” most precisely formulated as *informed consent* (do not involve other persons in one’s own strategies or policies, or undertake actions that affect others in pursuit of such policies, without their full prior knowledge and consent); and what we might otherwise characterize as the demands of justice and respect for the most basic human rights. These abstract and highly general *moral* principles, in turn, infuse the concrete *ethical codes* and principles of professional practice that govern the members of discrete communities of practice, such as medicine and the military.

Ethics and Law

In yet other contexts, ethics is sometimes thought to consist largely of respect for, and compliance with, provisions of the law. This widespread belief among rank-and-file citizens finds its way into many forms of organizational behavior, such as appointing lawyers as “ethics advisors,” conducting periodic organizational “ethics training” wholly as a review of applicable laws and regulatory statutes, and equating ethics itself with compliance—by military personnel, civil servants, or corporate employees—with relevant public law or applicable federal or corporate regulations.

Without doubt, showing proper respect for the rule of law, and living in accord with its dictates and constraints, constitutes an important dimension of morality. There are, however, a number of problems and pitfalls encountered in simply equating or conflating law and morality, such as encouraging the inappropriate conviction that one has attained a satisfactory level of moral behavior in one’s life simply by remaining in compliance with the law. Living what most persons would consider a “good” or “morally worthy” life, however, includes engaging in behaviors and cultivating attitudes toward others that the law itself cannot strictly require. The law may command that you properly care for and refrain from doing harm to your children, for example, but it cannot command you to love them. The law may prohibit your doing bodily harm to others or defrauding them of their money or possessions, but it cannot compel you to care about the positive welfare of others, let alone compel you to

do good deeds for their benefit. Those latter kinds of attitudes and behaviors that seem to lie beyond the requirements of law are, nonetheless, essential components of what most people otherwise regard as the province of ethics or morality.

As a further complication, the written “Codes of Ethics” often formulated and adopted by members of distinct professional societies, such as the *Belmont Report* and the *Declarations of Helsinki*, pertaining to medicine and the social and behavioral sciences resemble formal legislation and are often arrived at through collective deliberations that resemble a formal legislative process. Insofar as they serve to define rectitude and professional probity by prohibiting certain forms of unacceptable practices (e.g., actively harming or injuring patients or clients) and requiring others as minimum standards of professional conduct (e.g., a client’s or patient’s informed consent to medical procedures or exposure to financial risk), professional codes of ethics further appear to resemble formal legislation.

They differ from the latter, however, in that, absent genuine formal legislation by society or the state to criminalize the infractions specified in a profession’s code of ethics, the professional organizations themselves possess no independent authority to sanction behavior or punish violations of their codes, apart from reprimand, censure, or revocation of the wrongdoer’s membership in the professional organization (which may admittedly be achieved through withholding or revoking a legally required license to practice). Codes of ethics differ further from formal legislation, in that, quite often, such codes attempt to delineate the core values of the profession, or otherwise attempt to define professional best practices as aspirations for ideal or exemplary conduct by the profession’s members, an important function of ethics that the law (apart from the tradition of “natural law”), in contrast, pointedly ignores. Because codes of ethics represent a form of voluntary self-governance distinct from formal legislation, scholars of jurisprudence have increasingly come to define these various codes as forms of “soft law.”

In the context of *professional military practice*, such distinctions are especially vexing. On the one hand, the “profession of arms” broadly encompasses ancient traditions of self-governance, designated as codes of behavior for the society’s warriors (e.g., the *Code of Chivalry* in medieval Europe or the *Bushido Code* of the Samurai in medieval Japan) that seem

to define rectitude and professional probity and are also inspirational in the sense described above but that, in most other respects, often appear inchoate, outmoded, and, in any case, possess no formal legislative authority. On the other hand, bodies of legislation outlining the state’s jurisdiction over its military personnel are often designated as “codes” (e.g., the Uniform Code of Military Justice in the United States) and do establish formal, legal authority and accountability over the behavior of the profession’s members, while utterly lacking the ideal or inspirational qualities of best practices that usually characterize a profession’s own, internally devised code. As a result, quite apart from the domain of formal governance, military services and organizations in many nations and cultures find it incumbent to attempt independently to define the service’s *core values* and to articulate aspirations and ideals of best practice that attempt to capture the *professional military ethic* in a positive, moral (as opposed to a purely legal) sense and, hence, define the profession itself in terms of its highest ideals (rather than minimally tolerable behavior).

Military Ethics and Just War Theory

A historically noteworthy example of the latter process was the formulation, in 1863, of “General Orders 100,” known unofficially as the “Lieber Code” (after its principal formulator, the German-born American jurist at Columbia University, Francis Lieber). At the behest of President Abraham Lincoln, this document sought to set forth, clarify, and codify expectations of proper military conduct regarding the treatment of subordinates, enemy prisoners, and civilian noncombatants for officers in the Union Army during the American Civil War. Many of the prohibitions regarding abuse of prisoners and noncombatants were enforceable and punishable in principle, and thus, the document served in a limited sense as formal legislation. But it likewise drew on widespread practice and custom within the armed forces to define professional probity and rectitude and set forth high standards of professional conduct as well as constraints on minimally acceptable professional behavior and so functioned as a provisional code of ethics for the profession of arms as well.

In the latter sense, the Lieber Code was widely admired, and its provisions were emulated and ultimately adopted by the armed forces of other nations

during the 19th century, most notably the Prussian Army (in which Lieber himself had served during the Napoleonic wars). From there, the most significant constraints and professional ideals found their way into the Hague Conventions on Land Warfare of 1899 and 1907, which served, in turn, as the founding documents of contemporary international law of armed conflict, also known as international humanitarian law.

This reference to international law may seem to contradict the earlier claim that law and morality constitute distinctive domains. International law, however, and international humanitarian law, in particular, constitute unusual realms of jurisprudence in their own right, often appearing to lack the authority, jurisdiction, and, most importantly, the sanctions requisite to formal legislation and governance. Far more than domestic law, moreover, international law attempts to embody, codify, and insofar as possible, enforce broad moral or ethical norms designed to mitigate the worst forms of human suffering attendant on war in particular. Accordingly, the boundaries between law and morality, as well as between what can (or ought to) be enforced versus what is enjoined or exhorted as ideal or exemplary practice, are especially imprecise (as, e.g., in the UN's Universal Declaration of Human Rights of 1948).

This wider ambiguity is reflected in the manner in which legal and moral considerations are presented and taught to initiates in the military profession. In the context of just war doctrine, for example, the proper conduct of war constitutes a moral discussion traditionally labeled *jus in bello* to distinguish it from the moral considerations attendant on the justification for entering into war, *jus ad bellum*. The latter is thought to be primarily the province of political leaders and statesmen, while the former pertains primarily to restraints on the conduct of military personnel engaged in an otherwise-justifiable conflict. *Jus in bello* is actually the older of these two branches of just war discourse, ranging from laws in ancient India and China concerning those exempt from attack in the midst of war to the outlines by Socrates of prohibitions against vengeful, excessively destructive, or indiscriminate military tactics in Plato's *Republic*. The focus in these formulations is often as much on the warrior's own well-being, as on that of the enemy or the victim, seeking to guard the warrior's honor and personal character from the devastating consequences of engaging in normally

prohibited violence, while differentiating mere criminals and murderers from justified combatants mainly by the unwillingness of the latter to engage in indiscriminate violence against those who do not merit such treatment.

This classical moral discourse about the limitations on the warrior's conduct during combat thus has the character of a professional code of ethics, enjoining high standards of professional conduct as a voluntary outgrowth of the most essential core values, practices, and cherished traditions of the members of the profession of arms, past and present. In contrast, the "Law of Armed Conflict" is often presented as a bewildering and inchoate jumble of arcane prohibitions and legal restrictions, stemming from treaties and conventions whose relevance and authority appear questionable, and the significance and justification of whose resulting provisions or rules of engagement within the context of specific armed conflicts often seem neither clear nor reasonable.

Compliance on the part of military personnel with what appear to be arbitrary restrictions, formulated and externally imposed on their activities by those who are themselves insulated and abstracted from the exigencies of armed conflict, is understandably grudging at best. The suspicion and cynicism of combatants regarding the law of armed conflict, however, result largely from the failure to portray such constraints as both embodying the values and reflecting the long-standing practices and traditions of the profession itself. Therein lie the chief challenge and responsibility of professional military ethics education, and the chief justification for including the study of both dimensions of just war doctrine within its purview, even when members of the military profession themselves are thought not to be charged directly with the responsibility for the state's decisions to resolve conflicts through force of arms.

In truth, it is specifically incumbent on members of the profession of arms (as distinguished from the obligations of citizens generally) to attain a full and adequate understanding and commitment to the nature of their practice, of their distinctive role within the larger political order, and, most especially, of the peculiar responsibilities that devolve uniquely to them within this larger political context or framework to uphold acceptable standards of personal conduct, public service, and sound professional

practice. The latter include both knowledge and proficient mastery of *morally justifiable* and *legally permissible* military strategy and tactics, on the basis of which, in turn, military professionals are required to provide competent and accurate (even if sometimes unwelcome) advice to immediate supervisors and political leaders concerning the prudence, feasibility, and morality of their proposed uses of military force for political ends.

Finally, military personnel should possess the requisite knowledge and professional competence to carry out their socially assigned roles and responsibilities to defend their homeland and maintain the rule of law generally, as well as defend the lives and welfare of vulnerable victims of wanton violence when required, through the judicious and economical use of deadly force. Importantly, the latter encompasses the constant exercise of their individual autonomy and good judgment to avoid being drawn into professional malfeasance and illegal behavior, including the willingness to refuse even to countenance, let alone to order (or themselves participate in) strategies or tactics that transparently constitute such professional malfeasance.

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See also Civil-Military Relations; Code of Conduct; Customs and Traditions; Geneva Conventions; Hague Conventions; Just War Tradition; Laws of War; Leadership; Oath of Enlistment; Professionalism; Rules of Engagement; Uniform Code of Military Justice

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ETIQUETTE

See Military Courtesy

EUROPE

Europe occupies 8% of the world's surface and includes 50 internationally recognized countries (Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia [officially called Former Yugoslav Republic of Macedonia], Malta, Moldova, Monaco, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, the United Kingdom, and Vatican City). It is bounded on the north by the Arctic Ocean, on the west by the Atlantic Ocean, and on the south by the Mediterranean Sea; its eastern border conventionally runs along the Ural Mountains and Ural River, swinging south to include the trans-Caucasian republics. Europe can be divided into six composite regions, which are not all equally homogeneous: Scandinavia, western Europe, central Europe, eastern Europe, Mediterranean Europe, and the Balkans. Out of the 50 European countries, 28 (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom) are the member states of the European Union (EU)—the world's most integrated and extensive system of international governance. This entry briefly looks at conflicts and wars in Europe during the past century, then discusses the EU, challenges to security, civil-military relations in Europe, and the EU's relationship with the United States.

Recent History

Much of the European history of the 20th century was consumed by the two World Wars and the Cold War. At the end of the 20th century, the European continent experienced the collapse of communism and the dissolution of the Soviet Union (the USSR). This process started with the rise of nationalist movements in eastern Europe and the Soviet defeat

in Afghanistan. After Poland's electorate voted the Communists out of government in June 1989, Hungary and Czechoslovakia followed Poland's example by October. On November 9, 1989, the East German government opened the Berlin Wall, and East Germany was united with West Germany. Finally, in 1991, the USSR disintegrated into 15 separate countries: Lithuania, Estonia, Latvia, and Armenia declared or restored independence in 1990; Azerbaijan, Georgia, Russia, Uzbekistan, Moldova, Ukraine, Belarus, Turkmenistan, Tajikistan, Kazakhstan, and Kyrgyz declared sovereignty in 1991. As the power of the central government was considerably weakened (the Kremlin could no longer rely on the cooperation of government figures in the republics), in December 1991, Russia, Belarus, and Ukraine announced the establishment of the Commonwealth of Independent States (CIS): This marked the final collapse of the USSR.

Diminishing power of the USSR in the 1980s and the eventual fall of communism led to the collapse of the Warsaw Pact. Czechoslovakia, Hungary, and Poland announced in January and Bulgaria in February 1991 that they would withdraw all cooperation from the Warsaw Treaty Organization from July 1, 1991. In response, the USSR announced that the military structure of the pact could be wound up by March 31, 1991. The Warsaw Pact was officially dissolved in Prague on July 1, 1991; after the end of the Cold War, it became both unnecessary and unwanted. The USSR's subsequent efforts to persuade the countries that had left its sphere of influence to sign agreements renouncing military alliances and bases were rejected by Bulgaria, Czechoslovakia, Hungary, and Poland, although such a model agreement was signed by Romania in April 1991. Most former member states of the Warsaw Pact have later joined the North Atlantic Treaty Organization (NATO).

Another significant event in Europe's history that took place at the end of the past century was the Third Balkan War. This war can be seen as one long conflict divided into at least nine separate wars, rebellions, and uprisings, all of which involve parts of the disintegrated Yugoslavia. The first war, which was called the Yugoslav Civil War, took place in 1991–1992. The breakup of Yugoslavia also involved two separate but related wars in Slovenia (1991) and Croatia (1991–1995), which



Map of Europe.

Source: Courtesy of University of Texas Libraries.

declared independence from the Belgrade government. Slovenia's war against the Serbian-dominated Yugoslav Army was short and victorious. Croatia

fought both the Yugoslav/Serbian Army and Serb rebels in the Krajina region. In May 1995, the Croatian Army launched an effective offensive

(Operation Storm), which forced an end to the Krajina Republic. The Bosnian Civil War followed in 1992–1995. It involved Croatia, Yugoslavia/Serbia, and NATO. After NATO's air strikes against the Serbs (from August 30 to September 14, 1995), Bosnian Serbs agreed to end the fighting and participate as a part of the Bosnian nation. The latest conflicts were the Kosovo War of 1998–1999 (started after the ethnic Albanians living in the Serbian province of Kosovo sought independence from the Yugoslav Serb government in Belgrade), the Presevo Rebellion of 2000–2001 (rebellion by ethnic Albanians living in the Presevo Valley region of Serbia), and the Albanian Uprising in Macedonia, which began in March of 2001.

Events that intervened during the past decades significantly increased the role of the military alliance of NATO and led to its enlargement. Since 1949, NATO's membership has increased from 12 to 28 countries through six rounds of enlargement in 1952, 1955, 1982, 1999, 2004, and 2009. The enlargement of NATO contributed to the consolidation of stability and security for all countries in the Euro-Atlantic area by encouraging and supporting democratic reforms, including the establishment of civilian and democratic control over military forces; fostering patterns and habits of cooperation, consultation, and consensus-building characteristic of relations among members of the alliance; and promoting good-neighbor relations.

Another organization whose enlargement had a very large impact on the recent events in Europe's history was the EU (founding countries were Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany). The first three enlargements brought in six more countries (Denmark, Ireland, and the United Kingdom, 1973; Greece, 1981; and Spain and Portugal, 1986) to the European Economic Community (as the EU was called until the Treaty of Maastricht), thus strengthening its presence in northern and southern Europe. The Treaty of Maastricht (signed in 1992) represented a new stage in European integration since it opened the way to political integration and created the EU consisting of three pillars: (1) the European Communities, (2) the Common Foreign and Security Policy, and (3) police and judicial cooperation in criminal matters. New European dynamism and the continent's changing geopolitical situation led Austria, Finland, and Sweden to join the EU in 1995.

The fifth enlargement took place in 2004, when 10 more countries (the Czech Republic, Hungary, Poland, Slovakia, Estonia, Latvia, Lithuania, Slovenia, Cyprus, and Malta) joined the EU. Bulgaria and Romania joined the EU in 2007, bringing the number of EU countries to 27. The addition of 12 more countries did not simply increase the EU's geographical size and population but also its political and moral dimensions in terms of culture, history, and aspirations as new member states joined or returned to the democratic European family. It is expected that this process will continue further; at present, Croatia, Turkey, and Macedonia are official candidate countries holding (or planning to start) the accession negotiations. All the other western Balkan countries (Albania, Bosnia and Herzegovina, Montenegro, Serbia, as well as Kosovo) are potential candidates. Recently (July 2009), Iceland also submitted an application for EU membership.

The Treaty of Lisbon (ratified in 2009) provides the EU with modern institutions and optimized working methods to tackle efficiently today's challenges, such as globalization, climatic and demographic changes, security, and energy. However, the EU is unlikely to become a "superpower" in the political arena in the short run: Questions regarding budget concerns, the ability to formulate a common foreign policy, and energy problems, as well as the issue of the euro system, remain extremely difficult to agree on and to solve. On the other hand, the EU plays a very significant role in economic, trade, and monetary terms, and in all probability it will preserve this role in the foreseeable future.

Security Challenges and European Response

As indicated in the European Security Strategy (agreed in 2003), Europe has never been so prosperous, so secure, and so free as it was in the beginning of the 21st century. Nevertheless, Europe faces a lot of security challenges. Although large-scale aggression is unlikely, Europe faces threats that are more diverse, less visible, and less predictable. One such threat is terrorism, arising out of pressures of modernization, cultural, social, and political crises, and the alienation of young people living in foreign societies. Some of the groups involved in terrorist activities are related to European issues (like ETA Basque terrorism), others have nonterritorial leftist-centered ideologies or are radical Islamist groups.

These groups originating in North Africa, Pakistan, and Arab countries have already staged mass attacks in Spain, the United Kingdom, France, Germany, and Italy. This radical Islamist threat, combined with what is commonly called “homegrown” terrorism, challenges the various European states and the EU at large (in the United Kingdom, Ireland, and Spain, terrorist attacks caused 5,000 deaths in 30 years).

Since Europe is one of the two richest parts of the world, it is a prime target for organized crime originating outside Europe. State failure is also an alarming phenomenon that undermines global governance and adds to regional instability. The international treaty regimes and export control arrangement have slowed the spread of weapons of mass destruction. However, Europe is entering a new and dangerous period that raises the possibility of a weapons-of-mass-destruction arms race, especially in the Middle East. Advances in the biological sciences may increase the potency of biological weapons in the coming years. Many border areas of Europe are torn by regional conflicts that represent a large threat to Europe. New unconventional and asymmetrical threats (like possible energy supply disruptions, cyber attacks, etc.) are also challenging European security.

In addition to the NATO enlargement and the EU integration policies, security challenges in Europe are tackled by developing a range of EU policies. For instance, in 2006–2007, the EU also started working on a common energy policy, the aim of which is to negotiate energy more effectively as a united bloc, while diversifying supply and promoting competition to ensure security and sustainability of energy supplies. Prior to that, in 1999, the European Security and Defense Policy was launched, stressing the need to create an efficient decision-making mechanism and to enable the EU to act independently in solving international crises. The Treaty of Lisbon has reshaped the European Security and Defense Policy into the Common Security and Defense Policy, which allows the EU to develop its civilian and military capacities for crisis management and conflict prevention at the international level. The Common Security and Defense Policy does not involve the creation of a European army; therefore, it develops in a manner that is compatible and coordinated with NATO. It is worth mentioning that the EU and NATO agreed on mutual crisis consultation arrangements that are geared toward efficient and rapid decision making in each organization in the

presence of a crisis. If a given crisis gives rise to an EU-led operation making use of NATO assets and capabilities, the EU and NATO will draw on the so-called Berlin Plus arrangements. These arrangements cover three main elements: (1) EU access to NATO planning, (2) NATO European Command options, and (3) use of NATO assets and capabilities.

There is a growing demand for European governments to send armed forces on a wide range of expeditionary missions. From the Balkans conflicts of the 1990s onward, the number of European personnel deployed abroad has risen steadily. The requirement for more deployable forces is unlikely to be temporary. However, the European architecture for crisis management and its operational capabilities do not yet fully meet the needs dictated by the ambitious strategy defined in various EU planning documents.

European armies have been slow to acquire some of the military equipment necessary to engage in high-end warfighting and force projection that the EU would need in order to shoulder wider global responsibilities. In defense capability, there is a huge gap between the French and British on the one hand and the rest of the EU on the other. Britain and France remain the two big defense players in Europe. Apart from Britain and France, most European militaries have failed to keep up with technological advances in battlefield management and communications. They train their forces to defend largely unthreatened borders at home, leaving them unwilling and unprepared to defend common interests abroad, from Afghanistan to Libya.

The war in Libya in 2011, far from heralding a new era of European activism, once again highlighted the limits of Europe’s military power. While every NATO alliance member voted for the Libya mission, less than half participated, and fewer than a third were willing to participate in the strike mission. Frankly, many of those allies sitting on the sidelines did so not because they did not want to participate, but simply because they couldn’t. The military capabilities simply weren’t there. Even Britain and France skimped on munitions, which made it hard for them to carry out multiple missions (both are also fighting in Afghanistan).

The need to do more with less has put European governments under pressure to identify the capabilities that they require for modern missions and to carry out reforms. Several European countries say explicitly that they no longer perceive direct threats

to their sovereignty, and therefore, they organize their armed forces to deal with a wide range of contingencies, both abroad and at home. Clearly, this perception does not apply to everybody, since some countries, especially in eastern Europe, do still see possible territorial threats. Although there have been budget cuts in defense, Europe's potential to influence international security issues through military power remains significant. It has plenty of military assets to draw on for operations.

Compared with the United States, Europe lacks capabilities to project military power, and its technological base is inferior. Its forces are not interoperable with the United States, and its military doctrines are increasingly divergent, as the United States has successfully tested new concepts of warfare in Afghanistan and Iraq, while Europe lacks a debate about new methods of using armed force. European countries require a wide range of capabilities, some of which are still quite new. The driving need is to create forces with the right mix of skills, training, equipment, doctrine, and support systems, as well as being able to deploy rapidly far afield and be sustained over extended periods of time. For cultural, political, and budgetary reasons, Europe is unlikely to close the gap within a decade or so.

To sum up, despite impressive agreements and commitments, no European country possesses sufficient financial, industrial, or technological resources necessary to effectively sustain these kinds of adaptable military tool kits. The current financial crisis further accentuates this fact. Mounting pressures over defense budgets and an increasingly complex and uncertain security environment call for renewed efforts in European defense cooperation. European armed forces must develop capabilities that allow them to perform a wide variety of tasks—from high-intensity combat to constabulary duties and state-building.

Civil-Military Relations in Europe

In essence, all European countries pay great attention to improving civil-military relations. This is done by strengthening subjective and objective civilian control over the militaries (subjective civilian control focuses on maximizing civilian power, objective civilian control focuses on maximizing military professionalism) in four dimensions. First is the relationship between the military and the state.

The European norm here is that armed forces are unambiguously subordinate to the lawfully elected government in office, and the armed forces' leadership has no voice in public affairs beyond its professional domain. It is typical in Europe that although the head of state is usually its military's nominal commander in chief, the military owes its allegiance to the state, not the government of the day. As a consequence, when power legitimately changes hands, the armed forces dutifully serve their new political masters.

The relationship between the military and the executive branch of government is another important dimension of civil-military relations. Typical European practice is firmly and unambiguously to require subordination of the armed forces under civilian political direction. In advanced democracies, such "control" is normally exercised not by the head of government personally but by a departmental minister (usually the minister of national defense, though chiefs of staff may have a right of direct access to the prime minister in certain circumstances, e.g., as they do in the United Kingdom). In the EU, such "control" is much more than nominal: In matters of defense policy making, planning, programming, budgeting, and spending, the authority and autonomy of the military are strictly circumscribed. This means that, as a general rule, even in operational matters militaries do not have complete freedom of maneuver; military officers do not make public statements (even senior military officers and even on comparatively uncontroversial security-related matters) without the express authorization of their minister, and so forth.

The third dimension of civil-military relations is the role of the parliament and commitment to transparency. Policy accountability (obligation to reveal, explain, and justify what is done) and financial accountability (obligation to justify what is spent) are of central importance in this regard. On the other hand, it is the parliament's responsibility to hold government to account in both ways. The relationship between the military and a country's domestic security community of analysts, academics, journalists, interest groups, and other civil society organizations is a complementary fourth dimension of civil-military relations. Here, too, transparency is of the essence. Finally, the term *civil-military relations* extends to embrace the relationship between the military and society at large. Patterns of recruitment

and resettlement, the organization of military education, the extent of military aid to the civil community, popular attitudes toward the armed forces—these and many other factors determine that in general the armed forces in Europe are well integrated in society and do not exist as “a state within a state.”

The U.S.-EU Relationship

The relationship between the United States and Europe constitutes the world's strongest, most comprehensive, and strategically most important partnership. This relationship can be characterized by several features. First, the underlying feature of the transatlantic relationship is an economic relationship. On the government-to-government level, the United States and the EU work together to bring about a convergence in their respective regulatory regimes to multilateral trade negotiations. In light of economic and financial crisis, improvement of trade relations is of crucial importance.

Talking about Europe, many countries are experiencing troubles due to excessive sovereign debt. The eurozone's (countries that have adopted the euro as currency) sovereign debt problem emerged in 2010 first in Greece, but it was followed by problems in Ireland, Portugal, Spain, Italy, and Cyprus. The debt crisis that began in Greece and spread to other eurozone countries has served as a painful reminder of the risks associated with high public debt in a globalized financial system. The standard explanation for the problems in, for instance, Greece is that lack of effective monitoring of government deficits within euro area countries and lack of enforcement of the rules on how much debt a country can have allowed excessive debt levels to accumulate. In other cases, such as Spain, the problem was not irresponsible budget behavior; it was the recession that caused the government budget to collapse.

The EU policy response was to provide a fund for the problem countries to guarantee debt repayments. To convince financial markets that the weaker members of the single currency would not be abandoned, on May 10, 2010, European ministers produced a rescue package for the eurozone. The scale of the response reflected growing fears among European leaders that financing for the most troubled eurozone countries might suddenly stop. Although the package has bought the troubled currency area time, it does not resolve the underlying structural difficulties facing many of its members, particularly the

following five: Portugal, Ireland, Italy, Greece, and Spain.

It is worth noticing that the fallout of the eurozone's financial crisis is beginning to be felt elsewhere. Bailing out countries that have serious solvency problems threatens the stronger European nations that are trying to rescue them. Banks in Germany and France that have lent massive amounts to Greece, Portugal, and other struggling economies are beginning to teeter. Fears are growing that taxpayers in richer nations like the Netherlands will be bailing out poorer ones. To sum up, the near future may not bring much relief for countries like Spain, Greece, Ireland, and Portugal, or for others such as Belgium and Italy, which also have huge debt.

The second feature of cooperation between the EU and the United States is political cooperation. Unlike the economic sector, this relationship is basically an unequal partnership because of the EU's structure and the competences mainly remaining in the member states. Nonetheless, an intense dialogue takes place around efforts to enhance democracy and freedom and to promote security. In a number of instances, the common U.S.-EU effort has been critical, notably, negotiations with Iran over its nuclear program and the Middle East peace process. In addition, combined efforts have a measure of success in several other areas like Afghanistan, the Balkans, Lebanon/Syria, Sudan, and Ukraine.

The third feature is issues of potential conflict. One of the conflict areas between the United States and the EU is relations with Russia. For some time, Russia has openly challenged the United States and is playing hard in Europe over its energy supplies, the security of which is a critical issue for the EU (as a large part of the energy supply and especially gas originate from Russia). On the other hand, the United States and Russia seem to be in conflict, with Europe stuck in the middle and unwilling to take a geopolitical view of either player. In this regard, a number of European countries like Germany, France, and others argue that Russia is an indispensable interlocutor to ensure Europe's long-term stability and have consequently favored a policy of engagement over confrontation. Thus, western Europe treats Russia as if it were a developed industrialized country with a democratic political structure and an emerging civil society. The Obama administration has also shown a willingness to defuse tensions with Russia and concentrate on overlapping interests. However, the EU member states from central and eastern Europe,

which endured decades of Soviet rule, feel far more threatened by an increasingly assertive and aggressive Russia. According to them, Russia sees the obvious weakness in transatlantic relations and is seeking to take advantage of it. The U.S. government cannot ignore those concerns as well.

Another area of disagreement between the United States and the EU is the enlargement of the EU, particularly the membership of Turkey and most of the Balkans. The United States remains a strong proponent of enlargement to include these countries; however, this issue is particularly sensitive for the EU. The Turkish government is criticized by the EU because it has not yet adopted a single reform of the political program, and there is also no progress in the development of civil society and parliamentary control to oversee the army and defense policy.

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See also France; Germany; Kosovo Intervention; North Atlantic Treaty Organization; Russia; Turkey; United Kingdom; United Nations; World War I; World War II

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FAMILY, MILITARY

Military families—the spouses and children of members of the active-duty, National Guard, and Reserve forces—are an important part of the military community. In popular culture, military families are often portrayed as flexible, self-reliant, and adventurous, but the military lifestyle can be demanding and stressful for families. The recruitment, readiness, and retention of military personnel are affected by the living conditions and overall satisfaction of military families. Not surprisingly, during the era of the all-volunteer force (AVF), and especially after the attacks of September 11, 2001, the needs and concerns of military families have received a great deal of attention from the Department of Defense (DOD). Any widespread and prolonged crisis in the military family could affect national security. This entry describes the benefits and support available for military families and discusses the challenges faced by them.

The military sociologist Mady Segal has called the family a “greedy institution” competing with the military—another “greedy institution”—for the attention and energy of its personnel. The military lifestyle requires that families contend with circumstances that are quite challenging: frequent moves, financial hardship, the social pressure of living in a small community where work and family life are intertwined, extended absences of the service member, and, not least, the ever-present potential for physical harm or even death in battle.

On the other hand, military families receive benefits and support that civilian families do not.

The military provides a variety of free or low-cost services, including housing, child care, and health care, which mitigate financial and emotional stress, and the military community can be a source of social support. Many military families enjoy the opportunity to live in different countries, and most military families travel extensively. Children of service members, “military brats,” as they are sometimes called, learn to interact easily with many different types of people. Studies show that military children are especially close to their mothers, who are usually responsible for moving and helping the family readjust to each new home. Life in the military can be a great adventure for those who can adapt successfully.

Military officers and career soldiers have always had spouses and children, but the all-volunteer force includes more families than ever before. Military personnel are more likely to be married at younger ages than their civilian peers; of a total 1.9 million active-duty service members, 52% of enlisted personnel and about 70% of officers are married. They are also more likely to have children; among all the services, including the Reserve and National Guard, 1.9% children below the age of 18 have a military parent, and 765,000 children have at least one parent on active duty. There are almost 154,000 single parents in the military and 75,000 children with single parents on active duty. About 8% of married personnel in the military are dual-career couples. Women make up approximately 15% of all personnel in the services. However, about 93% of military spouses are female, and most of them are civilians.

In 1993, General Carl E. Mundy, the commandant of the U.S. Marine Corps, proposed a plan to

phase out married recruits in the U.S. Marine Corps. Amid great uproar, he was forced to abandon the plan, but his concerns about the burden of family responsibilities on young marines echo traditional thinking. The saying "If the Army wanted you to have a wife, it would have issued you one" is an old cliché that reflects the reality that wives and families must fit into the military mission.

Historical Precedents

Throughout most of the U.S. military's existence, families were viewed as camp followers who provided a variety of services. Officers' wives organized post social and cultural life, while wives of enlisted men worked as servants, nurses, and laundresses. No provisions were made for families in terms of transportation or housing. Officers lived in quarters on post, assigned only by rank, not family size. "Ranking out," the system in which an officer of a higher rank could evict a lower ranking officer from his quarters, was ubiquitous on frontier posts, and families with children could be forced to turn over their quarters to a bachelor officer. Some wives of enlisted men worked as laundresses and received rations, but they lived in run-down shacks on the edge of the post, often known as "soapsuds row." Other enlisted families lived in casements, the thick walls of coastal forts, or fended for themselves in the nearest town while the soldier lived in the post barracks. Transportation was a particular financial burden for military families. During the late 19th century, railroads sometimes provided free transportation for military families traveling to and from western posts, but this was a favor, not an official policy, and military families usually had to pay their own transportation costs. On frontier posts, schools for children were organized informally by the commanding officer or an enterprising wife. Teachers might be enlisted men, wives, or civilian women hired for the purpose. Life for families on frontier posts could be rough, but most families recalled a strong sense of community and frequent adventures. Wives organized dances, holiday feasts, picnics, and other social events. Children went hunting and riding and, sometimes, even accompanied their fathers into combat.

The Spanish-American War and the acquisition of colonial possessions in Cuba, Hawaii, Panama, and the Philippines meant that military families were assigned to posts not just on the western frontier but

throughout the world. Families took steamers to the Philippines as early as 1899 and 1900, even as combat continued. They faced expensive travel and inadequate housing, although some services, such as elementary schools, were organized on a more formal basis. In the early 20th century, social life for officers and their wives became more elaborate, with endless rounds of cocktail parties, bridge, dinners, and formal balls. Family members took the opportunity to visit Japan and China while stationed in the Philippines.

When the United States entered World War I, wives schemed to find some way to get to France to be near their husbands, although the military discouraged it. Some tried to join the Red Cross. This was the first time that wives were not allowed to join their husbands in a combat zone, although they joined their husbands in Germany during the post-war occupation.

The Second World War brought many more families into the military community, which up to this point had been small, insular, and multigenerational. After the war was over, the Allied forces occupied Germany, Japan, Austria, and South Korea, and in 1946, family members were encouraged to move to the occupation zones. The policy allowing military families to live in Europe and Asia was intended to tame the wild barracks atmosphere that was hurting relations with the civilian population and damaging the health of the men and to show the world that the United States would remain an active leader in global affairs. Many servicemen married European or Asian women while stationed overseas.

As a worldwide garrison force, the military began providing housing and shopping areas, schools, health care, and recreation facilities for families. After the war, military couples, like their civilian counterparts, began having children; in 1947, the first military babies were born overseas, and military children soon added to the baby boom. In garrison communities, whether overseas or in the United States, wives organized the social life of the base and of the unit and performed many types of volunteer work. The postwar decades saw the creation of numerous wives' clubs and organizations, and the social performance of wives became a factor in promotion decisions for service members, particularly officers.

During the Vietnam War era, living conditions for military families worsened to the point of crisis, as base facilities deteriorated, military pay failed to

keep up with inflation, and veterans returned home physically and emotionally disabled. In 1973, the unpopular draft was abolished and the era of the all-volunteer force began, but military life continued to decline. Families were forced to use food stamps and other government assistance to supplement their meager incomes, and officials described base housing as “slum-like.” Clubs and organizations became less active or lapsed altogether, as women entering the workforce viewed the duties of a military spouse as burdensome.

By the late 1970s and early 1980s, retention experts realized that poor conditions for families were a retention challenge, and the services began to improve conditions for military families. Reforms included significant pay raises, modernization of housing and schools, and more attention to the needs of military families. At the end of the Cold War, many installations were closed and the military downsized, but the September 11 attacks brought a renewed urgency to military affairs. The new force posture affected military families as service members were deployed, sometimes multiple times, to Iraq and Afghanistan. The defense posture of the future projects an expeditionary force model in which most families live on or near large posts in the United States while personnel are deployed overseas. This model is traditional for naval personnel and their families, but for personnel and families of the U.S. Army, Air Force, and Marine Corps, it will represent a significant departure.

Current Challenges

Much of the literature about military families begins with an often unspoken assumption that the military lifestyle is difficult and stressful and that military family life is especially prone to dysfunction. In 2005, for example, a spate of news sources reported that the divorce rate among military personnel was skyrocketing due to stress caused by deployment. More careful research showed that the apparent spike in divorce was a statistical fluke and that deployment actually decreased the likelihood of divorce, although families and personnel perceived deployment as stressful to the family. However, exposure to combat and posttraumatic stress disorder did prove to be risk factors for divorce.

Deployment does place particular stress on children, and children whose parents are deployed

show increased levels of anxiety. Difficulties for children are exacerbated when they live off-post and attend civilian schools, because military children often feel isolated and misunderstood in the civilian world. Reserve and National Guard families are also at higher risk for deployment-related stress, and when the civilian parent has difficulty adjusting to the deployment, stress on the child increases. Interestingly, the greatest stress for military families comes not when the service member is away, but after he or she returns home. Families report difficulty in reintegrating the returning service member into family routines and roles. However, studies suggest that military children do not experience elevated levels of dysfunction in school or social relationships, and deployment-related anxiety diminishes or disappears when deployment is over.

Employment is another challenge for military spouses. Military wives are better educated than the general female civilian population—84% have at least some college, 25% have bachelor's degrees, and 10% have advanced degrees. Unfortunately, while most are working or want to work, military spouses experience more unemployment and underemployment than civilians. The wage gap between military wives and civilian women is as high as 40% due to frequent moves, lack of high-paying jobs in the surrounding area, and child care issues.

In recent decades, the Department of Defense has established a large number of support programs and services to meet the needs of military families, but there has been frequent skepticism about the effectiveness and sincerity of these efforts. In 2011, the Obama administration created a comprehensive plan to support military families that included four priorities: (1) to “enhance the well-being and psychological health of the military family,” (2) to “ensure excellence in military children's education and their development,” (3) to “develop career and educational opportunities for military spouses,” and (4) to “increase child care availability and quality for the Armed Forces.” Fifty federal agencies have committed to participating in efforts to strengthen military families.

Support programs for military families are influenced by two hypotheses about military family life. The “stress hypothesis” suggests that military life is more difficult than civilian life. The “selection hypothesis” proposes that the military attracts recruits who are more likely to have vulnerable families, because

of risks including age, socioeconomic status, education levels, ethnicity, and other demographic factors. Research needs to continue to determine which of these hypotheses better explains the stresses that military families experience, so that programs and services can be more accurately targeted.

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See also Bases, Foreign; Bases, U.S.; Family Readiness; Women

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FAMILY READINESS

Military family readiness programs are initiatives from the Department of Defense intended to create and maintain high levels of morale throughout the military community, especially among military family members. Their objectives are to build a sense of cohesion through social activities, share accurate news and information, help families prepare for deployment and reunion, inform families about available programs and benefits, and help families get the assistance they need in times of crisis. Family readiness programs exist at all levels of the military, but they operate at the unit level. The purpose of family readiness programs is to strengthen the competence and happiness of the families of the unit,

enabling service members to concentrate on their missions free from domestic worries, and to allow commanders to share the burden of dealing with difficult family problems. This entry examines the history and features of these support programs.

For at least the past decade, family readiness programs have been command-sponsored and funded through congressional appropriations, rather than through funds raised by the community itself. Although these two characteristics of family readiness programs support the contention of the Department of Defense that the groups are vital to the mission of the armed services, at the unit level, family readiness programs continue to be staffed by volunteers, usually spouses of military personnel. The volunteer aspect of the programs has the advantage of increased user involvement, but it also means that the quality of individual programs varies widely; moreover, local leaders are often expected to handle serious problems with little or no professional training in social work or counseling.

Family readiness programs have been established by all branches of the military, both active duty and Reserve/National Guard, and in all major commands. Since the Persian Gulf War of 1991, there has been a great deal of attention paid to family readiness, partly as a result of the stresses resulting from that conflict and partly in response to several longer term changes inside and outside the armed forces. First among these is the 1973 transition from the post–World War II draft to the all-volunteer force. After several decades of existence, the all-volunteer force is a professional military force that includes a high percentage of older, career personnel with spouses and children. The tendency of military personnel to be married can be seen even at the junior enlisted level; in fact, military family members outnumber military personnel by about one third. Military personnel with families often find their attention divided between their military mission and their responsibilities to their families. Family stress is a common cause of attrition, something commanders try to avoid.

A second long-term change involves the military moving from a worldwide garrison force in which families are stationed with their sponsors overseas to a stateside-based force in which personnel are deployed to forward locations while families stay home. This change in basing policy means that families have to be prepared to spend much of their lives

separated from their sponsors. Such a system cannot work well unless the families are educated and prepared to deal with the strains and challenges. Finally, military families in today's armed forces are more diverse than ever before, in terms of ethnicity, family background, education levels, and career goals. All branches of the service have seen growth in the numbers of dual-career military families, international military spouses, and male military spouses. Commanders can no longer assume that military families will enter military life with the same expectations and skills that they may once have had.

The comprehensive family readiness programs of today are the culmination of almost a century of gradually increasing support for military families. In the 19th century, military families were not officially acknowledged or supported by the War Department, with the exception of army laundresses (War Department employees who were often the wives of noncommissioned officers). However, officers' wives did often accompany their husbands to posts all over the United States and in the Pacific, and wives assumed most of the responsibility for social and community life on posts. In the early 20th century, after the Spanish-American War revealed scandalously poor preparation for a large-scale conflict, the Army Relief Society was organized by officers' wives and wealthy philanthropists to raise money to help the widows and orphans of soldiers who had died. During the decades before World War II, officers' wives began organizing social clubs and charitable groups on posts, but it was only during the early Cold War that the armed forces began organizing as a worldwide garrison force, building large bases with family housing, schools, hospitals, and recreation facilities for military families, officially integrating military families into the installation system.

During the 1950s and 1960s, a plethora of clubs and social organizations grew on military bases throughout the world. Members, mostly women, socialized, did charity work, and provided various types of support for the wives and children of enlisted personnel and junior officers. Almost all of this work was unpaid labor, but officers' wives, especially at the command level, were expected to participate. Officers' Evaluation Reports included discussion of a wife's social and charitable activities, and, in theory at least, an officer could lose promotion because of his wife's unwillingness to assume leadership in clubs and groups.

During the Vietnam War, the armed forces cut back on many services for families, and military family life became more difficult and unpleasant for many families. Poverty among junior enlisted families increased, and by the 1970s, the social support network that had existed in the first decades of the Cold War began to fray as more women worked outside the home, leaving less time for volunteer activities. At the same time, benefits and programs for families increased and became more complex, a result of the all-volunteer force. Department of Defense surveys in the early and mid-1980s revealed that military families needed better information about what was available to them and showed that family stress was a leading cause of attrition. By the 1990s, the armed forces began to establish more formal family readiness programs as a way of helping families navigate the complexities of military life.

The recent shift from a global garrison force to an expeditionary force model has necessitated much greater support for families, who now face years of long separations and temporary reunions. The family readiness programs of today are designed largely around deployment issues, in contrast to past efforts that emphasized the challenges of frequent moves. For example, family readiness programs offer workshops on organizing finances and legal matters in preparation for deployment, effective communication during deployment, and the challenges of reunion and reintegration.

Family readiness programs have been criticized as being merely a public relations ploy, or for their expectation that family members, mostly women, will do hours of unpaid work each week. However, it does appear that every branch of the armed services has coordinated and professionalized its family readiness programs to a greater extent than ever before. Group leaders have more resources and training available to them, they have funding and command support, and, if successful, they serve an enormously important service to military families.

Anni P. Baker

See also Bases, Foreign; Bases, U.S.; Family, Military; Finance, Personal; Women

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FEDERAL BUREAU OF INVESTIGATION

On its website, the Federal Bureau of Investigation (FBI) proclaims its mission:

to protect and defend the United States against terrorist and foreign intelligence threats, to uphold and enforce the criminal laws of the United States, and to provide leadership and criminal justice services to federal, state, municipal, and international agencies and partners. (www.fbi.gov)

It also lists “Priorities,” in which “we will produce and use intelligence to protect the nation from threats and to bring to justice those who violate the law.” First under “Our Core Values” comes “rigorous obedience to the Constitution of the United States,” meaning among other things, protection of civil rights and liberties. Wartime presents the greatest challenges to balancing the FBI goals of protecting both security and civil liberties. As the nation’s major federal domestic intelligence agency as well as its major federal investigator of crimes, the FBI faced these challenges almost from its inception as the investigative arm of the Department of Justice (DOJ) in 1908 continuing into the present. This entry focuses on the role of the FBI during wartime.

Background

During the earliest years of the Bureau of Investigation (BOI), as it was first named, the United States had few federal criminal statutes. The law relevant to the earliest war involving the BOI, the Mexican Revolution of 1910–1916, concerned neutrality violations—recruiting and arms and ammunition smuggling. The U.S. government, despite its official neutrality, often chose sides, usually favoring the incumbent government over various rebel factions. Severely hampered by budget constraints, the few BOI agents relied on Mexican intelligence, private American operators, and border communities for information. Individuals with mercenary interests, including double agents,

sided with whoever paid the most. El Paso, Texas, became a center of intrigue along with its Mexican counterpart, Ciudad Juarez. The BOI and later the FBI used the intelligence techniques developed along the Mexican border throughout future U.S. hot and cold wars. For example, Western Union and the U.S. Post Office provided the BOI with copies of telegrams and envelopes (mail covers). BOI agents also planted “bugs” to overhear conversations even where they had to break into private property to plant them, a technique used during the Cold War as “Black Bag” operations.

World War I

Neutrality continued to be the major federal law associated with war from 1914, when World War I broke out in Europe, until the United States declared war in April 1917. Espionage (1917) and sabotage (1918) became federal crimes only after the U.S. war declaration, and the BOI was strictly limited to investigating federal law violations. During neutrality, the BOI’s failure to arrest propagandists and spies subjected it to ridicule by the press. When the BOI, after being granted special authority, investigated a munitions explosion at New Jersey’s Black Tom railroad yard and identified the perpetrators, it received no credit. However, the 1917 and 1918 laws gave the BOI new powers, and by the war’s end, the BOI had arrested more than 900 suspects.

With the United States at war, President Woodrow Wilson revived the 1798 Alien Act and put the BOI in charge of regulating alien enemies, primarily Germans and Austrians. The BOI used the Espionage Act to surveil individuals, regardless of citizenship, whose words or actions raised suspicion. In 1917 and 1918, the bureau had only 300 to 400 agents nationwide. Therefore, it officially associated with the American Protective League (APL), citizens pledged to identify suspected spies, saboteurs, and “slackers” (draft dodgers). War needs fed labor unrest, and violence occurred on both sides. The BOI and the APL joined the army, immigration authorities, and vigilantes in their largely successful efforts to destroy the unions. In 1918, the APL conducted well-publicized slacker raids in major cities, rounding up males of apparent draft age not carrying their registration cards. The vast majority actually had registered, but many were kept in incommunicado in crowded conditions awaiting an opportunity to prove their innocence. The raids discredited the APL and BOI

in some cities. After the armistice (November 1918), the wartime BOI director, A. Bruce Bielaski, reduced the agent force and dissolved the BOI's association with the APL in January 1919. To Congress, Bielaski described the Bureau's wartime function as "giving the public a feeling of security." That purpose would continue in subsequent wars.

World War II

With the onset of World War II in 1939, neutrality laws again became a justification for operations by the renamed (1935) Federal Bureau of Investigation. President Franklin Roosevelt in 1936 had secretly authorized the FBI to investigate subversive activities by foreign governments. Using that authority after 1939 and continuing through the war, the FBI used warrants to investigate suspected German, Italian, and Japanese operatives.

The German intelligence agency, Abwehr, sent its spies into the United States from at least the mid-1930s. To the Abwehr, William Sebold, a German-born U.S. citizen with an American wife, seemed a perfect spy. After training in Germany, he was to establish a radio transmitter and collect information from German spies run in the United States by Fritz Duquesne. Sebold agreed but informed the FBI on his arrival in the United States. The bureau set up his radio and sent false information laced with enough true transmissions to appear credible. Moreover, the FBI filmed Sebold's contacts with the spies. Only when Sebold testified against the Duquesne ring in September 1941, was his true loyalty revealed. The convictions helped solidify the reputation of the FBI and its director, J. Edgar Hoover, for the American public.

Hoover's public reputation, however, was insufficient to prevent the removal of Japanese and Japanese Americans from the American west coast. With Roosevelt's 1936 directive, bureau agents using radio and cable intercepts, interviews, and searches of homes and offices investigated suspected foreign and communist spies. For example, an FBI and military search of homes on Terminal Island, California, where the Japanese fishing fleet docked, netted code books and communication equipment that might have been used to contact Japanese submarines. The FBI had identified several thousand suspected spies and "subversives" by the time the Japanese attacked Pearl Harbor, December 7, 1941, prompting the U.S. declaration of war. In the next few days, the

TAKE SLACKERS INTO ARMY.

Many at Camp Dix Welcome Induction Into Military Service.

Special to The New York Times.

CAMP DIX, WRIGHTSTOWN, N. J., Sept. 9.—By direction of Federal authorities, several hundred prisoners captured in North Jersey slacker raids last week and sent to this camp are being inducted into military service today as rapidly as a special detail from the mustering office can handle them. In a few cases where the prisoners had deferred classification but could not find their cards, they are being assigned as soon as their records are established. About 8 per cent. of the prisoners, it is said, are found to have been deliberate slackers who evaded registration.

While Department of Justice agents were under instructions to have all prisoners inducted into service by their local boards before they were sent to camp, several of the prisoners came through without this procedure. An unusually high percentage of the prisoners will eventually be discharged on physical grounds, it is asserted.

A strange feature of the situation is the fact that a majority of the members of the party seemed highly pleased this afternoon over the prospect of getting in the army. Even some of the wilful slackers admit they grew tired of the apprehension of capture and that their arrival here is a real relief.

The *New York Times* article about the "slacker raids" being conducted by the Bureau of Investigation, September 9, 1918.

Source: New York Times.

government detained suspected German, Italian, and Japanese spies. The FBI also acquired significant information by breaking into a Japanese consulate. By February 1942, the bureau, with the army and navy intelligence concurring, concluded that all dangerous Japanese had been identified. Hoover also contended that in future suspect individuals



The FBI's fingerprinting work grew so massive during the war that it had to be moved to a federal armory larger than a football field.

Source: Federal Bureau of Investigation.

would be identified and detained. Mainly for these reasons, FBI director Hoover formally objected when Secretary of War Harold Stimson insisted that all Japanese and Japanese Americans should be removed from the U.S. west coast and sent to camps further east. President Roosevelt overruled Hoover with Executive Order 9066.

Significantly contributing to the American war effort, the FBI developed the supersecret Special Intelligence Service authorized by President Franklin D. Roosevelt on June 24, 1940. The Special Intelligence Service consisted of FBI agents working undercover as representatives of banking, investment, and business interests in Central and South America. Usually single, they learned Spanish or Portuguese, trained in the States in their cover

business to seem credible, and learned spycraft-like secret writing and codes. The Special Intelligence Service was so secret that its agents hid their identity from other agents and even Congress did not know it existed. Their informants included local police (who made arrests) and anti-Axis individuals, like the members of Argentina's Jewish community. By the time the war ended in 1945, these bureau spies helped shut down the South American Abwehr radio system and caused the arrest of suspected Germans.

The Early Cold War

The Soviet Union had been an American ally during World War II. But it soon became the greatest enemy of the United States in its quest for communist world

domination. In 1949 it exploded an atomic bomb, thus making it an even deadlier enemy. The Cold War for the FBI occurred in two phases: the first from 1946–1961, which included the Korean War (1950–1953), and the second, which lasted until the fall of the Soviet Union in 1991. The FBI's early war against communists had two separate but simultaneous aspects: (1) investigating and arresting suspected spies and (2) tracking—and in some instances arresting—suspected subversives who allegedly supported violent overthrow of the U.S. government.

Some of the FBI's best known (and most controversial) Cold War espionage investigations involved individuals who spied for the Soviets during World War II, like Alger Hiss, who was convicted of perjury when the statute of limitations on espionage ran out, and Julius and Ethel Rosenberg, who were executed for giving atomic secrets to the Russians. The FBI first learned of these and many other spies through decrypted and translated Soviet documents known only to a handful of Americans. Under the rubric "Venona," these decrypts pointed to hundreds of code-named individuals, mostly in the U.S. government, who passed information to Russia. One of the first identified was, then, a current Justice Department employee, Judith Coplon. The FBI agent in charge of her case, Robert Lamphere, received permission from President Harry Truman's attorney general, Tom Clark, to put her under surveillance and tap her home and office telephones. Since Roosevelt in 1940, presidential directives permitted wiretapping in cases of "grave matters involving the defense of the nation." Soviet espionage in the 1940s, according to Clark, fits this description. While under surveillance, Coplon passed a document to a Soviet agent, and both were arrested. Juries convicted her in two trials, but various reasons, including the wiretaps, caused a higher court to reverse her conviction. The Venona documents, revealed to the public in 1995, proved the reality and extent of Soviet espionage.

Tracking members of the American Communist Party (CPUSA), considered a Soviet tool, involved many FBI agents during the early Cold War. In connection with President Truman's Loyalty Program, later extended by President Dwight Eisenhower, the FBI instituted a "full-field" investigation whenever "derogatory" information surfaced on an applicant or a government employee. Sometimes the investigation indicated that the only "subversive" association

came from an innocent action, such as purchasing insurance through a suspect organization or having a suspect relative. In such cases, Loyalty Boards, which made the decisions, ruled that the individual was not disloyal. Many others, however, belonged to a communist-dominated union, a "subversive" organization, or the CPUSA itself. According to the historian Ellen Schrecker, the boards cleared 70% to 90% of the cases they heard. At its height, between 1947 and 1956, the boards dismissed approximately 2,700 federal employees for loyalty-security reasons, and some 12,000 resigned.

In addition to investigating government applicants and employees, the FBI tracked members of organizations with alleged ties to the Soviet Union. They were among the individuals on the FBI's Security Index (SI), a list of "dangerous and potentially dangerous" people subject to detention in times of war. The SI covered three levels of communists. First were the 11 leaders who were arrested and convicted for promoting the violent overthrow of the U.S. government. Next came the second echelon individuals who went underground after the Supreme Court upheld the initial arrests in 1951. Last were the ordinary CPUSA members. Because tailing all the individuals was impossible, the bureau often used informants like Herbert Philbrick of *I Led Three Lives* fame to infiltrate the organizations. Philbrick reported on the families and employment of members of his CPUSA club as well as its activities. Other informants merely identified SI people for the bureau. For example, a disabled veteran spent his summer sitting on a front porch across from a Communist Party (CP) member. The veteran reported the license plate numbers of her visitors. Agents conducted their own surveillance as well. Tired and cold outside the home where a meeting took place, an agent knocked on the door saying his car had broken down. He stayed long enough to identify several members of the White Collar Communist Party club. Into the late 1960s, FBI agents periodically checked on their SI charges—in the later years, sometimes in person—to keep the SI up to date, but few arrests of the rank-and-file Communist Party members ever came of the early Cold War surveillance.

The Vietnam War

The Vietnamese conflict (1964–1975) occurred during the second phase of the Cold War. Every war

has its deserters, and in this conflict, as in World War II and Korea, the FBI conducted deserter investigations in conjunction with the military. The FBI often assigned deserters to new agents. According to one agent, the first place to look was home because young soldiers missed their families.

The FBI, however, was most identified with its surveillance of the anti-Vietnam War movement. To Hoover, the antiwar movement represented “a new style in conspiracy—conspiracy that is extremely subtle and devious” characterized “by unrestrained individualism, by nonconformism in dress and speech, even by obscene language,” not by membership in an organization. Although President Lyndon Johnson insisted that communists inspired antiwar riots, Hoover understood that the American antiwar movement was homegrown. Prior to 1968, the FBI surveilled antiwar groups mostly to forewarn the government about demonstrations. But as vandalism, arson, and bombings occurred and campus protests increased to some 3,400 in the 1967–1968 school year, the FBI instituted a secret Counterintelligence Program (COINTELPRO) against this “New Left.” COINTELPROs served to disrupt and discredit their target organizations. The bureau encouraged field agents to inform parents and employers anonymously about the “scurrilous and depraved” (Powers, 2004, p. 279) behavior of their children or employees. FBI informants and undercover agents infiltrated antiwar groups and tracked the leadership using its Rabble Rouser, Agitator, and Key Activist Indexes.

Few of the several hundred thousand people participating in antiwar demonstrations engaged in violence. When mid-1970s congressional investigations revealed the COINTELPROs, the public perceived law enforcement’s surveillance and infiltration as unreasonable breaches of civil liberties. This severely damaged the FBI’s reputation for many years. Yet no court decisions clarified the FBI’s role regarding domestic terrorism until 1972, and the attorney general did not publish surveillance guidelines until 1976. Antiwar activists did more than just damage property. In March 1970, members of a violent faction blew themselves up as they prepared anti-personnel bombs intended to explode in Fort Dix, New Jersey. An antiwar-motivated action also killed a graduate student at the University of Wisconsin, Madison, that August. This 3:43 a.m. explosion aimed at an army research facility was the most

powerful terrorist bomb in the United States until the Oklahoma City bombing in 1995. These were domestic terrorists. During the Persian Gulf War (1991) and the wars in Afghanistan (2001 to the present) and Iraq (2003–2011), however, foreign or foreign-influenced religious extremists became the FBI’s focus.

Iraq and Afghanistan

President George H. W. Bush’s commitment of troops to operations Desert Shield and, later, Desert Storm raised concerns that the situation would bring Islamist terrorism to American shores. Using the same tactics they used before Pearl Harbor, FBI agents interviewed people either suspected of terrorist aspirations or in a position to know who might harbor those ideas, in this case, Muslim Arabs. If media portrayals were correct, agents did not differentiate between these types either by their sometimes hostile questioning or by their place of interview, often at the subject’s work. As a result, Arab communities feared that they would end up in internment camps. The FBI’s reputation for breaching civil liberties fed these fears. By the war’s quick end, neither terrorism nor such a roundup took place.

Islamic terrorism arrived in the United States in 1993. A car bomb killed six in New York City’s World Trade Center, but the towers stood. Five years later, Osama bin Laden’s al Qaeda blew up the American embassies in Kenya and Tanzania. The conspirators behind the bombings were identified and convicted, and bin Laden was put on the FBI’s “Most Wanted Fugitives” list. The FBI also investigated two later incidents with less success: (1) the destruction of Khobar Towers, which housed American military in Saudi Arabia (1996), and (2) a suicide mission that killed U.S. naval personnel on the destroyer USS *Cole* (2000). President Bill Clinton had bin Laden’s suspected training camp bombed. But according to the author Richard Gid Powers, the FBI continued its emphasis on criminal investigations and judicial punishments rather than proactive operations that might compromise civil liberties or just evoke a bad press. Then on September 11, 2001, al Qaeda operatives flew planes into the World Trade Center and the Pentagon killing more than 3,000 people. Later investigations faulted both the FBI and the Central Intelligence Agency for failing to “connect the dots” and possibly prevent

this tragedy. For example, FBI Headquarters failed to follow up a field agent's suspicion of a flight student who was not interested in learning how to land. The Central Intelligence Agency, in another example, failed to inform the FBI that people it tagged as terrorists had entered the United States.

President George W. Bush almost immediately declared the United States involved in the Global War on Terrorism. For the FBI, the USA PATRIOT Act (more commonly called the Patriot Act) and new Attorney General's Guidelines updated domestic surveillance rules. For example, they took into account cell phones by permitting roving warrants tied to a person rather than a particular phone. The Patriot Act also blurred the line between security and criminal investigations by permitting the bureau to investigate suspects before they actually committed a criminal act. These changes enabled the bureau to become more proactive and share its intelligence with other agencies. In 2004, the FBI became one of the agencies that reported to the new Office of the Director of Intelligence. The FBI's National Security Division, created a year later, according to www.fbi.gov, combined "the missions, capabilities, and resources of the counterterrorism, counterintelligence, and intelligence elements of the FBI" to strengthen "the integration of the FBI's intelligence and investigative missions. Information collected through FBI investigations is analyzed, not just to build a case for prosecution, but for its predictive value."

The attorney general and the FBI director had been on the job for a short time before 9/11. They did not use the FBI's experienced counterintelligence personnel or those agents most familiar with Arab American communities as well as they might have. Initially, the FBI made high-profile arrests, but the DOJ prosecuted only a few of them on terror charges. The DOJ also instituted a program of voluntary interviews with FBI agents of Middle-Eastern Arabs legally in this country that potentially alienated those who might have been most helpful. Nevertheless, some field agents reaching out to their Arab communities developed their trust. Community members in Lackawanna, New York, told the FBI about neighbors who had trained with al Qaeda. These suspected potential terrorists pleaded guilty. In a recent 8-year period covered by New York University's Center on Law and Security, the DOJ often succeeded with terrorism prosecutions, although only 11% involved al Qaeda. Yet, as

this is written, failed bombing attempts on a flight to Detroit and in Times Square caused Congress and the media once again to question the FBI's ability to prevent terrorism in this latest war.

While the military remains in Afghanistan, the FBI plays its part in the war against terrorism. It lends its expertise wherever terrorism takes place, like Mumbai, India (2008). So many of its personnel now work overseas that the bureau gives a predeployment training class. Domestically, the FBI continues to tread the fine line between surveillance for national security purposes and protecting civil liberties. Since the FBI began in 1908, wars have challenged this dual role. That challenge has never been as great as it is in the 21st century.

Susan Rosenfeld

See also Border Patrol; Central Intelligence Agency; Global War on Terrorism; Terrorism; War in Afghanistan; World War I; World War II

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FILMS

See War Films

FINANCE, PERSONAL

Successfully managing personal finances is an essential skill for every service member. Personal financial readiness is considered an important part of the mobilization process for deploying troops, and the administrative mobilization process specifically ensures that dependents register for direct deposit and that all of their legal documents are updated. Both the deploying members and their spouses are generally required to attend lectures that explain the military pay process and “personal financial readiness.” Financial planning services and low-cost or free legal representation for service members engaged in disputes with financial institutions or merchants are available on most bases, and military spouses are encouraged to take advantage of them. This entry examines the pitfalls of managing finances for service members and provides an overview of federal laws in place to protect service members’ personal finances.

There are a variety of resources available on base, like the Navy-Marine Corps Relief, that specialize in getting families through temporary financial crises and providing interest-free loans and other services for military families in financial distress. Other resources provided by the military include the Marine Corps’ courses in personal financial management and the programs of the Army Community Service. There are other grassroots community organizations that provide services and protections, including the Consumer Financial Protection Bureau and volunteers who provide financial advice, coupons, and other assistance at the commissary.

Unfortunately, even with all these safeguards at hand, managing personal finances is fraught with difficulty. First, military pay is based on a variety of factors, and for those without financial savvy, it can be hard to manage. While members can count on getting two paychecks every month, pay dates fluctuate from month to month depending on holidays and weekends. Additionally, pay is calculated in two categories: base pay and allowances. Base pay is based on rank and longevity, while allowances consist of housing, subsistence special pays, like combat or hazardous duty, as well as location and other factors. As a service member relocates and changes duty, his or her pay is also subject to change. Entry-level positions tend to pay well.

It can be the first time many service members have been responsible for their own finances; that responsibility can also fall in the hands of their non-military partner. Many enlisted servicemen and servicewomen are young (under 21) and have little, if any, experience in managing money. In many cases, this may be the best paying job they have held, or it may be the first time they have been responsible for managing their finances. After a deployment without the ability to spend money, many find themselves with fistfuls of cash, more than they have ever had.

For others, managing their income poses numerous pitfalls as well as additional stress for their families—especially for individuals called up from the Reserves. For a reservist, military pay often represents a pay cut. When deployed, reservists can find themselves maintaining multiple households, and they may not have an active role in the disbursement of their funds to pay bills. Virtually all military personnel have to deal with military bases surrounded by used car dealerships, furniture rental operations, paycheck loan operations and other financial services, pawn shops, jewelry stores, and so on. Enticed by new technologies and consumer goods and services with promises of easy financing, many fall prey to unsavory sales practices. Individuals managing more money than before are often tempted to spend it and can fall prey to a host of predatory proprietors and lenders. If they are unskilled at financial management, managing income can be extremely difficult and many fall victim to “payday loan” operations and others looking to assist them. These predatory lenders also tempt the reservist trying to keep up with expenses that current salaries cannot support. In addition, deployment literally makes it physically impossible for reservists to both receive and pay their bills on time, even if funds are not an issue.

Federal laws do exist to protect the military from financial usury and unsavory financial practices. For example, American soldiers and sailors and their families are protected by law from foreclosures on their homes while on active duty. One of the most important laws protecting soldiers is the Servicemembers Civil Relief Act (formerly the Soldiers and Sailors Civil Relief Act). Under the Servicemembers Civil Relief Act, active service members can receive a 6% cap on all debt, except student loans, while they are in active duty. The 6% cap includes any service charges or fees. Furthermore,

rates in excess of 6% are forgiven, and a creditor cannot by law accelerate the payment of the principal. Other provisions include protection for their dependents from eviction if they have difficulty paying their rent. Additionally, civil litigation can be postponed until a soldier returns from active service so that he or she can properly represent himself or herself in court proceedings.

Despite these legal protections, unsavory institutions, including many large national companies, have violated the rights of military personnel. JPMorgan Chase & Co. illegally foreclosed on American soldiers and was called to testify before the Veterans' Affairs Committee. Many of the same lending agencies have been forced to refund usurious overcharges and cease their foreclosure and repossession actions. The Justice Department settled suits against a subsidiary of Bank of America (Countrywide Home Loans Services) and a subsidiary of Morgan Stanley (Saxon Mortgage Services) after these companies knowingly and repeatedly violated the Servicemembers Civil Relief Act by illegally foreclosing service members' mortgages.

American service members receive many financial incentives and benefits for their service, including access to education and a pension. Additionally, the U.S. Congress votes for regular pay raises. Service members who can navigate their fluctuating pay, avoid the pitfalls awaiting their paychecks at the edges of their base, and avail themselves of the services and protections of the U.S. government can find themselves enjoying the rewards of a solid middle-class income, access to the G.I. Bill and its many financial rewards, a good pension, and a stable income.

Susan G. Contente

See also Family, Military; Family Readiness; Pay, Military; Retirement

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FIRE, DIRECT AND INDIRECT

See Direct Fire; Indirect Fire

FIRE, FRIENDLY

See Friendly Fire

FOOD

In his 1970 memoir, *Khrushchev Remembers*, the former premier of the Soviet Union declared that “without Spam, we wouldn’t have been able to feed our army.” The feeding of armed forces has greatly improved since the days of World War II lend-lease aid. The practice of providing food to military forces has changed over history with the evolution of the knowledge and technology of each age. U.S. military services operate today in an increasingly collaborative joint environment and yet still retain unique cultural differences in meeting their obligation of providing nutritional food in garrison and field environments. To have the right personnel with the proper equipment preparing the best rations available, each service has embraced modern technology and business practices to ensure the most effective and efficient food support for all military personnel, especially those serving in austere locations. This entry discusses the history of food service systems for feeding troops, types of rations, and

differences and similarities in food service among the U.S. armed services.

History

Humans are recognized throughout history as the ultimate primary war machine. The soldier, sailor, airman, or marine must be fueled (fed) as certainly as a tank, ship, or aircraft. Napoleon Bonaparte's maxim that an army marches on its stomach remains valid to this day. He recognized that good food was essential to maintaining his army's morale, health, and fighting efficiency. With few exceptions, early armies carried very little provisions and foraged off the land as they moved, thus limiting campaigns to near harvest time or at a fixed distance from a magazine. Soldiers at the small unit level appointed one of their own as a cook, and the quality of meals was dictated by that individual's culinary skill. Sailors aboard ship followed a similar system and fared no better. Both the U.S. Navy and Army finally recognized that specialized food service personnel were important to the proper preparation of food and formalized the cook as a military specialty. The navy, in particular, recognized the criticality of cooks and rewarded them accordingly on the pay scales of the early 1900s.

The health of soldiers, sailors, and marines suffered from the poor food preservation techniques of the time, namely, salting and smoking, and from the inevitable infestation of insects. The recognized need for fresh food and nutritious meals frequently clashed with government frugality over the price of the soldier's and sailor's daily ration. Civilian contractors often took advantage of the pricing situation and provided substandard supplies that were barely edible.

Throughout the 19th and 20th centuries, medical and scientific knowledge increased concerning the value of nutrition. This coincided with the early use of rudimentary canning in glass bottles and sealing of food in tin-coated containers that served as somewhat effective methods to package and preserve rations. Dehydration of food (the "desecrated vegetables" of the American Civil War soldier) and refrigeration techniques were also developed, although extended deployments and tropical climates still revealed weaknesses in preservation technology.

The basic ration of the Revolutionary War soldier consisted of meat (1 pound beef, or $\frac{3}{4}$ pound pork, or 1 pound fish), bread (1 pound or the same of

flour), drink (1 pint milk and 1 quart cider or spruce beer), 3 pints of peas or beans, and 1.4 ounces of rice per man. It eventually evolved to the modern family of rations seen today. Designated as A rations (fresh, refrigerated, or frozen foods), B rations (group-sized canned or preserved food prepared by food service personnel), and C rations (prepackaged preserved meals for individual use), these three groups make up the military's version of the food pyramid. The A and B rations are designed to feed groups and for preparation in a garrison dining facility, aboard ship, or in a field kitchen. They do not differ substantially from food found in a commercial grocery store, though some are designed to have longer shelf lives and are prepared by heating in a hot water immersion system. It is the final group of rations that evokes the strongest love-hate emotions from service members. The C rations represent a whole family of lightweight individual meals designed to be carried by soldiers during extended combat operations. An evolution of names from C-rats to K-rats to the MREs (Meals, Ready-to-Eat) of today are mirrored in the change of packaging from tin cans to durable plastic with the purpose of lightening a service member's load. Varieties today include humanitarian MREs (including kosher and halal meals), cold weather meals, long-range patrol meals (lighter packaging to carry more food), and First Strike rations that can be eaten on the go. Extensive research goes into the delicate balancing act of developing these rations to ensure their portability, consumability, and longevity. The military continually searches for new combinations of menus and packaging to meet the food intake needs of military personnel.

Differences and Similarities Among the Military Services

Throughout the history of each military service, separate, but duplicate, food service systems were developed to support military personnel. A focus on consolidating similar functions into joint systems began in the 1980s; however, each service still retains unique functions due to the different missions.

As the largest ground force, the U.S. Army is designated as the executive agent for food in the Department of Defense. In a mature theater, this means that the army is responsible for coordinating the delivery or contracting of food for all the services.

Under the modular, brigade-centric organizations developed by the army in the early 21st century, food service personnel and equipment were assigned down to the battalion level. This gave tactical commanders greater control in providing food support during rapidly changing (combat) situations.

Many of the systems used by the U.S. Marines are similar to those of the army, but the marines' distinct mission of conducting amphibious operations means that they have some special considerations. Because of their amphibious heritage and traditional method of deployment into combat "over the shore," marine expeditionary forces carry up to 60 days of rations on board U.S. Navy supply ships. If the duration of the operation exceeds that time period, the marines tap into the largest service user in the theater, which has usually been the army in modern times.

Unlike the other services, the U.S. Air Force operates mainly from fixed-site air bases even when deployed. Unique among services, the air force treats its food service personnel as part of a hospitality industry. The art of cooking is just one of the several activities in which airmen in the services career field are expected to maintain proficiency.

While most consumers are familiar with the headaches and costs associated with weekly grocery shopping, all would blanch at the cost of a navy carrier's food bill. A carrier under way needs a ship-to-ship replenishment every 7 to 10 days at a cost of nearly \$2 million. A simple fried chicken meal aboard a carrier requires 3,000 pounds of chicken. Though much in the feeding of service personnel is becoming a joint effort, the navy is the original source of another military-wide tradition. The Armed Forces Recipe Service, consisting of more than 1,500 of the best recipes in the armed forces, evolved from the Navy Recipe System dating back to the first navy cookbook published in 1902.

In joint service terminology, rations are a common item of support. Regardless of whether army, navy, air force, or marines, each service sets a standard of providing three quality meals per day. All services provide food to their personnel either in a garrison or in a deployed setting, with the deployment being afloat, in a field exercise, or in combat. The guiding elements, or principles, of the feeding systems for each service focus on planning, personnel, equipment, and food.

Planning for food service support must occur in parallel to mission planning and must be tailored to

support the tactical commander's intent throughout the operation. A key planning factor might be that field rations, such as prepackaged MREs, will not be used as the sole ration for a duration greater than 21 days except in extreme conditions. Subsistence units and initial stocks of rations must deploy to a theater at the beginning of operations to establish resupply points and distribution activities to meet unit requirements. During deployments (to include combat), rations will be pushed to using units on a 2-day cycle using unit-end strength to determine quantity. As operations settle down or local sources are more defined, contracting for fresh food or providing actual food service operations (support) are established (to include ice and water).

Food service personnel must be recruited and trained. In 2009, as a result of the Base Realignment and Closure (BRAC) plans, the army was designated as the executive agent for basic food service training. The Joint Culinary Center of Excellence was established at Fort Lee, Virginia, to provide garrison, field, and culinary arts training to food service personnel from all services. The U.S. Army Culinary Arts Competition is an annual event that showcases the finest talents of military food service personnel throughout the Department of Defense. Teams from installations, regions, and ships compete not only on providing the best gourmet meals but also on providing the best meals in both field conditions and using packaged operational rations.

While much of the food purchased through the Department of Defense system is similar across the services, it is the equipment and methods for storage, transport, and distribution that differentiates them.

Modern Trends: Technology and Business Practices

Providing quality food to service members everywhere has evolved from yesterday's stove-piped, resource-wasting systems to the streamlined, efficient centralized system of today. The Defense Logistics Agency (DLA) is a subordinate organization to the Department of Defense and serves as the executive agent for subsistence across all military services. Thus, DLA manages everything from setting policy to purchasing and distribution of rations worldwide.

One of the DLA's best business practices is a program called "Subsistence Prime Vendor." This

supply chain management concept involves contracting with commercial vendors for the delivery of food to military facilities in the United States and overseas. DLA saves money and increases efficiency because the vendors are responsible for inventory, warehouse management, and distribution costs rather than a government storage facility.

Since the goal of all military food operations is to provide quality, nutritious meals that people will eat, it only makes sense to provide the food with the modern choices that service members have grown up expecting. Using concepts borrowed from the fast-food industry, military services established both an à la carte cafeteria system and a quick service area providing healthy food that military personnel find appealing. The air force expanded this system to a campus dining initiative covering all sources of food for airmen on a base from the traditional dining facility to clubs, snack bars, and community centers. Other initiatives include self-serving lines and uniform menus to increase efficiency.

Another modern trend is the increased use of contractors by all military services. Private contractors have always existed to provide food for American service members. From the sutlers of the American Revolution and Civil War selling fresh foodstuff and luxuries to soldiers near the battlefield to modern fast-food restaurant chains on military bases today, the goal has always been to provide good nutritional food and maintain service member morale—at the best possible price. The current 21st-century conflicts, however, set a new precedent for the size of contractor support. In World War II, there were an estimated 12 military personnel for every single contractor. By Vietnam, that ratio had shrunk to 5 to 1. At the height of Operation Iraqi Freedom, more than 190,000 contractors existed in theater, a troop-to-contractor ratio of 1:1. Under the provisions of the army's Logistics Civil Augmentation Program, over half of these contractors carried out base operations, including food support and housekeeping services. Operating under the assumption that the American service member deserved all the trappings of home even in a war zone, military personnel found themselves able to drink fresh milk with each meal and choose from multiple flavors of ice cream for dessert. While some military food service personnel were required to monitor operations, providing control and quality assurance, most cooks found

themselves pulling other onerous duties, such as security details, far removed from maintaining proficiency in the kitchen. Contractors provide critical support to military operations, and the decision to contract out a task is the correct one many times. However, these decisions are not without risk. Short-term cost savings must be weighed against the loss of food service capability.

Some long-term cost-saving technologies have worked to improve food service capabilities. The Joint Services Combat Feeding Technology Program, under the auspices of the army, works to research new ration types, reduce packaging material, and develop new equipment. Recent research has focused on such projects as increasing the productivity of galley equipment on navy ships while also reducing size. Analysis of radio frequency identification technology is ongoing to facilitate shelf-life management of rations stored at DLA depots. The joint nature of this program itself produces efficiencies, which means more money is available for providing quality food to military personnel.

Perhaps the most challenging task is providing quality food to service personnel stationed in the most austere environments ranging from submarines deep in the ocean, signal or intelligence personnel on mountaintop sites, and soldiers at combat outposts in remote valleys. Though the degree of difficulty is increased, the method for feeding servicemen and women at these locations is not that different from that previously discussed. All the required supplies for a mission may be carried and prepared on board as in the case of a submarine. Cooks assigned to remote units have food shipped in via military helicopter, ground convoy, or air-dropped using Global Positioning System-guided parachutes that can hit a football field-sized drop zone. Standards for remote site feeding are established in contracts that provide food service support with the method of supplying meals determined by the contractor.

Conclusion

Regardless of service, providing quality food and conducting food service operations require a detailed coordination between food suppliers at the Department of Defense, commodity managers, logistics staff personnel at all levels, and food service personnel. Flexibility is always the watchword

for food service personnel. They must continually provide quality meals to all military personnel under even the most adverse conditions and be prepared to react to the changing needs of the force as new situations arise.

Allan S. Boyce

See also Logistics

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FORCE RECONNAISSANCE, MARINE

Marine force reconnaissance refers to specialized units of the U.S. Marine Corps that are equipped, trained for, and doctrinally tasked with conducting amphibious deep reconnaissance missions for a Marine Expeditionary Force. For several decades, force reconnaissance units also trained for and carried out other types of special operations missions. More recently, with the creation of the Marine Corps Special Operations Command, force reconnaissance units have returned to their traditional emphasis on reconnaissance. This entry discusses the history and organization of Marine Corps force reconnaissance and the types of missions.

Missions

Marine Corps doctrine distinguishes among three basic types of reconnaissance missions: (1) close reconnaissance, (2) distant reconnaissance, and (3) deep reconnaissance. The primary mission

of force reconnaissance units has always been to conduct *deep amphibious reconnaissance* operations in support of the largest Marine Corps units: marine divisions, Marine Expeditionary Forces, Marine Expeditionary Units, and other major task forces. Close reconnaissance is conducted by forward-deployed conventional units focusing on the nearest portions of the area of operations and enemy forces that are already committed to the battle, while distant reconnaissance focuses on the farthest reaches of the area of operations, enemy supporting arms and enemy reserve forces, and is conducted by a marine division's specialized reconnaissance battalion.

Deep reconnaissance, the doctrinal responsibility of force reconnaissance units, can encompass any objective within the force commander's area of interest and focuses on enemy reinforcements rather than the enemy's committed forces or supporting arms. Deep reconnaissance missions place a marked emphasis on stealth and normally require extensive maneuver ashore. They are conducted outside the range of supporting arms and reinforcement by friendly forces and often require specialized insertion and extraction techniques.

Like other elite units, force reconnaissance units have been assigned missions that are not always in accordance with their doctrinal missions. In Vietnam, force reconnaissance units often conducted long-range reconnaissance patrols and frequently acted as forward observers for air and artillery strikes. More recently, in the Iraq and Afghanistan conflicts, force reconnaissance units have been tasked with motorized raids and foot patrols to capture high-ranking insurgent targets, as well as other types of conventional operations.

Selection and Training

Marines assigned to force reconnaissance units undergo an arduous selection and training process. Military occupational specialty training for all battalion and force reconnaissance Marines takes place at a basic reconnaissance course, which develops the candidates' skills in communications, supporting arms, amphibious reconnaissance, land navigation, and ground reconnaissance. This course also develops candidates' physical abilities, including long-distance swimming, to a high level. Force reconnaissance marines then go on to a series of

specialized schools, including schools for combatant diving, parachute training, and training in survival, evasion, resistance, and escape. They also train in a variety of insertion and extraction techniques, including free-fall parachuting, submarine insertion, and specialized helicopter extraction.

Organization and Units

Throughout much of their history, force reconnaissance marines have been organized into companies of approximately 100 marines. These force reconnaissance companies sometimes formed part of the divisions' reconnaissance battalions for administrative purposes, although the companies themselves supported the Fleet Marine Forces rather than the

division. Each company had a headquarters platoon, a support platoon, and a number of operational platoons (typically six). Each platoon was itself made up of three teams of four to seven men apiece. Each team generally operated independently of the other teams.

With the activation of the Marine Corps Special Operations Command, the organization of force reconnaissance units has changed considerably. Personnel from the former force reconnaissance companies of the First and Second Marine Divisions now form the core of the new Marine Corps Special Operations Command battalions. Each of the division reconnaissance battalions retains a force-level reconnaissance capability, which is now organized into a company of three operational platoons plus a



U.S. Marines board the guided missile destroyer USS *Barry* (DDG 52) from a rigid hull inflatable boat during an enhanced visit, board, search, and seizure training mission in the Mediterranean Sea, May 14, 2011. The marines are with Force Reconnaissance Platoon, Battalion Landing Team, 2nd Battalion, 2nd Marine Regiment, and 22nd Marine Expeditionary Unit. *Source:* U.S. Marine Corps photo by Corporal John M. Raufmann (released).

headquarters platoon. The two traditionally organized force reconnaissance companies that remain active—the Third and Fourth Force Reconnaissance companies—are both reserve units.

History

The roots of Marine Corps force reconnaissance lie in the work of Major Dion Williams, who published the first formal statement of amphibious reconnaissance doctrine in 1906. His ideas saw practical application in 1920, when Lieutenant Colonel Earl Ellis was posted to the Pacific to collect information for use in possible future operations. (His work ultimately became the basis for the American campaign against Japan in World War II.) As the Marine Corps developed doctrines for amphibious landings, the need for long-range reconnaissance became clear, and the first amphibious reconnaissance units were formed in 1938. These units carried out missions in support of a variety of operations, notably the major landings at Tarawa, Tinian, Iwo Jima, and Okinawa, as well as the Solomon Islands and Bougainville.

These units were disbanded at the end of World War II but dedicated reconnaissance units were re-formed in 1950, seeing action in the Korean War and in Vietnam, where they worked with the Studies and Observations Group and carried out a variety of missions for the marine divisions. After Vietnam, force reconnaissance marines participated in various operations, including Lebanon (1983), Grenada (1983), Desert Storm/Desert Shield (1991), Operation Enduring Freedom (2002), and Operation Iraqi Freedom (2003).

In 2005, the secretary of defense authorized the formation of a Marine Corps component for the Special Operations Command. The new component, called Marine Corps Forces Special Operations Command, drew the bulk of its personnel from the existing reconnaissance community, including the force reconnaissance companies. However, each marine division continues to retain a somewhat smaller force reconnaissance company within its division's reconnaissance battalion.

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Author's Note: This entry has been critically reviewed by the U.S. Marine Corps.

See also Marine Corps, U.S.; U.S. Special Operations Command; Warfare, Amphibious

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FOREIGN RELATIONS COMMITTEE, HOUSE

The House Committee on Foreign Affairs, more commonly called the House Foreign Relations Committee, is among the weaker actors in the defense and foreign policy-making processes. Previously known as the House International Relations Committee, it was founded by a congressional resolution in 1822 and has played a role in pivotal moments in U.S. diplomatic history. Its primary roles are to provide oversight to the executive agencies that conduct diplomacy and to draft and pass legislation related to foreign policy. The chair and ranking member have considerable clout, however, and are consulted by the president and often participate in delegations to foreign countries. The House Foreign Relations Committee subsumes seven subcommittees organized by region or theme (e.g., trade, human rights, global environment) that manage the minutiae of the committee's responsibilities. One distinction that the House Foreign Relations Committee holds over other congressional actors is its unique ability to originate spending bills related to foreign policy. This entry discusses the powers and responsibilities of the House Foreign Relations Committee.

There are significant differences between the House Foreign Relations Committee and its complement in the Senate. First, all House members serve identical 2-year terms and are continually

campaigning for reelection. Unlike senators and their staggered 6-year terms, House members are thus more sensitive to current trends in public opinion and are more likely to represent the grass roots. The second substantial difference between the House and the Senate is the former's lesser constitutional authority to influence foreign policy. While the Senate Foreign Relations Committee has the power and responsibility to ratify treaties and confirm presidential appointees, the House Committee does not. One exception to the general trend of Senate superiority is the House Committee's prominent role in originating foreign policy–spending legislation, including foreign aid. A third difference between the House and Senate Committees rests on the fact that the House Committee has more members with niche expertise. Since House Committee members do not have to serve on as many committees as their Senate counterparts, they often develop a deep technical knowledge of foreign affairs relevant to their subcommittees.

The committee has two substantial powers and responsibilities. First, it oversees all of the executive agencies that conduct foreign policy. These include the Department of State, the Peace Corps, and the U.S. Agency for International Development. The committee's oversight takes one of two paths, depending on the context and the leadership of the chair and ranking member. The first style of oversight is the holding of regular meetings and soliciting testimony from key executive branch foreign policymakers, for example, the secretary of state. With these regular meetings, executives of key agencies report under oath on foreign policy–making activities. The second style of oversight is the creation of special investigations. The committee has the power to subpoena records, experts, and executive branch policymakers to either report on their activities or provide research and insight regarding matters of national security and foreign affairs. In recent years, the committee has routinely investigated the issue of nuclear weapons proliferation, the conduct of the wars in Iraq and Afghanistan, and the status of human development in the Southern Hemisphere. Both of these types of hearings can be public or closed, depending on the sensitivity of the matters discussed.

Second, the committee considers foreign policy legislation and approves it for consideration by the entire House. Historically, this legislation has varied in scope and authority. One of the most significant

actions taken by the committee was the approval of the Marshall Plan in 1947, which marked a monumental shift in American foreign policy toward engagement in Europe and is one of the most significant financial commitments the United States has ever made to foreign countries. The committee also took the first step in defunding the Vietnam War in 1973 and was the source of H.J. Res. 114, which in 2002 authorized President George W. Bush to use military force against Iraq. Other forms of legislation include nonbinding resolutions that make statements on world events, remarks on world events, and condemnation of violence against American allies, among others.

The rules of the committee provide for a chair from the majority party and a ranking member from the minority party. These leaders are highly visible, often make media statements on foreign policy, and are occasionally included in delegations to and negotiations with foreign countries. The committee has the ability to take actions that complicate presidential action and potentially contradict official U.S. policy. One notable example is the committee's approval of a resolution that acknowledges the 1915 Armenian Genocide in Turkey. The House Foreign Relations Committees of the 110th and 111th Congresses passed this resolution, potentially jeopardizing U.S.-Turkey relations and Turkish cooperation necessary to prosecute the wars in Afghanistan and Iraq. The House of Representatives has not considered these resolutions, but their mere passage in the committee provoked terse reactions from the Turkish government.

The role of the committee in the conduct of foreign policy today is best understood in its dual roles of oversight and legislation. Many of the pressing foreign policy issues (e.g., climate change, nuclear proliferation, terrorism, the War in Afghanistan) are topics of constant investigation by the committee. Such public hearings have the effect of shifting the agenda of the Congress, raising public awareness, and serving as a potential signal to other countries of American intentions. In recent years, the committee has reviewed foreign policy and the president's actions regarding the wars in Iraq and Afghanistan, the Copenhagen Conference on Climate Change, U.S.-Mexican cooperation on the transshipment of illegal narcotics, arms reduction talks, trade with the People's Republic of China, and the promotion of human rights in developing and newly developed countries.

The House Foreign Relations Committee is positioned to play a role in foreign policy making in the early 21st century, although it faces considerable limits to what it is able to accomplish. In an era of increased globalization and fast communication, the federal government requires expedient and effective foreign policy decision making that a committee of divergent interests and constituencies might struggle to provide. When coupled with the president's advantage in having access to privileged information, these trends curtail the committee's ability to be intimately involved in the daily management of American foreign policy. It is likely that the committee will continue its role as a periodic reviewer of the executive branch's actions, and it will retain the ability to fund and defund foreign policy initiatives. In other regards, however, the committee is an important but secondary player in the American foreign policy-making apparatus.

David Bell Mislán

See also Congress, U.S.; Foreign Relations Committee, Senate; U.S. State Department

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FOREIGN RELATIONS COMMITTEE, SENATE

The Senate Committee on Foreign Relations was established by an act of Congress in 1816 as one of its 10 original committees. It commands a special role in the creation of foreign policy as the first reviewer of policy-sensitive matters. The committee is composed of a variable number of senators, who are apportioned by party and led by a chair from the majority party and a ranking member from the minority party. The Senate Foreign Relations Committee is the first institution to consider the confirmation of presidential appointees critical to the conduct of foreign policy, including the secretary of state and U.S. ambassadors. Equally important, the committee is the first to consider foreign treaties for ratification. Senators and executive branch policymakers often

consult committee members, and their membership on subcommittees gives them a niche expertise on regions and critical foreign policy issues. The committee as a whole oversees all of the executive branch agencies and programs that relate to foreign policy. Furthermore, the chair and ranking members of the Senate Foreign Relations Committee are prominent in negotiations with foreign missions, consult the president on politically sensitive matters, and are routinely included on foreign delegations. This entry discusses the powers and responsibilities of the Senate Foreign Relations Committee.

The first major power and responsibility of the Senate Foreign Relations Committee is treaty ratification. According to Article I of the U.S. Constitution, the Senate retains the sole power to ratify treaties with foreign countries. After the adoption of the committee system in 1816, the Senate Foreign Relations Committee has had the responsibility to conduct the first review of treaties before they are forwarded to the entire Senate for ratification.

The process of considering a treaty for ratification is a labor- and time-intensive process for the committee. Members of the committee, many of whom have developed areas of foreign policy expertise over years of service, often consider the technical details of the treaties before voting. This is not to say that party or individual interests do not influence treaty consideration or other functions of the committee. Members do tend, however, to approach the matter of ratification from a more practical aspect than senators who do not sit on the committee. Notable treaties considered by the committee include the Alaska Purchase (1867), the Treaty of Versailles (1919), the United Nations Charter (1945), the Nuclear Non-Proliferation Treaty (1968), the Convention on the Law of the Sea (1994), and the Kyoto Protocol (1998).

The second aspect of the committee's role in making foreign policy is its initial review of all diplomatic and foreign policy personnel. Executives of agencies that conduct foreign policy as well as U.S. ambassadors must undergo a confirmation process that commences with the committee. The committee vets each candidate carefully and in a manner that is occasionally linked to political agendas. While many diplomatic posts are filled by career diplomats and are not heavily politicized or scrutinized, other candidates can be political appointees and have little or no diplomatic experience. In such instances, the

committee tries to ensure that nominees are worthy of full consideration. Perhaps more impactful on the making and conduct of foreign policy is the vetting of the president's nominees for secretary of state and ambassador to the United Nations. Once approved by a simple vote in the committee, presidential nominees are now considered by the entire Senate.

The Senate Foreign Relations Committee also oversees the agencies that conduct foreign policy, which is the third set of powers and responsibilities it has regarding foreign relations. On a routine basis, the secretary of state reports to the committee on the status of foreign policy and international affairs. Other executive branch officials also report to the committee. The committee also occasionally investigates particular foreign policy issues in either an open or a closed forum. Oversight extends beyond diplomatic issues to include budgetary, legal, personnel, and operational issues. Some of the agencies and institutions that the committee oversees include the Department of State, the Peace Corps, and the U.S. Agency for International Development.

While oversight of foreign affairs has been a cornerstone of the Senate Foreign Relations Committee, recent trends indicate an increase in the president's use of executive prerogatives to avoid supervision. While some oversight panels are highly effective in influencing the president's foreign policy agenda, the frequency and intensity of oversight in foreign affairs has decreased over the past decade.

Prominent leaders in the foreign policy-making apparatus have served on the Senate Foreign Relations Committee. Historically, some of the most notable foreign policy leaders and foreign policy decisions have originated in the committee. Most notably, the Senate's refusal to ratify the Treaty of Versailles originated in the committee with its chair, Henry Cabot Lodge. Lodge, who descended from a family of diplomats, was well versed in foreign affairs and was highly respected among his colleagues. His criticism of the treaty gained traction among the committee and the remainder of the Senate, effectively suspending American involvement in European politics and weakening the League of Nations, which was greatly favored by President Woodrow Wilson.

Strong committee chairs have made their mark on foreign policy in the post-Cold War era as well. As chair in 1996, Senator Jesse Helms (R-NC) used his position and influence to gain congressional

approval of the Helms-Burton Act, which tightened sanctions on Cuba against the wishes of the Clinton administration, which preferred a less coercive approach. In recent years, Senator Joe Biden (D-DE) was the most vocal critic of the Bush administration's neoconservative foreign policy and laid the groundwork for a new realist grand strategy.

In recent years, committee members from both parties have taken an active role in foreign policy by inserting themselves in key negotiations. John Kerry (D-MA) was particularly active as chair. He held high-profile meetings with the leaders of Syria, negotiated sanctions on Iran with the Russian Federation, and mediated a dispute between the Afghan government of Hamid Karzai and the Obama administration.

Due to changes in the committee membership, the beginning of the 113th Congress brought a new chair (Robert Menendez, D-NJ) and a new ranking member (Bob Corker, R-TN). Both of these leaders came to their positions with less foreign policy experience than their predecessors. Menendez has indicated a willingness to work closely with the Obama administration, while Corker has focused his early attention on finding cost savings in the foreign policy bureaucracy and foreign aid budgets.

Among the congressional committees relevant to foreign policy, the Senate Foreign Relations Committee is the most influential. There are limits to its influence, however, in an era of presidential preponderance in foreign policy making. Still, due to provisions written in the Constitution, the committee is poised to continue its central role in the creation and maintenance of American foreign policy.

David Bell Mislan

See also Congress, U.S.; Foreign Relations Committee, House; U.S. State Department

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FRANCE

France is a western European country of 65,500,000 people and 212,814 square miles (640,053 square kilometers), including territories in the Caribbean

Sea (French Guiana, Guadelupe, and Martinique), the Pacific Ocean (New Caledonia, French Polynesia), and the southern Indian Ocean (Reunion and Mayotte). Paris is the country's capital, principal city, and economic and cultural center. France is the world's fifth largest economy with a 2009 nominal gross domestic product (GDP) of \$2,635,000,000. Its defense budget takes up 2.3% of the GDP, which makes it the third largest in the world and represents 4.2% of global military spending. France is one of the strongest military powers in the world, though it lags far behind the United States, which spends 43% of all global spending. French forces are deployed throughout the world, including 20,800 French troops outside French territory in the Central African Republic (200), Chad (1,000), Côte d'Ivoire (4,000), Djibouti (2,900), Gabon (800), Senegal (1,100), Democratic Republic of the Congo (20), Bosnia (510), Kosovo (2,400), Afghanistan (1,870), Lebanon (2,000), and Mali (4,000). Over the past 15 years, the French military has undergone a major reorganization to adapt itself to the post-Cold War world just as the government and economy have also experienced major structural changes. This entry explores the evolution of French military, diplomatic, and economic policies over the past 20 years in response to domestic and international pressures.

French Government

Founded in 1958 by Charles de Gaulle following a military revolt during the Algerian War (1954–1962), the French Fifth Republic combines a strong presidential system with a parliamentary democracy. The president is elected to a 5-year term by universal suffrage using a 2-round system in which the two candidates with the most votes in the first round advance to the second round, unless one has an absolute majority. The bicameral parliament consists of a lower house, the National Assembly, which is elected to a maximum 5-year term, and a Senate, which is elected indirectly. The president appoints a prime minister whose cabinet requires majority support in the National Assembly. Presidents have sometimes shared power with a hostile prime minister and cabinet in a situation known as cohabitation, but that likelihood was reduced after a referendum in 2000 cut the president's term from 7 to 5 years. In May 2012, the Socialist François Hollande was elected president of the French Republic after defeating

incumbent President Nicolas Sarkozy of the conservative *Union pour un mouvement populaire* in a close election. Sarkozy's popularity had waned as a result of his support for austerity measures designed to strengthen the euro and the widespread perception that his high media profile had reduced public respect for his office. Hollande's *Parti socialiste* won the subsequent legislative elections, but it required support from its allies the *Parti radical de gauche* and the Greens to command a majority in the National Assembly. Hollande appointed Jean-Marc Ayrault as his prime minister, and Ayrault, in turn, formed a coalition government dominated by the *Parti socialiste*.

French Economy

The French economy is approximately 18.7% the size of American economy, making it the world's fifth largest economy and the second largest, after Germany, in the European Union (EU). Subsidies from the EU's Common Agricultural Policy have allowed France to retain a larger small-plot farming sector than is typical in advanced countries. Since the mid-1980s, the government has privatized many companies, and the economy is increasingly market oriented. The French unemployment rate has remained stubbornly high, ranging from 10% in 2000 to a low of 7.4% in 2008 before rising back to 10% during 2010. Seventy-five percent of France's electricity comes from nuclear power, and despite opposition from environmentalists, the first examples of a new generation of nuclear power plants are under construction. France's largest trading partners are other EU nations, but the United States accounts for 4.3% of French imports and 5.8% of exports, making it France's sixth largest trading partner.

France and the Euro Crisis

The euro crisis grew out of the rise in eurozone (countries that have adopted the euro as their currency) government debt following the 2008 global financial crisis and the 2009 Dubai sovereign debt crisis. In January 2010, it accelerated when an EU report revealed that the Greek budget deficit was much larger than the Greek government had admitted. By April, estimates of the Greek budget deficit grew from 3.7% to 13.9% of GDP. It soon became clear that Greece would struggle to pay its debts, which exceeded 140% of GDP. The Greek crisis

triggered market speculation about which other euro members would be next. Initial speculation centered on Ireland, Portugal, and Spain, but it soon included Italy as well. The French deficit was 7.7% of GDP, and it was able to easily service its public sector debt, but by the middle of 2011, capital markets feared that French banks were too exposed to Greek and Italian debt. Money market managers worried that if weaker governments defaulted, either the French banking system would collapse or the French government would have to assume so much debt to support the banking system that it could not safely service the debt. That combined with increasing market concern about the ability of the euro to survive a default by a major member state drove up bond yields, pulled the French into the crisis, and caused France to lose its AAA credit rating in January 2012. Fears over the stability of French banks were one of the major factors that pushed President Sarkozy and the German chancellor Angela Merkel to agree to create the European Stabilization Mechanism and allow the European Central Bank to act as a lender of last resort for French banks, helping them retain access to credit, despite fears over the amount of potentially bad debt they held.

President Sarkozy's policies tried to calm the markets without forcing any eurozone members to abandon the euro while entrenching French influence within strengthened EU institutions. Sarkozy argued that the best way to end the crisis was by enhancing fiscal integration within the EU either through stronger EU powers over national budgets or through the creation of bonds that would pool national debts. However, Sarkozy faced opposition from Germany and Britain. Germany's Angela Merkel opposed European bonds because she feared that Germany would be forced to pay the debts of less financially stable euro members, and Britain's David Cameron opposed giving the EU the power to supervise national budgets or to tax financial transactions. The conflict ultimately led Cameron to veto the proposed EU treaty in December 2011, and Sarkozy and Merkel had to arrange a separate treaty. Sarkozy based his gambit on the assumption that France would remain powerful enough within the EU to insulate itself from outside control of its budgetary decision making and that the new supervisory powers would calm the markets.

As the summer of 2012 began, the eurozone crisis remained acute. The crisis led to the collapse of the

Greek coalition and new elections in Greece, which called the terms of the bailout into question. Spain's economy was also under attack, and the new conservative *Partido Popular* government, which was elected in the fall of 2011, faced discontent over the scale of the budget cuts necessary to conform to the EU's austerity program. Even President Sarkozy's election defeat was influenced by the negative effects of the eurozone crisis on the French economy and his inability to increase spending or cut taxes before the election because of market and EU pressure to maintain austerity measures. President Hollande's accession to power raises the possibility of a shift in French policy because he campaigned on a promise to increase government spending to boost consumer demand in France. Such a policy would expand France's budget deficit and risk breaking the EU consensus that fiscal austerity is the only way to maintain the euro's damaged credibility.

French Society

The French state actively encourages gender equality and officially does not recognize racial or ethnic distinctions among citizens. Political parties are required to nominate equal numbers of men and women for parliamentary elections, but in practice, the major parties prefer to pay a fine to avoid complying with the law. The passage of the civil partnership law by the Socialist-led cabinet of Prime Minister Lionel Jospin in 1999 marked the growing acceptance of gay and lesbian rights in France, and marriage equality is now a significant political issue on the French left. During the 2012 presidential campaign, Hollande expressed his support for legalizing same-sex marriage.

Since the 1970s, France has attracted large number of immigrants from former French colonies in the Middle East and West Africa. Despite perceptions that France is experiencing mass migration, the current net-migration rate is barely one third that of the United States (1.48/1,000 vs. 4.31/1,000) and lower than that of Britain and Germany. Nevertheless, about 8% of the French population is foreign-born, and there are probably about 5,000,000 Muslims in France, mostly first- or second-generation immigrants. In 2002, fears about immigration and crime propelled Jean-Marie Le Pen, the leader of the extreme right-wing National Front, into the final round of the presidential

election before being decisively defeated by Jacques Chirac. Increasingly, conflicts over race and gender have displaced conflicts over class as the main fault lines in debates about the structure of French society. This is reflected in the long debate over Muslim girls wearing head scarves in public schools and President Sarkozy's call to ban women wearing the burqa in public. Before the 2012 presidential campaign, Jean-Marie Le Pen handed control of the National Front to his daughter Marine Le Pen, who finished third but won 17.90% of the vote in the first round, the party's best showing ever in a presidential election. The National Front's success in 2002 and 2012 has sparked concerns about why so many French voters are willing to support a party that contains members, including Jean-Marie Le Pen, who have denied the Holocaust and who are generally believed to be racists.

Recent French Military History

After the end of the Cold War, French defense policy was reoriented toward foreign interventions. Under United Nations and Western European Union auspices, French president François Mitterrand contributed 15,000 troops under General Michel Roquejeoffre to coalition forces during the Persian Gulf War, including the 12,500-man division Daguet, which was built around the *6e division légère blindée*. During the ground campaign, division Daguet, under General Bernard Janvier, formed part of U.S. General Norman Schwarzkopf's Left Hook strategy and operated as part of the U.S. XVII Airborne Corps (a unit designed for rapid deployment anywhere in the world). The French force included 44 AMX-30 tanks, 12 Mirage 2000s, and 24 Jaguar strike aircraft.

Although the French government attempted to stay out of the Balkan Wars, the growing humanitarian crisis in Bosnia led Mitterrand to deploy French forces as part of the UN Protection Force in February 1992. The two French generals, Bertrand de Sauville de La Presle and Bernard Janvier, commanded the UN Protection Force between March 1994 and its dissolution in January 1996, during the implementation of the Dayton Peace Accords.

In March 1999, the French president Jacques Chirac, who took office in May 1995, joined Operation Allied Force, the North Atlantic Treaty Organization campaign against Yugoslavia. The

French air force and navy Mirage 2000s and Super Etenards contributed to the North Atlantic Treaty Organization's bombing campaign. After the September 11, 2001, attacks, Chirac sent French naval, land, and air forces, including the newly operational aircraft carrier *Charles de Gaulle*, to support the U.S.-led coalition forces in the Afghanistan War, and French forces remained in Afghanistan as part of Operation Enduring Freedom throughout the decade.

Franco-American cooperation did not extend to the 2003 U.S.-led invasion of Iraq. The bitter Franco-American feud over George W. Bush's decision to invade Iraq was highlighted by the French foreign minister Dominique de Villpen's dramatic global shuttle diplomacy as he rallied global opposition to the U.S.-led invasion. Villpen's campaign highlighted French leaders' attachment to multinational institutions, though France itself sometimes acted unilaterally. This diplomatic confrontation stoked public anger in both countries and left a deep scar on Franco-American relations.

Although French opposition to the Iraq War created the impression in the United States that the French were pacifists, French forces continued to fight in Afghanistan, and President Chirac continued to intervene in conflicts throughout the world. In September 2002, French troops intervened in Côte d'Ivoire to end that country's civil war. The intervention occurred without the approval of the UN Security Council but was later sanctioned by that body. Despite the hostile relationship between Bush and Chirac, the French and American governments cooperated closely during the 2004 Haitian crisis. Franco-American pressure forced the Haitian president Jean-Bertrand Aristide to resign in February 2004 in order to stop the Haitian Civil War. Between 2007 and 2009, French forces intervened in the Central African Republic with air strikes and ground forces to stabilize the rule of Françoise Bozizé and to prevent the spread of unrest from neighboring Darfur as part of an EU mandate.

President Nicolas Sarkozy's election in May 2007 improved Franco-American relations. In 2009, France rejoined the North Atlantic Treaty Organization's integrated command structure after an absence of 42 years. Sarkozy's move signaled the French government's interest in repairing the Franco-American diplomatic and security relationship. Sarkozy's June 2008 White Book laid out France's future defense strategy. It promised to retain

a smaller nuclear deterrent and make the conventional force more efficient by cutting 54,000 military personnel by 2015 to reduce the proportion of the defense budget spent on logistics and support from 60% to 40%. In the wake of the White Book, Sarkozy approved funding to build a *de Gaulle*-class aircraft carrier but promised that it would not be nuclear powered. The future of this project, however, remains in doubt. The Sarkozy government never began construction of the vessel and changed its design several times before leaving office. François Hollande's election will certainly lead to changes in French defense policy, and his commitment to extensive domestic social spending might affect plans to build a second aircraft carrier.

Despite Hollande's stated intention to abandon France's postcolonial role as the guarantor of many of the regimes in its former colonies in Africa, the Malian Civil War led him to order French troops to intervene. In January 2013, he ordered 4,000 French troops to assist the Malian government in its struggle against the Tuareg nationalists of the *Mouvement national pour la libération de l'Azawad* and Islamist groups, including *Ansar Dine*. Between January and March 2012, the rebels had overrun most of northern Mali, and *Ansar Dine* had begun destroying parts of Timbuktu. Their advance had triggered a military coup that overthrew President Amadou Toumani Touré in March 2012. Following international sanctions and a partial return to civilian rule in Mali, the battle lines stabilized as the *Mouvement national pour la libération de l'Azawad* and *Ansar Dine* fell into a conflict, which *Ansar Dine* exploited to take control of most of Mali's northern cities.

President Hollande authorized Operation Serval in January 2013, following a new offensive by *Ansar Dine* against government positions that resulted in the fall of Konna and which threatened to open the way for the conquest of southern Mali. Utilizing its own transport aircraft together with planes from the United States and Britain, the French military airlifted 4,000 men and their equipment to Mali and opened an offensive against *Ansar Dine* within days of the decision being taken to intervene. The French force included soldiers from the *6e Brigade légère blindée*, *11e brigade parachutiste*, *9e Brigade légère blindée de marine*, and the *3e Brigade mécanisée*. These included elements of units with a long colonial-era connection to Africa, including the *1er Régiment étranger de cavalerie*.

In late January and early February 2013, French forces routed Islamist fighters with help from the Malian army, other African states, and *Mouvement national pour la libération de l'Azawad*, which defected to the government side after France intervened. By mid-February, all of Mali's major cities were back in government hands. French forces are set to remain in Mali for the foreseeable future to help the government deal with ongoing terrorist and guerrilla violence, but as of the writing of this entry, it is too early to tell whether *Ansar Dine* and other Islamist groups will be able to sustain an insurgency against French and Malian forces.

French Armed Forces

French Army (Armée de Terre)

The French army consists of 112,800 soldiers and has been an all-volunteer force since 2001. The end of conscription reduced the force by 50% but made it more deployable by eliminating the political difficulties attached to sending conscripts abroad. To compensate for the loss of its conscripts, the army has shifted many functions to civilian workers and increased its recruitment of women. During the 1990s, the French army abandoned divisional organization. The previous five-battalion light divisions were abolished and replaced by independent brigades. The brigades deploy three battalion-sized regiments as well as artillery and support forces. The new organization recognized that the French army was unlikely to face large-scale conventional fighting without help from allies. The brigades can act as self-sufficient intervention forces in the Third World and function as part of larger coalitions.

The French army's equipment is largely of domestic or European manufacture. The increasingly competitive arms export market has strained the French arms industry, but cooperative ventures with other western European countries have allowed France to retain its position as one of the top five arms-exporting countries in the world. The army's major weapons systems include the Leclerc main battle tank, the new VBCI infantry-fighting vehicles, the AMX 30 AuF1 self-propelled gun, and the new CAESAR 155-millimeter truck-mounted cannon. The striking differences between the armored AMX 30 AuF1 and the unarmored but highly mobile CAESAR reflects the French army's increasing focus on operations in the Third World.

French Navy (Marine Nationale)

The French navy consists of 77 combatant vessels, 37,000 military personnel, and 6,000 civilian workers. The 38,000-ton aircraft carrier *Charles de Gaulle* is the centerpiece of the fleet. Entering service in 2001, the *de Gaulle* served three tours supporting the War in Afghanistan in 2001–2002, 2005, and 2006. It is a modern and highly effective naval combatant and the first nuclear-power surface warship built in western Europe. The *de Gaulle* can deploy up to 40 fixed-wing aircraft using catapults, including state-of-the-art Rafale M naval fighter-bombers, Super Etendard strike aircraft, and American-designed E-2C Hawkeye air early-warning aircraft.

The four *Le Triomphant*-class SSBNs (nuclear powered submarines capable of carrying nuclear-armed ballistic missiles), which entered service between 1997 and 2010, carry the intermediate-range M45 missile, which became France's primary

means of delivering nuclear weapons after intermediate-range ballistic missile bases on the Plateau d'Albion were closed in 1999. The six active *Rubis*-class nuclear-powered attack submarines began building in the late-1970s and are showing their age, though they remain effective against most opponents they are likely to face. Although the *Cassard*-class guided missile frigates (often credited as a destroyer outside France) are obsolete by American standards, they are equipped with the SM-1 MR as well as the Mistral surface-to-air missile and are effective against most threats. The *Lafayette*- and *Horizon*-class frigates showcase the high technological standard of the French fleet and its superb antisubmarine capacity. The French also maintain a group of inexpensive and lightly armed vessels, such as the *Floréal* class, to use as patrol ships in the Third World.

The combination of the *de Gaulle*'s large complement of modern fixed-wing aircraft, the fleet's excellent antisubmarine warfare vessels, and the presence



A French Super Etendard aircraft from the nuclear-powered aircraft carrier French navy ship *Charles de Gaulle* (R 91) performs a touch-and-go landing on April 12, 2007, on the flight deck of the *Nimitz*-class aircraft carrier USS *John C. Stennis* (CVN 74). *Stennis*, as part of the John C. Stennis Carrier Strike Group, and *Charles de Gaulle*, the flagship of Commander, Task Force 473, are operating in the northern Arabian Sea.

Source: U.S. Navy photo by Mass Communication Specialist 1st Class Denny Cantrell (released).

of several modern amphibious warfare ships makes the French navy one of the most capable naval forces in the world. President Sarkozy's decision to build a second carrier similar to the *de Gaulle* secured France's status as a major naval power, and at least until the British *Queen Elizabeth*-class aircraft carriers enter service sometime after 2016, the *de Gaulle* gives France a naval power-projection capacity second only to the United States.

Air Force (Armée de l'Air)

The French air force includes 44,400 military personnel and 6,500 civilian workers and deploys more than 800 aircraft, including 368 fighter and strike aircraft. Between 2006 and 2011, the French air force reduced its inventory of active combat aircraft from 305 to 225. Although some Mirage F-1s remain in service and the air force retains a large fleet of Mirage 2000s, the future combat power of the French air force is based on its growing fleet of Rafale fighter-bombers. The Rafale has a technological advantage over all the best fighters in the world, although it is not equivalent to the American F-35 or F-22. The French also deploy the Boeing E-3 Sentry AEW aircraft and a large fleet of transport aircraft.

Civil-Military Relations

Despite a history replete with civil-military crises between 1890 and 1962, today's French military is solidly under civilian control. The president has primary responsibility for national defense, though he must share power with the prime minister and the minister of defense. When the president and the cabinet are from different parties, as happened during the 1986–1988 and 1997–2002 cohabitations, the presidents clashed with the cabinet over defense policy, making it harder to plan for the future. The cuts announced in the 2008 White Book produced some complaints by senior officers, but discontent did not lead to a major political intervention by military leaders or a civil-military crisis.

The French public has generally supported foreign military operations, in part because the government usually obtains approval from international organizations and emphasizes humanitarian justifications for intervention. However, the development of international and humanitarian law has created challenges for France because of the legacy of decolonization. During the Algerian War, French forces routinely

used torture and extrajudicial executions to combat the *Front de libération nationale*, and debates about the legacy of the war have created controversy when human rights groups have attempted to force the prosecution of retired French servicemen.

Andrew Orr

See also Aircraft Carriers; Brigade; Kosovo Intervention; North Atlantic Treaty Organization; War in Afghanistan

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FREDERICK II OF PRUSSIA

Frederick II (1712–1786) stands alongside Alexander, Hannibal, and Napoleon as one of the most distinguished commanders in the history of warfare. This entry examines the rise to prominence of Frederick II, his writings, and his military principles.

Biography

Born in 1712 as the son of Frederick William I of Prussia and Sophia Dorothea of Hanover, his youth

was affected by an enduring conflict with his father, later called the “soldier king,” culminating in a disastrous attempt to escape to France in 1730. The plot failed and Frederick was imprisoned in Küstrin, where he watched his confidant Hans Hermann von Katte executed. After being pardoned by his father, the crown prince was trained for governing the military and the state. In 1733, Frederick married Elisabeth Christine of Brunswick-Bevern but kept an enduring distance from her as well as from most other women for the rest of his life. After his accession to the throne in 1740, the young monarch immediately started the war against Austria, conquering Silesia to achieve a Europe-wide reputation and to consolidate his “kingdom of borders.” Successfully keeping control over Silesia during the First and the Second Silesian Wars (1740–1742 and 1744–1745), he finally entered into the Third Silesian or Seven Years’ War (1756–1763). Prussia survived the war, maintaining the status quo ante bellum and establishing itself as the fifth greatest power in Europe. In 1772, Frederick extended Prussian territory through the first partition of Poland with the help of Austria and Russia, while in 1778–1779 he fought the War of the Bavarian Succession to prevent Austria from annexing Bavaria. The later years of the Prussian monarch saw continuing modernizing reforms of the economy, the bureaucracy, and agriculture, combined with a policy of religious toleration.

Military Writings and Principles

Until the mid-1730s, there was little evidence that Frederick would become an acclaimed military thinker. His military ambitions started in 1734 when he accompanied Prince Eugene of Savoy on a campaign against France. Two years later, he moved to Rheinsberg, where he celebrated the arts and started studying classical military writers like Caesar. But not until the end of the first two Silesian wars did he start reading the works of military thinkers like Turenne, Feuquière, or Folard in a systematic way. Developing his own ideals of military leadership in his *Anti-Machiavel* (1740), Frederick produced a respectable oeuvre of military literature over the following years. His military writings, nevertheless, do not contain abstract maxims and principles on the art of war that are applicable to any historical context in the way Carl von Clausewitz did later. Instead of a general system, we find numerous

regulations and instructions for infantry, cavalry, and artillery with a strong focus on every possible detail. It was the practical aim of his writings that made them a reflection of his actual experiences of war. Between his *Military Instructions* (1747/1748) and the *Elements of Castrametation and Tactics* (1770) lies a significant development that reflects the increasing importance of artillery during the Seven Years’ War. At first, the text of *Military Instructions* was secretly addressed to his officers only, but during the war, it fell into the hands of the Austrians and hence was published and translated into many languages. *Military Instructions* can be considered his main theoretical work. In 31 articles, the *Instructions* covers topics such as logistics, encampment, spies, ruses, and battle tactics. Frederick also wrote a well-acclaimed didactic poem titled *The Art of War* (1752). Other important thoughts on military strategy are contained in his *Political Testament* (1752), further developed on a tactical level in *Elements of Castrametation and Tactics* (1770). In his later years, he followed with some elaborations on campaigning and a range of smaller dispositions and instructions.

His writings matched with key concepts of the Enlightenment, namely, that the art of war has to be based on a professional education and solid knowledge, that war could be theoretically conceived with certain key principles, and that these abstract rules could be successfully applied to individual cases by the experienced commander. On the one hand, Frederick’s military thinking is deeply rooted in the military mentality of his time with its strong tendency to maneuver and to avoid major battles; on the other hand, it tends to promote quick and determining moves, including decisive battles, due to the special historical situation he found himself in with only a small country and limited resources. His historical and military writings also show a strong sense for contingency and hazards, phenomena that Clausewitz would later call frictions. But after all, his fame as a military genius owes more to his practical rather than to his theoretical moves.

One of Frederick’s main military principles was that his wars had to be short and decisive. This was based on the assumption that a small state like Prussia would not have the economic resources to continue a war; therefore, the enemy needed to be persuaded to make peace soon. The cultural background that determined the Prussian military

system to act the way it did was formed by pietism, paternalism, and an enlightened rationalism. Ideas of duty and service for their sovereign and the institutions of the state gave Frederick's enlightened despotism the proper authority and governmental foundation. As Frederick became a symbol for self-discipline, the Prussian army became a symbol for military discipline. Phrases like the common soldiers should "dread their own officers more than the enemy" (Luvaas, 1966, p. 16) won dubious fame. The enormous cohesion of the Prussian army was achieved not only by force but also through a system of material as well as symbolic gratifications and a paternalistic and personalized leadership that helped produce a strong identification with "the king's army." The army was the main nerve of the Prussian state. While most other European monarchies of the time invested 20% to 30% of their national budget on the military, Prussia spent almost three fourths of its economic resources on its armed forces. Frederick was no great military reformer, but he steadily increased the number of his troops and eagerly controlled their machine-like drill to improve their fire power and mobility.

Much of the success and the effectiveness of his military leadership resulted from his role as a *roi-connétable* (i.e., the king as military commander). In the 18th century, active command in the field had become a rare phenomenon among European monarchs. Karl XII of Sweden, on whom Frederick wrote a critical essay (1759–1760), had been one of the last and Frederick was only followed by Napoleon. The *roi-connétable* combined political, economic, and tactical decision making and only owed responsibility to himself. He could take risky decisions without fearing a court-martial, and his personal presence among the troops had a special charisma that motivated his men more than anyone else could. He was able to reward his soldiers immediately for brave behavior as well as to penalize and to discipline them. At a time when it was the prevailing opinion of most military thinkers and practicing generals to avoid battle by all means, Frederick went for battles again and again. His amateur-like decision making and a spirit of breaking all the rules of the traditional art of war added up to his image of an unpredictable military genius. Being short of troops in most of his important battles, he surprised the enemy with maneuvers nobody had expected.

The use of the famed oblique order in the battle of Hohenfriedberg (1745) and most famously Leuthen (1757) (and unsuccessfully tried earlier that year in the Battle of Prague and at Kolin) was not Frederick's invention. He just reemployed the antique tactic, requiring highly disciplined troops on a battleground his soldiers already knew from earlier maneuvers and in an inferior position from which the Austrians would not expect an attack. With a concentration of troops on one flank, even a weaker force could gain a local superiority. Leuthen became a myth of Frederick's tactical skill but was never repeated. At Torgau (1760), Frederick operated innovatively with two independent units but won the battle only with heavy losses. His men were heavily outnumbered by the enemy in famous victories like Rossbach (1757) as well as defeats as Hochkirch (1758) or Kunersdorf (1759), a fact that in retrospect helped fabricate the myth of tactical superiority and unrivalled discipline. Despite some remarkable victories, Frederick made lots of mistakes. He mistrusted most of his own generals and had a low opinion of enemy generals. And his behavior after some battles demonstrates anything but a disciplined commander. At Mollwitz (1741) and Lobositz (1756), he suddenly left the battlefield; after Kolin (1757), he showed strong signs of resignation only outmatched by his behavior after Kunersdorf (1759), where he desperately resigned from his command. In his *History of the Seven Years War* (1788), written in 1763–1764 but published only posthumously, Frederick established his own historical account of the war.

Views on Frederick II

After severe criticism during the wars of the revolution, when many reformers regarded him as the symbol of an outdated ancien régime mentality, Frederick found many admirers among later military leaders and thinkers, such as Napoleon and Clausewitz. Napoleon wrote comments about the wars of Caesar, Turenne, and Frederick during his stay on St. Helena. Clausewitz especially appreciated Frederick for "pursuing a great object with very limited means." In Imperial Germany, discussions about his strategy during the Seven Years' War caused a major scholarly debate between the civilian military historian Hans Delbrück and the German

General Staff. Apart from the quarrel between civil and military historiography, the main issue debated was the question of whether Frederick followed a *Niederwerfungsstrategie* (the strategy of annihilation) or an *Ermattungsstrategie* (the strategy of exhaustion). While Delbrück counted Frederick as the strategist of exhaustion, this brought him angry criticism from the members of the General Staff, who saw Frederick in one line with strategists of annihilation like Caesar or Napoleon. But even in his theoretical writings, Frederick never advocated the search for battle; his actual way of facing the enemy during the Seven Years' War owed much more to the limited options he had facing overwhelming enemy forces. The inclusion of Frederick's strategy in the so-called Schlieffen Plan had a far-reaching practical impact on the German strategic doctrine at the beginning of World War I. In the minds of the generals, Saxony turned into Belgium as they proposed to follow the Frederician example of a fast and decisive move on the right flank. Hitler and the German Wehrmacht (the name of the German military forces from 1935 to 1945) used Frederick as an example for their operations, and Hitler even hoped for a second miracle of the House of Brandenburg after Roosevelt's death in April 1945, paralleling it to Czarina Elisabeth Petrovna's death in 1762. After being ideologically exploited by Nazi propaganda during World War II, Frederick's public image faced severe damage after the war. Nevertheless, military strategists around the world, from the German Federal Armed Forces to the U.S. Army, continue to use the famous battles of Frederick II as tactical examples.

As there are few military commanders who have received such differing interpretations and appropriations over time, one of the most important tasks remains to historicize his life and his writings in the context of the 18th-century world. While the rule of Frederick II in its entirety has been described as a kingship of contradiction, the same is true for his military leadership. Charismatic guidance and intellectual competence as well as institutionalized structures, individual ambition, or contempt toward the fate of the common soldier were not mutually exclusive characteristics but two sides of the same coin. The Prussian king started with the personal intention to achieve greatness through military success and ended as a collective projection screen for

the aspirations, longings, and myths of soldiers and subjects alike who labeled him Frederick the Great.

Marian Füssel

See also Germany; History, Military: Approaches to; Leadership

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FRIENDLY FIRE

Whether called friendly fire, fratricide, or amicide, the problem of engaging one's own forces on the battlefield is an old one. Long familiar to soldiers and students of military affairs, friendly fire became a hot public issue only during the Persian Gulf War of 1991, when 35 U.S. soldiers and marines were killed and 72 were wounded in 28 friendly fire incidents. Just more than 23% of all U.S. personnel casualties and about 77% of all U.S. combat vehicle losses in the Gulf were due to friendly fire, and other coalition forces suffered similar losses. This entry discusses aspects of friendly fire such as accountability, costs, causes, and prevention.

Accountability

Most military personnel understand that friendly fire is an unfortunate but natural part of warfare, but the media has a tendency to blow such incidents out of proportion, and an ill-informed public, increasingly isolated from the realities of war, reacts with distrust, demanding retribution and proposing remedies that may be counterproductive. The families of the victims of friendly fire display excusable anguish

and suspicion that is often translated into demands for explanations that cannot be provided with any degree of speed or accuracy and thus often provoke unwarranted charges of cover-up and malfeasance.

During the Persian Gulf War, an exception to the usual practice of not bringing formal charges against personnel involved in committing friendly fire incidents was the case of Lieutenant Colonel Ralph Hayles, an AH-64 Apache helicopter pilot who fired a missile that hit a Bradley infantry fighting vehicle on February 17, 1991, killing two and wounding six. Hayles was charged with disobeying an order and subsequently retired from the army. The public identification and punishment of a soldier responsible for a friendly fire incident was very rare. The only previous case arose from the bombing of Zurich, Switzerland, by six U.S. Eighth Air Force B-24s on March 4, 1945, that killed five civilians, wounded 12, and left 22 families homeless. The pilot and navigator of the lead plane were subsequently acquitted in a June 1945 court-martial presided over by Colonel James M. (Jimmy) Stewart, the famous movie actor.

Costs

While fratricide often extracts a high price in terms of death, suffering, and bereavement, the direct effects of friendly fire incidents on the outcome of military operations is usually negligible. Even in the worst case in World War II, the July 1944 Operation Cobra bombings that resulted in 111 killed and 647 wounded, the operation was delayed only by 2 days and was ultimately successful. From a purely operational standpoint, the psychological effects of friendly fire incidents are perhaps more important than the physical effects. Troops under friendly fire are almost certain to lose confidence in their supporting units, and overall cohesion is likely to be reduced. The current emphasis on accountability and punishment also raises the question of whether or not infantrymen, gunners, and pilots will delay employing their weapons out of fear of hitting friendly troops. In an intense combat situation, getting off the first shot may be the key to survival and victory.

Until quite recently, there were no clear reporting requirements nor any common definition of what actually constituted a friendly fire incident, and such incidents were not commonly highlighted in official reports or historical accounts. Commanders often

elected not to report combat deaths as being caused by friendly fire in order to protect what they believed to be the best interests of the victim and any survivors or to preserve morale and relationships with supporting units. Consequently, the available data on friendly fire incidents are so poor that it is simply impossible to determine the true number of such incidents with any accuracy, but a figure of around 15% to 20% of total casualties is probably "in the ballpark."

Causes

Friendly fire incidents may be caused by a variety of factors and often by more than one factor at a time. High on the list of causes are environmental factors, such as the difficulties posed by terrain, climate, and weather; poor visibility; the type of operation being conducted; and the size and pace of operations. The increased lethality, range, remote operation, and speed of modern weapons are also major contributory factors. In many respects, modern weapons have outstripped the ability of their human users to control them, and the employment of sophisticated camouflage, electronic deception, and other modern defensive technology further compounds the problem. Mechanical failures may also add to the toll from friendly fire. However, when traced to their core, most incidents of friendly fire are found to be the result of human error. Such errors take many forms on the battlefield. They include carelessness, the stress of combat (and its companion, the oft-cited "fog of war"), lack of proper training and seasoning, lack of discipline, poor fire control, poor tactical planning, and lack of coordination in and among units.

Prevention

Since the Persian Gulf War, there has been a sustained effort to identify technological solutions to the problem of friendly fire. But new technology cannot solve the problem entirely, and in view of its probable high cost-to-benefit ratio, any technological solution may prove fiscally impractical. War is a human endeavor, and the solutions to the problem of friendly fire are more likely to be human rather than technological. Increased emphasis on hard, realistic training, combat conditioning, fire discipline, good planning, and thorough coordination of operations is likely to produce better results than any expensive technological innovation.

Conclusion

Despite the focus on preventing friendly fire, since 2001, U.S. and coalition forces in both Iraq and Afghanistan have had their share of friendly fire incidents. Those incidents, which remain to be tallied and classified, have included the typical range of air-to-ground incidents and both direct and indirect fire ground incidents. The best known and most controversial case was the death of Army Ranger Patrick D. Tillman, a well-known former professional football player, in Afghanistan on April 22, 2004. The Tillman incident displayed characteristics common to many friendly fire incidents: confusion as to what actually happened; alleged misrepresentation and cover up of the incident by the army; anguish, disbelief, and criticism on the part of the bereaved family; media hype and error; and even speculation that the incident might have been murder.

Charles R. Shrader

See also Combat, Physical and Psychological Impact

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and antiair warfare. Prior to 1975, frigates were ships of various sizes with the common characteristic of being smaller than a ship of the line (a warship of the 17th-19th centuries that mounted anywhere between 60 and 110 guns). Frigates have been part of the U.S. Navy since the Maritime Committee of the Continental Congress first authorized the construction of 13 such vessels in 1775 and have occupied a justified position of prominence within the U.S. Navy ever since. As of 2012, only 23 frigates remain on duty, and the U.S. Navy intends to replace all of them with the new LCS (littoral combat ship) within a decade. This entry discusses the history and classes of frigates and their features and capabilities.

Frigates, 1775-1945

While the 13 frigates of the Revolution were vastly outmatched by the Royal Navy, Congress saw the need for a permanent navy and in 1794 appropriated funds for an additional six frigates ranging in size from the 44-gun USS *Constitution* (popularly known today as "Old Ironsides") to the 36-gun USS *Constellation*. These six frigates saw extensive service against the Barbary Pirates and during the War of 1812. Newer generations of frigates, including the USS *Congress*, a 1,800-ton sailing frigate, served in both the Mexican-American and Civil Wars. While foreign navies continued to utilize frigates in the ironclad age, the U.S. Navy did not. During the Second World War, however, frigates reappeared in the American arsenal. While a handful were built by Great Britain, the majority, belonging to the *Tacoma* class, were British-designed and American-built warships that displaced 1,430 tons and were used primarily in an antisubmarine role.

Frigates and the Cold War

After World War II, the U.S. Navy continued to deploy numerous frigates, primarily to combat the rising threat from the Soviet Union's burgeoning submarine fleet. Over time, the differences in design, size, armament, and raison d'être between frigates, cruisers, and destroyers began to blur, and so in 1975, the U.S. Navy reclassified many ships with the result that the number of frigates in service dramatically declined. Most frigates were reclassified as either destroyers or cruisers, while destroyer escorts built as antisubmarine vessels were reclassified as frigates.

In 1960, Congress authorized the construction of the new *Bronstein*-class destroyer escort, designed to combat Soviet submarines worldwide. At just over

FRIGATES

For the contemporary U.S. Navy, a frigate denotes an escort ship whose primary focus is antisubmarine

2,700 tons, the *Bronstein* class carried advanced sonar, antisubmarine rockets, and 3-inch guns. In 1964, the U.S. Navy commissioned the first of the new larger and faster *Garcia*-class destroyer escorts. With 5-inch guns and built to handle both manned and unmanned helicopters, the *Garcia* represented a demonstrable improvement over the *Bronstein* class, especially after the addition of the lightweight Tartar surface-to-air missile (*Garcia*-class destroyer escorts equipped with the Tartar were known as *Brooke*-class vessels). In 1965, construction began on the first of the 4,200-ton *Knox*-class destroyer escorts. The 41 ships of the *Knox* class, which enjoyed periodic sonar upgrades as well as the eventual introduction of the Sea Sparrow and Phalanx weapons systems—both of which protect ships against incoming missiles—remained stalwart escort and antisubmarine vessels until the 1990s.

The remaining frigates on active service with the U.S. Navy belong to the *Oliver Hazard Perry* class. Commissioned beginning in the late 1970s and designed primarily as an antisubmarine warship, the 51 American built *Perry*-class vessels top out at just over 4,000 tons, have a maximum cruising speed of 29 knots, and carry an assorted weapons package that includes helicopters, torpedoes, surface-to-air missiles, and the Phalanx weapons system. The *Perry*-class proved its durability in combat when the USS *Stark* suffered major damage in 1987 after an Iraqi warplane fired on and struck the vessel with two Exocet missiles. A year later, an Iranian mine damaged the USS *Samuel Roberts*. Both vessels survived their attacks and returned to service.

Frigates Since the Cold War

In 1986, just as the number of frigates in service with the U.S. Navy peaked at 115, the office of the Deputy Chief of Naval Operation for Surface Warfare cancelled plans to replace the *Knox* class with a new, advanced frigate. Today, the U.S. Navy is developing a new combat ship designed to replace its aging frigates. The new vessel, the LCS, comes in two classes, the *Freedom* and *Independence*, and tops out at 3,000 tons. Although smaller than the *Knox*, the LCS has a maximum speed in excess of 40 knots and is equipped with the navy's new flexible mission packages, which allow for the quick addition or substitution of specialized equipment to counter various threats, as well as an enhanced, primarily defensive,

missile capability. Both classes of LCS are faster and more versatile than frigates and will counteract submarines, fast moving small surface craft, and mines. The U.S. Navy had deployed one vessel from each class as of 2012.

Frigates in Service With Foreign Navies

While frigates are fast disappearing from the U.S. Navy, other fleets still rely on the versatile and relatively cost-effective warship. Allied navies, including Japan and Great Britain, widely employ frigates. Numerically, Japan's 36 frigates (the Japanese did not reclassify their ships as the Americans did, and therefore, frigates are still referred to as destroyers or destroyer escorts) dominate the Maritime Defense Force (the 1946 constitution prohibits Japan from maintaining an army, navy, or air force). Britain, however, much like the United States, is steadily reducing the number of frigates in service as part of its Future Surface Combat Program. The British frigate replacement, the Type 26 combat ship, is similar in many respects to the new U.S. LCS.

As of 2012, the Chinese navy had the largest number of frigates with 47. Of these, nearly half belong to the two classes of Chinese built *Jiangwei* and *Jiangkai* frigates. The *Jiangwei* top out at just over 2,200 tons and carry, depending on class, a complement of surface-to-air missiles, Gatling guns, and depth charges, but on the whole lack torpedoes, helicopters, or a modern combat information center. The newer and larger *Jiangkai* class surpasses 4,000 tons and employs many advances over older Chinese models, including stealth technology.

The Legacy of Frigates

A stalwart ship of the seas, frigates have historically served roles almost as versatile as their myriad designs. In the U.S. Navy, frigates served primarily as antisubmarine vessels since World War II, and though the threat from submarines has not entirely dissipated, new threats, especially from mines and small fast attack ships, have made the frigate less vital with the effect that, while still in use in dozens of fleets, they should, by 2020, all but disappear from the register of active-duty vessels in the U.S. Navy.

Sidney Pash

See also Antisubmarine Warfare; Cruisers, Naval; Destroyers; Warfare, Surface

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GATES, ROBERT

In November 2006, President George W. Bush nominated Robert M. Gates to fill the role of secretary of defense. He replaced the outgoing defense secretary, Donald Rumsfeld, who resigned in the wake of the Democratic Party regaining control of both houses of Congress and thrusting the ongoing Global War on Terrorism to the forefront of national debate. Gates faced the enormous task of turning the wars around and modernizing the Department of Defense on a budget targeted for cuts after excessive growth over the past decade. This entry looks at the career of Gates, focusing on his accomplishments as secretary of defense in the Bush and Obama administrations.

Early Career

Gates studied history in college and earned a doctorate in Russian and Soviet history from Georgetown University. In 1966, he began what became a 27-year career with the Central Intelligence Agency that was briefly interrupted by service in the U.S. Air Force and a later career on the staff of the National Security Council and as deputy national security advisor to President George H. W. Bush. After an arduous Senate confirmation that revolved around his involvement in Iran Contra, Gates became the first entry-level employee to rise to the level of director of the Central Intelligence Agency under George H. W. Bush in 1991. In the course of his career, Gates also spent 9 years at the National Security Council, where he gained a reputation for consensus building

with both political parties. He followed his 1993 retirement from the Central Intelligence Agency with a career in education at Texas A&M University, where he later became president of the institution.

Reinventing the Pentagon

It quickly became obvious that Gates signaled a drastic change in Washington and at the Pentagon. During his nomination hearing, Gates soberly admitted that the United States was not winning the war in Iraq, a stark contrast to the previous administration's upbeat outlook. Rather than fire any aides on his arrival, Gates set out to repair relationships frayed by what critics called Rumsfeld's top-down, confrontational style. He set out to fix the friction that existed during the Bush administration between the State and Defense departments and understood that such tensions had troubled many administrations in the past. Furthermore, he proved willing to listen to and work with the new Democratic majority in Congress where his bipartisan appeal was evident through continued support for defense spending despite enormous pressures. He also made strides to meet commanders and soldiers in the field, on their turf, where he listened carefully and adjusted as necessary. He had learned many years earlier that to achieve change in resistant bureaucracies, one must start from the bottom up.

One of the largest tasks Gates needed to address concerned the institutional reorganization necessary to approach the half-decade-old wars with a new perspective. The first change occurred in February 2007, when the Walter Reed Medical Center

controversy led Gates to decisively fire army commanders responsible for the poor conditions in the hospital. Later that August, Gates removed air force leadership after controversy surrounding lost nuclear weapons and a failure to provide resources like unmanned aerial vehicle drones in Afghanistan and Iraq. Over the next year, he focused on army leadership and promoted officers, like General David Petraeus, whose innovative counterinsurgency strategies were more relevant to asymmetric warfare faced in Iraq and Afghanistan. Gates chose to empower commanders with bottom-up strategy reform where leaders owned the implementation and results of new tactics. Later, in 2010, Gates joined Joint Chiefs of Staff chairman Admiral Mike Mullen in condemnation of Don't Ask, Don't Tell (the 1993–2011 U.S. government policy toward gays and lesbians in the military), but he allowed the U.S. Congress to decide on the repeal, while he consulted the different branches of the armed forces about policies for implementation.

In January 2007, Gates agreed with the Bush administration on a troop surge to reverse the growing sectarian violence in Iraq. He had worked on the policy that introduced 30,000 new troops and extended tours during his time with the Iraq Study Group. The commanders also implemented their counterinsurgency strategy, which sought to provide breathing room for Iraqi politicians to repair fractured relationships, pass legislation, rebuild infrastructure, and train national security forces. Gates then shifted to repair relationships with regional allies and the North Atlantic Treaty Organization (NATO) as well as transfer responsibilities that fell on the military to better equipped civilians within the State Department. As secretary of defense, Gates consistently promoted the State Department and the important role he felt it should play in finding solutions to conflict abroad.

Throughout 2008, glimmers of success in Iraq were replaced with deterioration of the situation in Afghanistan. The Iraq surge appeared to work and provided time for the Iraqi parliament to make progress toward withdrawal objectives for U.S. forces. When asked to stay on as secretary of defense for the incoming Obama administration, Gates set out plans for a 2009 troop surge in Afghanistan. Together Gates and the White House implemented a surge model similar to Iraq but struggled with Pakistan's Taliban sanctuaries and Iran's interference in both wars. The following year, the United States withdrew

combat forces in Iraq and reduced the troop count to 50,000 troops set to leave in December 2011. While progress in Afghanistan teetered, Gates remained focused on preparing the Pentagon to deal with troublesome situations in Iran, North Korea, and Pakistan under renewed budget scrutiny after the global economic crisis of 2008.

Gates responded to increased concerns over the Pentagon's budgets in 2010 when he unveiled plans to reel in defense spending and optimize existing funds. Gates made a point to strike a balance between hawkish representatives concerned about a weakened military and their dove counterparts who called for deeper cuts. Initial cuts eliminated expensive conventional weapons systems, including F-22 fighter jets, navy destroyers, and marine amphibious assault vehicles totaling an estimated savings of \$330 billion over the programs' life span. He also eliminated the Virginia-based Joint Forces Command and planned cuts to the massive use of expensive defense contractors that swelled to 30% of the defense department's employees. Later in 2010, the White House demanded further cuts, and Gates produced \$78 billion more in reductions through a policy to reduce troop counts to 2007 levels and curb increased costs of the Pentagon's TRICARE health program. Although he initiated many of the cuts, Gates argued the need for defense investment and suggested that the nation's fiscal crisis could not be resolved by defense cuts alone.

While budgetary arguments loomed, the Pentagon under Gates made significant headway toward modernizing weapon systems and strategy for future asymmetrical conflicts. In his first year, Gates replaced seriously vulnerable Humvees with mine resistant ambush protected armored vehicles to protect soldiers from roadside bombs and improvised explosive devices. He also pushed for expanded implementation and funding that tripled the number of unmanned aerial vehicle drones. Additionally, many of his planned cuts will reinvest savings in new, less expensive weapons systems to help troops fight future wars. Gates has steadily promoted diplomacy, especially with China, but many new programs will seek to augment the U.S. military's edge as new countries rise to challenge American military superiority. Two projects that Gates began in 2011 included long-range bomber development and technology to combat antiship missiles that threaten the nation's carrier fleets.

Final Year and Departure of a Statesman

In February 2011, the Arab Spring of revolution that swept through Tunisia and Egypt finally reached Libya and its longtime dictator Muammar Qaddafi. After Qaddafi's air force bombed civilians, the United States, NATO members, and allies intervened with sanctions and a no-fly zone. While Gates initially fought against a politically unpopular intervention in a new war, the Obama administration decided to intervene. Gates's very close working relationship with Secretary of State Hillary Clinton showed in the days that followed as they worked together to support NATO operation Unified Protector.

Later, on May 1, the Obama administration announced the death of al Qaeda leader Osama bin Laden. American defense and intelligence organizations learned of bin Laden's location the previous year, and Obama approved a special operations raid that killed bin Laden in a compound located in Abbottabad, Pakistan. The operation was conducted in near-complete secrecy as the U.S. government did not notify the Pakistani authorities of the mission

conducted inside Pakistan's borders. Ever careful of his words, Gates tiptoed around implications of Pakistan harboring America's most wanted criminal and troubles in Afghanistan that worsened an increasingly strained relationship between the two countries.

After numerous successes, Gates decided to retire in July 2011, his legacy as secretary of defense shining with accolades. He had firmly supported a reinvention of the Department of Defense, forged strong civil-military relationships, and helped lead America's military through some of the toughest conflicts in recent history. As he left, the consensus builder warned the nation of dysfunction in America's political system. To allies in NATO, Gates appealed for improved sharing of the global security burden as the U.S. debt crisis signaled potential for a diminished presence in future global conflicts.

Alex S. Kasper

See also Asymmetric Warfare; Central Intelligence Agency; Counterinsurgency; Defense, Secretary of; Global War on Terrorism; Iraq War (2003); Nation-Building; War in Afghanistan



U.S. Defense Secretary Robert M. Gates (left) presents a personalized coin to a U.S. Marine with Regimental Combat Team I during a farewell tour at Camp Dwyer, Helmand Province, Afghanistan, June 5, 2011. The trip marked his 12th and final visit to Afghanistan.

Source: U.S. Marine Corps photo by Sergeant Mallory S. VanderSchans (released).

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GAYS AND LESBIANS

The subject of lesbians and gays in the military is a highly contentious one; many people have strong opinions, though a much smaller number fully understand the history of lesbian and gay service. The U.S. military has a long record of homosexual service members, but it has often overlooked (frequently intentionally) or disparaged their presence. Legal challenges to exclusion and separation of lesbian and gay personnel arose by the early 1980s, and in 1993, the military inaugurated the policy known as Don't Ask, Don't Tell (DADT). After thousands of discharges under various policies and the repeal of DADT (which was equally contentious), the status of gays and lesbians in the military is still in limbo. The historical debate has been driven by stereotypes, misconceptions, and strongly held beliefs, but the fact remains that gays and lesbians have served and continue to serve in the armed forces. This entry discusses the history of gays and lesbians in the U.S. military and the attempts to screen for and regulate homosexual behavior.

History

Sodomy, usually defined as anal and sometimes oral sex between men, and now including between a man and a woman, was considered a criminal offense as early as 1778, when the first soldier was drummed out of the Continental Army. Many of the most

pertinent paradigms and official policies concerning military homosexuals have only occurred within the past 100 years, however. Since World War I, gays and lesbians have been prohibited from serving in the armed forces through either personnel regulations or the application of the sodomy provisions of military law. Early attempts to regulate homosexual behavior within the military were sporadic and amorphous, probably in large part because the cultural climate of the time inhibited discussion of sexual or "perverse" matters as indelicate. Margot Canaday points out, however, that a great number of army and navy records produced both during and after the First World War, reveal a military establishment well acquainted with homosexuality within its ranks. The Articles of War of 1916 went into effect on March 1, 1917, the first complete revision of military law in more than 100 years and the first legal document to address the incidence of "sodomy" within the military population. Its first mention of sodomy in military law occurred in Article 93, which prohibited assault with the intent to commit sodomy. A 1920 revision of the Articles of War treated sodomy as a separate offense, which did not change until 1951.

Between the two world wars, the military tried to screen and exclude homosexual men from service by using contemporary biological theories about the causes and manifestations of homosexuality. Army regulations produced in 1921 included "stigmata of degeneration," which attempted to describe "overly feminine" men as having sloping shoulders, broad hips, and an absence of secondary sex characteristics, including facial and body hair. Criteria for exclusion of individuals for service also incorporated the "degenerative characteristic" of "sexual psychopathy," which included sexual relations between men. Although there was official policy during the interwar period that homosexuals required court-martial under the Articles of War, the military more frequently discharged them administratively under a "Section VIII" discharge for unsuitability. Theoretically, while these could be honorable discharges, discharges in case of psychopathic behavior usually fell under the category of "less than honorable," or "blue," discharges, due to the paper on which these discharge forms were printed. Until World War II, however, there was no explicit bar against homosexuals in the service.

With World War II, the prewar practice of separating gay men from service became part of army

regulations, although with great debate: There were 24 separate revisions of regulations concerning homosexuality between 1941 and 1945. Treatment of individual cases of homosexuality varied widely in the military, and military authorities began to consult with psychiatrists and other medical personnel to develop evaluation procedures for the 18 million men examined for induction during the course of the war. The army and navy, however, had already determined that overtly homosexual behavior disqualified entry into the military. *Homosexual* replaced *sodomist* as the term of choice in discussing both legal and criminal aspects of same-sex behaviors, though the military had not yet defined or clarified these aspects. Even if a service member had not engaged in sexual activity, a growing body of policy maintained the view that evaluators could identify homosexual personalities, either to deny these men induction or to seek their separation on discovery. Service members who engaged in same-sex behaviors could further separate from the service through their resignation or by administrative discharge. The pioneer sex researcher Dr. Alfred Kinsey's wartime surveys suggest that at least 650,000 and as many as 1.6 million male soldiers were homosexual.

After the war, a 2-year liberalization of policies concerning lesbian and gay personnel, increasing the likelihood of honorable discharge, was reversed in 1948. In 1949, the Department of Defense (DOD) issued a memorandum unifying military policy toward homosexual behavior, which prohibited lesbians and gay men from service in any branch of the armed forces in any capacity. The memorandum also made prompt separation of "known homosexuals" mandatory; this policy foreshadowed President Dwight D. Eisenhower's 1953 Executive Order 10450, which codified "sexual perversion" as grounds for dismissal from federal employment. Although the armed forces did not keep consistently reliable statistics on reasons for discharge, the numbers of dismissals from both the military and from federal service rose to 10 times their wartime rate, despite the vastly smaller postwar army.

In the late 1950s and early 1960s, the military continued to separate lesbians and gays. The DOD revised policy in 1959, issuing a directive that among the reasons for administrative discharge for "unfitness" was "sexual perversion," including homosexual acts and sodomy. This remained DOD policy throughout the 1960s (changed in 1975 to

include "homosexual acts or other aberrant sexual tendencies"). In 1965, however, a directive allowed personnel facing less-than-honorable discharge to present their cases before administrative discharge boards and to have legal representation. Prior to the directive, most service members accused of homosexuality cooperated without protest to avoid more severe punishment and/or to protect others, as accused members were often pressed for the names of sexual partners or other gay or lesbian acquaintances in the military. Moreover, as need for troops in Vietnam increased, DOD paradigms concerning draftees required those seeking deferment for homosexuality to submit "proof"—signed affidavits from sex partners or the sworn statement of a psychiatrist—as many men sought to avoid the draft by making such claims. The journalist Randy Shilts notes, however, that at that time, in 49 of the 50 states, confessing to a homosexual act was to confess to a felony, sometimes punishable by up to 20 years in prison. Inconsistency in standards, required documentation, and administrative procedures thus prompted a review of discharge policy and procedures during the Carter administration.

New DOD directives in 1981 reflected the results of the review, outlining that any service member who had "engaged in, has attempted to engage in, or has solicited another to engage in a homosexual act" (National Defense Research Institute, 1993, p. 40) was subject to mandatory discharge. It regulated for the first time that "homosexuality is incompatible with military service" (National Defense Research Institute, 1993, p. 40) and explicitly maintained that the presence of homosexuals adversely affected order, discipline, morale, and trust among the troops. It also asserted that homosexuality in the military impinged on recruitment and retention of new members, public acceptability of armed service, and national security. Despite increasing legal challenges, this policy remained in place until January 1993, resulting in more than 1,400 discharges per year.

The armed forces have also used the sodomy provisions of the Uniform Code of Military Justice to discharge lesbians and gay men from the service. The use of the Uniform Code of Military Justice in this manner evolved despite observations from many quarters, military and civilian, that noted that human sexuality falls along a scale created by Dr. Kinsey in his highly regarded sex research. This 0 to 6 scale measured homosexual behavior, with

0 indicating complete heterosexuality and 6 indicating complete homosexuality; many people who identify as heterosexual participate in behavior that could be classified as homosexual. Furthermore, Kinsey's research on the human male (1948) and female (1953) provided a highly complex view of sexuality in the postwar era that the public had not encountered prior to that time.

Additionally, the military has historically applied sodomy laws and regulations unequally to homosexual and heterosexual service members, although both groups widely practice the prohibited behaviors. According to a study produced at the direction of Defense Secretary Les Aspin, under military law the act itself is forbidden, regardless of the participants; heterosexual as well as homosexual sodomy has been banned but continues in both populations.

The Palm Center, a think tank concentrating on issues of gender, sexuality, and the military, summarizes the results of 20 studies, articles, and papers, many produced by government sources. These studies have concluded that sexual orientation alone is "not germane" in determining who should serve and that unit cohesion, morale, and organizational effectiveness would not be affected if gays and lesbians served openly. Studies also found no evidence showing that gays were unsuitable for military service and suggested that policy requiring their exclusion or separation from the armed forces was unnecessary and damaging. One report pointed to growing tolerance of homosexuality and concluded that "the military cannot indefinitely isolate itself from the changes occurring in the wider society, of which it is an integral part" (Sarbin & Karols, 1988). Another report found that "the preponderance of the evidence presented indicates that homosexuals show preservice suitability-related adjustment that is as good or better than the average heterosexual," a result that appeared to "conflict with conceptions of homosexuals as unstable, maladjusted persons" (McDaniel, 1989, pp. 24, 26).

In examining analogous foreign militaries, the Government Accountability Office studied 25 countries, with special focus on Israel, Canada, Germany, and Sweden, and related the opinion of government officials that the presence of homosexuals in the military is not an issue and has not created problems in the functioning of military units. A study by the RAND group also examined other countries, including Canada; none of the militaries of other countries

studied for the report believe that their effectiveness as an organization has been impaired or reduced as a result of the inclusion of homosexuals, despite the fact that homosexuality was still not widely accepted in those countries.

The Palm Center further conducted its own studies of openly gay service in Britain, Israel, Canada, and Australia and concluded that not one person had observed any impact or any effect at all that undermined military performance, readiness, or cohesion; led to increased difficulties in recruiting or retention; or increased the rate of HIV infection among the troops. It further found that although many heterosexual soldiers objected to homosexuality, the military's emphasis on conduct and equal standards was sufficient for encouraging teamwork without undermining cohesion. In July 2008, a bipartisan panel of retired generals and admirals, which studied the issue for more than a year, released "The Report of the General/Flag Officers' Study Group." The officers found that lifting the ban on gay/lesbian service is "unlikely to pose any significant risk to morale, good order, discipline, or cohesion" (Flaherty, 2008).

Current Debate

Current debate about lesbians and gays in the military, generally within the context of the lifting of the DADT policy, centers in part on whether the "political correctness" of allowing homosexual people to serve trumps the rights of heterosexual military members to serve in what they perceive as an unmolested environment. Additionally, even though DADT has been repealed, in order for gay/lesbian service members to escape legal punishment, the Uniform Code of Military Justice would also have to be altered to reflect changes in definitions of sodomy. Moreover, current policy against lesbian/gay service is somewhat abstract, as even a statement that one is homosexual is construed as a "homosexual act" under that policy, interpreted to mean that the person making the statement intends to commit other homosexual acts of a bodily nature. Gender figures into the discussion, as well, with a larger percentage of lesbians than gay men being discharged.

The debate about lesbians, bisexuals, and gay men in the military continues, with many younger heterosexual servicemen and servicewomen at far greater ease with their homosexual and bisexual counterparts than might have been believed even at

the start of DADT. The advent of repeal and certification of the repeal of this policy indicate the government's implementation of the next stage of equality for military personnel in the United States.

Donna B. Knaff

See also Constitutional Rights; Personnel; Discharge and Separation; Diversity; "Don't Ask, Don't Tell"; Morale; Women

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GENERAL DYNAMICS

General Dynamics is, as of Fiscal Year 2011, the fourth largest American defense contractor. Formed by the 1952 merger of Electric Boat shipbuilding and Consolidated Vultee aircraft, General Dynamics produces or has produced the M-1 tank, the F-111 and F-16 aircraft, and many of the *Los Angeles*-, *Ohio*-, *Seawolf*-, and *Virginia*-class submarines. Currently, General Dynamics' portfolio includes four major divisions: (1) aerospace, (2) combat systems, (3) information systems and technology, and (4) marine systems. The firm remains a leader in land, air, and information-based technology. This entry examines the history of General Dynamics and discusses current products.

History

General Dynamics emerged from the union of two powerful defense contractors: Electric Boat and Consolidated Vultee aircraft. Electric Boat traced its origins to the last years of the 19th century, coming

to prominence through the company's development of submersibles. Electric Boat grew and prospered on that basis through the early decades of the 20th century, producing submarines for the U.S. Navy through World War II. Consolidated Vultee (also known as Convair) emerged from the union of two influential aircraft producers in 1943. Consolidated Aircraft had produced a number of influential aircraft, including the B-24 Liberator of World War II fame, while Vultee produces trainers for the U.S. Air Force, among other designs.

After the merger, General Dynamics continued to expand its portfolio, producing submarines and aircraft that played a crucial role in the Cold War, including the B-36 Peacemaker bomber, the F-102 and F-106 interceptors, the Atlas missile, and the USS *Nautilus*, the navy's first nuclear submarine.

One of General Dynamics' controversial products, however, was the F-111. The F-111 arose out of the air force's desire for a fast low-level tactical bomber and the navy's desire for a supersonic high-altitude long-range patrol aircraft in the late 1950s. In February 1961, Secretary of Defense Robert McNamara ordered the two services to create a single set of requirements to fill the two disparate roles and solicit bids for a single design to fill the need—the TFX (Tactical Fighter Experimental). By January 1962, the two main contenders were Boeing and General Dynamics. The Boeing design was innovative and their bid lower, but after several delays, revisions to the requirements, and interservice disagreements, McNamara overruled the Pentagon and awarded the contract to General Dynamics. Citing concerns about the usefulness of the final design to carrier aviation, the navy backed away and turned to Grumman, a move that eventually produced the F-14. General Dynamics' decision to locate their plant manufacturing the F-111 in Vice President Lyndon B. Johnson's home state of Texas also allowed Johnson to claim credit for the jobs thereby created. Ultimately, the F-11 proved a versatile and useful airframe, serving in a variety of roles for the air force throughout the last decades of the Cold War.

Following the mixed success of the F-111, General Dynamics' next major aerial success was the F-16 Fighting Falcon. General Dynamics won a 1972 competition for a new lightweight fighter, and subsequently it put the F-16 into production in 1975. Eventually, more than 4,000 F-16s would be produced, making it one of the most successful aircraft

of the post-World War II era. In recent years, General Dynamics has broadened its portfolio to include landing systems and Gulfstream commercial aircraft.

Today, General Dynamics also produces a variety of land-based systems, including the M-1 Abrams main battle tank, the Stryker LAV (light armored vehicle), and MRAP (mine resistant ambush protected) wheeled vehicles. Ordnance has also become a focus, with the corporation producing a variety of bomb bodies; small, medium, and large caliber munitions; propellants; and nonlethal products.

Submarines also continue to form a large part of General Dynamics' portfolio. Designers in the Electric Boat shipyards played a pivotal role in designing and building the first American nuclear submarine, the *Nautilus*, placing them ahead of rival Newport News Shipbuilding to build the nuclear navy. In the early 1970s, Admiral Hyman Rickover expressed concern over the immense number of new Soviet attack submarines in production, and he pushed for a new American design to counterbalance them. Rickover, apparently hoping to control General Dynamics by reminding it that it was not indispensable, pressured Newport News Shipbuilding to bid on the contract. Newport News designed the 688- or *Los Angeles*-class submarine, but since Electric Boat was the only other shipyard able to build nuclear submarines, General Dynamics was awarded a large share of the fixed-price contract.

The shipyards were also suffering from the problems of major expansion, in the form of an influx of unskilled workers, as well as the general unrest in the American economy, and production difficulties mounted while profits fell. Based on the need to project costs far into the future under Total Package Procurement (a U.S. government policy whereby the development, production, and support of a system were contracted for as a total package, with price commitments), Electric Boat's cost overruns led to a 1977 contract claim for \$544 million. Political fallout for such a large payout to a major contractor dovetailed with Rickover's claim that civilian shipyards placed profit over quality and led to an investigation of fraud against General Dynamics. Eventually, P. Takis Veliotis took over and revitalized Electric Boat, but this caused another major scandal in 1980 when the navy found substandard steel being used in the construction of the USS *Bremerton*. Veliotis defended himself in congressional hearings, but he resigned suddenly in 1982 and returned to

his native Greece just ahead of a fraud indictment in 1983. Veliotis then produced documents alleging widespread fraud at General Dynamics, leading to another inconclusive investigation.

In recent years, however, Electric Boat has enjoyed considerably more success. The firm produced the *Ohio*-class ballistic missile submarine and the more recent *Seawolf*- and *Virginia*-class attack subs. Electric Boat continues to be the leading submarine manufacturer for the U.S. Navy.

The Future

The end of the Cold War meant uncertainty for General Dynamics as for all military contractors. While the American focus on technology as the cornerstone of defense remained largely intact, the scale of the military establishment declined as fears of Soviet aircraft, submarines, and tanks declined. General Dynamics adapted by emphasizing battlefield information systems as part of the overall push to make the small volunteer force as efficient as possible. In December 2008, General Dynamics was contracted to build 14 of the third block of the *Virginia*-class attack submarines. The company press release portrayed the contract as a way to create jobs in troubled economic times, suggesting the crucial role defense contractors still play in American political, military, and economic life.

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See also Congressional Relations, Military

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Website

General Dynamics: <http://www.generaldynamics.com/>

GENEVA CONVENTIONS

In popular usage, *Geneva Conventions* refers to a body of agreements aimed at setting international standards of warfare. Begun in 1864 as a mutual

accord regarding treatment of the wounded and medical personnel, the convention grew in complexity by the early 21st century, addressing new technologies, prisoners of war, broader issues of human rights, and noninternational conflicts. International bodies, most notably the International Committee of the Red Cross (ICRC) and the United Nations, have been instrumental in shaping the convention. From the beginning, a tension has existed between enforcement of the convention's provisions and respect for the sovereignty of individual states. This entry discusses the background of the Geneva Conventions and the content of the conventions and agreements from 1864 to the present, including applications to the Global War on Terrorism.

Development

Background

In the mid-19th century, a rising concern for humanitarianism in warfare spread among the publics of Europe. Much of this interest stemmed from Florence Nightingale's well-publicized experiences as a nurse in the Crimean War, combined with the efforts of the Swiss philanthropist Jean-Henri Dunant, whose observations of the Italian war for unification convinced him of the need to codify international norms. As Nightingale called for improving conditions in military hospitals, Dunant emphasized the need to ensure the safety of those transporting the wounded from the battlefield. Public interest sparked the creation of national societies—which became the Red Cross organizations—as well as a Geneva-based movement that became the International Committee of the Red Cross. The latter opened the dialogue through a preliminary meeting in Geneva, Switzerland, in 1863. A year later, the Swiss Federal Council invited states from Europe and the Americas to participate in a larger conference.

The 1864 Conference

The conference convened in Geneva on August 8, 1864, with representatives from 15 European countries. On August 22, it produced the Convention for the Amelioration of the Condition of the Wounded in Armies on the Field. Key stipulations were the care of wounded, regardless of nationality; the neutrality of hospital and ambulance personnel; and the

visual display of a “red cross on a white ground” to designate such personnel. A second conference in October 1868 adapted existing agreements to maritime warfare, although it was never ratified. The First Geneva Convention was ultimately ratified by 57 states, including the United States, in 1882.

Early Adaptations

The Franco-Prussian War of 1870 exposed several flaws in the First Convention, including the abuse of the Red Cross designation by scavengers. The Swiss government convened another conference in 1906, attended by 35 states, to revise and expand the Geneva agreements of 1864. The revised document placed voluntary aid societies within the frame of military regulations. New provisions also required victors to provide lists of the dead, as well as their personal effects, to other belligerents. Notably, the delegates qualified their revisions by creating reasonable allowances for military necessity. Their final product, the Second Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field, was signed in July 1906, taking effect in August 1907.

The Second Hague Peace Conference, held in October 1907, adapted the Geneva Convention to maritime warfare. It also created provisions on new technologies and prisoners of war. It became effective in January 1910. In 1925, a meeting was convened in Geneva to solidify international rules on new weapons, including those employed in the First World War. The Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare took effect in February 1928, providing a basis for all subsequent restrictions on weaponry.

The 1929 Conference

While the Second Convention required enemy sick and wounded to be treated as prisoners of war, no articles covered captives as a whole. A conference took place in Geneva in July 1929 to create a third Convention relative to the Treatment of Prisoners of War, building on the provisions of the Hague Conference of 1907. It called for prisoners’ humane treatment and their swift evacuation from the battle area, and it created guidelines for work, discipline, and repatriation.

The delegates also revised the Convention for the Amelioration of the Condition of the Wounded and Sick in Armies in the Field. It now recognized the red crescent, and the red lion and sun as designations for medical personnel, as well as providing for the use of medical aircraft. The new convention gained 61 signatories between July 1929 and its revision in 1949. The ICRC proposed a conference in 1940 to address issues of medical aircraft and the treatment of enemy civilians, but the Second World War precluded it.

The 1949 Conference

Sixty-three nations sent delegates to Geneva in April 1949 to combine the existing Geneva and The Hague agreements and adapt the convention to the experiences of the Russian Civil War, the Spanish Civil War, and the Second World War. A commitment to fundamental rights was evident in the wake of the Nuremberg Trials, which prosecuted German war criminals after World War II. Additional impetus came from the UN Universal Declaration of Human Rights, adopted in 1948. Reflecting on the experiences of partisans in occupied Europe, the delegates set out to guarantee new guidelines for the treatment of civilian populations, including resistance forces. They also sketched preliminary provisions for “noninternational” conflicts taking place within a single state.

The convention now comprises four distinct agreements: (1) the First Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field; (2) the Second Geneva Convention for the Amelioration of the Condition of Wounded, Sick, and Shipwrecked Members of Armed Forces at Sea; (3) the Third Geneva Convention relative to the Treatment of Prisoners of War; and (4) the Fourth Geneva Convention relative to the Protection of Civilian Persons in Time of War.

Subsequent Protocols

Events in the 1960s, including the Vietnam War and the Arab-Israeli conflict, spurred the ICRC to call for additional conventions. Its 1973 proposals evolved into two protocols, signed on June 8, 1977. Article 1 of the Protocol relating to the Protection of Victims of International Armed Conflicts expanded the definition of international warfare to include

wars against “colonial domination and alien occupation” and violence perpetrated by racist regimes. Article 60 included “zones under special protection” from attack and included provisions for noncombatants. The Protocol relating to the Protection of Victims of Non-International Armed Conflicts significantly expanded the application of international law to internal warfare, although concerns over state sovereignty limited its scope. It required basic protections for civilians, the sick, and the wounded. Protocol III, signed in 2005, allowed the use of the red crystal, a diamond shape, as a designation for medical personnel. The purpose was to extend protections to Magen David Adom, Israel’s emergency medical service.

Enforcement and Sovereignty

The initial basis for enforcing the laws of war was reciprocity. It reflected a pragmatic focus on conflict between sovereign states. The assumption was that a signatory nation would act appropriately because if it did not, it opened itself to reprisals from the enemy. The inherent problem with such a concept was a lack of consistency in determining appropriate reprisals. In addition, the ICRC opposed reprisals because they punished one group of individuals for the deeds of another. Convention signatories could not agree on appropriate provisions, however, citing military necessity. As a result, no such stipulation entered the Geneva Conventions before the 1929 Convention on Prisoners of War, which forbade reprisals against captives. That year’s meeting also introduced a new means of enforcement, a “protecting power” to represent a belligerent by observing its soldiers in captivity and issuing complaints on its behalf. This structure allowed for better communication, although its effectiveness was dubious in that it required the consent of three sovereign states: (1) the protecting power, (2) the captive’s state, and (3) the captor’s state.

The widespread infliction of reprisals on civilians in the first half of the 20th century, including aerial bombings and punishment of enemy populations, bolstered the case for broader protections. The 1949 Convention relative to the Treatment of Civilians banned reprisals against noncombatants, including collective punishment, taking hostages, and pillaging. The 1977 protocols extended prohibitions further to reprisals against “civilian objects.” Critics

argued that these protections for resistance fighters infringed the occupier’s right to act out of military necessity. In practice, belligerent states after 1949 tended to define conflicts in ways that skirted these restrictions.

After 1949, Articles 146 and 147 of the Fourth Convention used the power of signatory states to punish “grave breaches” of its provisions: “willful killing, torture or inhuman treatment, including biological experiments, willfully causing great suffering or serious injury . . . and extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.” The convention called for belligerent parties to prohibit grave breaches by law and, in wartime, to agree on an umpire who would oversee procedures for prosecution. In 1977, Protocol I added to the number of grave breaches and required signatories to participate in extradition procedures and fact-finding commissions. Individuals committing breaches were subject to trial, as were their superiors, and their governments were liable to pay compensation. Enforcement had thus evolved to address both states and the individuals within them.

Terrorism

Terrorism, which usually involves violence committed by a nonstate actor on citizens of a state, has presented an additional problem for the Geneva Conventions. Beyond Protocols I and II, which prohibit acts of terror “at any time and in any place whatsoever,” there is no explicit language dealing with terrorism or appropriate responses to it. In what has been called the Global War on Terrorism, the complexity is evident. Those fighting on behalf of the Taliban in Afghanistan were attached to a state and were therefore covered under the Third Geneva Convention relating to prisoners of war. For members of al Qaeda, the lack of state affiliation suggested that they would be subject to criminal proceedings. Both the Third Convention and Protocol I do stipulate, however, that a prisoner whose status is unclear should be treated as a prisoner of war until a ruling by a tribunal.

Within the United States, the status of detainees as part of the Global War on Terrorism has brought much attention to this problem. The George W. Bush administration classified suspected

terrorists as “unlawful enemy combatants,” thereby declaring them to be unprotected by the Geneva Conventions. Under this designation, it held detainees for indefinite periods of time and used military commissions to try their cases. The administration’s supporters argued that both the convention and regular criminal procedures were inadequate to address the problem of a sustained campaign of violence against the United States and other countries by nonstate actors. Opponents of this approach argued that it contained inherent contradictions, such as the disregard of Afghan fighters’ attachment to a belligerent nation during a professed state of war. In *Hamdan v. Rumsfeld* (2006), the U.S. Supreme Court sided against the administration, arguing that the military commissions violated both the Uniform Code of Military Justice and Common Article 3 of the Geneva Conventions, which required regular judicial procedures in all cases of noninternational conflict. In response, Congress passed the Military Commissions Act of 2006 to authorize the administration’s practices. Two years later, the Supreme Court declared a portion of this law to be unconstitutional in that it suspended the writ of habeas corpus, but it left the remainder of the law in place. The controversy of the Global War on Terrorism well illustrates the ongoing challenge of adapting the laws of war in an increasingly complex global setting.

Gregory Kupsky

See also al Qaeda; Crimes, War; Global War on Terrorism; Hague Conventions; Human Rights; Laws of War; Nuremberg War Crimes Trials; Prisoners of War; Red Cross, International Committee of; Terrorism; Tokyo War Crimes Tribunal; Uniform Code of Military Justice; United Nations; Warfare, Biological; Weapons, Chemical

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GENOCIDE

Without question, the 20th century has been permanently scarred by genocides. That is not to say that genocides have not occurred in earlier times; one need only to look at Imperial Rome during the Jewish uprising in ancient Palestine to find government-sponsored violence against a particular group of people. The extensive killing of Armenians at the hands of the Ottoman Turkish government was the first “modern genocide” of the 20th century, and showed how thorough, systematic, and widespread mass exterminations could be when a government was behind the planning. This entry provides an overview of 20th-century genocide and discusses the UN Genocide Convention.

It was the knowledge of Enver Pasha’s Ottoman Turkish Empire’s attempt to wipe out the Armenian population that inspired a Polish-Jewish jurist, Raphael Lemkin, to try to formulate a concept that would explain what he believed the National Socialist regime was attempting to do to the Jewish population of Europe. To Lemkin, the word *genocide* came closest to what he saw happening during World War II. Taking the root *genos* from the Greek term for family, tribe, or race and combining it with *cide*, from the Latin *occidere*, to kill, he coined the term *genocide* in 1944 in his work *Axis Rule in Occupied Europe*. After the war, Lemkin went on to campaign for a set of international laws that would provide a legal framework for the crime of genocide. In 1948, Lemkin was the leading advocate for the creation of the UN Convention on the Prevention and Punishment of Genocide, generally called the Genocide Convention. Although Lemkin’s original definition of genocide included the political and/or cultural destruction of a people, the Genocide Convention produced a narrower legal framework and was made the UN Genocide Convention on December 9, 1948.

Under the UN Genocide Convention, genocide is considered to include “any acts committed with the intent to destroy, in whole or in part, a national, ethnical, racial or religious group.” The convention specifically covers infliction of physical or mental harm to members of the group, forcible removal of children to another group, the creation of conditions that will bring about the physical destruction of the whole or part of the group, and murder. The most disputed portion of the UN Genocide Convention is with the phrase “the intent to destroy.” “Intention” is often quite difficult to prove, since even in many modern cases of genocide, no written, direct orders were given. Instead, it falls to the historian to make connections within the chain of command, tracing the interplay between the actual killers and those in powerful positions issuing the actual orders to destroy.

To many legal and academic scholars (and to Lemkin at the time), the UN Genocide Convention falls short in that it fails to consider members of social or political classes marked for eradication, such as the Kulaks under Stalin’s Soviet Union. In other cases, the framework does not allow for the destruction of a culture, such as the Tibetan peoples of China. Despite its perceived deficiencies, the UN Genocide Convention does provide a working definition of genocide, and all 140 countries that have signed the convention are required by international law to prevent and to punish acts of genocide. In addition, the UN Genocide Convention has been put into place in the International Criminal Court, created in 2002, and ratified in 2007 by 104 states. Although these statistics seem impressive, it was 1988 before the United States agreed to the convention, and to date, the United States refuses to recognize the jurisdiction of the International Criminal Court. Despite these drawbacks, in 1998 the International Criminal Tribunal for Rwanda found the country’s former Prime Minister, Jean Kambanda, guilty of genocide, marking him as the first person to be found guilty under the UN Genocide Convention’s terms.

Many nonacademics tend to believe that National Socialist leaders tried at the International Military Tribunal at Nuremberg were convicted of planning and carrying out genocide, but they were not. The legal language of the Genocide Convention clearly stated that crimes committed before the convention was ratified (in 1951) could not be prosecuted, and

therefore, no Nazis were ever convicted of the crime of genocide, despite there being very little question that the regime practiced a planned policy of genocide. To Adolf Hitler and his Nazi colleagues, racial theories “proved” that the Jews represented the gravest threat to German racial purity and to the creation of a *Volksgemeinschaft* or “people’s community.” It is also important to note that Nazi racial thinking was flexible enough to target other groups of people for annihilation if they were perceived to pose a potential threat to the Aryan people’s ideal community. Those also not included in the *Volksgemeinschaft* were physically and mentally handicapped people, the “work shy,” prostitutes, the Roma and the Sinti, and even some political prisoners. Although genocide was directed from the central leadership in Berlin, the process involved thousands of people who had accepted the need to classify individuals according to categories of race and racial health. In many respects, the Nazi regime’s actions most clearly correspond to the definition of genocide, whereby a government clearly demonstrated its intent to physically and culturally destroy a defined group of people, but of course, it would not be the last attempt by a government to commit genocide.

In 1975, Cambodia, ravaged by war and seething with a discontented population, experienced the Khmer Rouge revolution. Spurred on by a quick victory, Khmer Rouge leaders, including Pol Pot, claimed that the Khmers were a superior race among Southeast Asians, and they began forced evacuations of urban people, collectivization drives in the agrarian sector, reclassifications of the population, and massive, deadly purges. By 1979, the leadership of the Khmer Rouge had killed approximately 20% of the Cambodian population in their drive to be ruthless and efficient, separating children from parents and killing any potential opponents of their regime. Much like the Nazi regime, not only were people physically destroyed, so too were thousands of years of cultural heritage obliterated in the destruction of Buddhist temples and Catholic churches.

In the 1980s and 1990s, the former Yugoslavia degenerated, not into revolution as had happened in Cambodia in 1975, but rather into war, “ethnic cleansing,” and ultimately, genocide. Like the Khmer Rouge and the Nazis, Serbian nationalists wanted to create a “pure” Serbian state and society. In 1987, Slobodan Milosevic encouraged Serbians to reclaim

their historical rights to land, and he tapped into a sense of nationalism filled with resentment over all past injustices supposedly carried out against Serbs by Croats, Slovenes, and Muslims. Serbia was largely portrayed as the victim of all victims in all of history. Like the Nazis and Khmer Rouge leaders, Serbian officials began their own process of classification to determine who would be eligible for privileges and who would be displaced and/or killed. Serb nationalists, led by Milosevic, did not bother with fine details. Muslims were marked for death; Croats were marked for violent mistreatment. Place names such as Srebrenica and Kosovo came to symbolize all of the genocidal violence that Milosevic's government could unleash. Sexual violence against Muslim women and girls was also used as a means of destroying Muslim identity, family, and community life as the ultimate humiliation. At The Hague Tribunal, Slobodan Milosevic and some of his coconspirators were found guilty of genocide due to the wording of the Genocide Convention, "the intent to kill, in whole or in part" a portion of the Muslim community.

Despite the threat of legal action, genocides continue to erupt in modern societies. Beginning in 1994, the world witnessed massacres of men, women, and children in the African nation of Rwanda. At first, journalists and members of the United Nations labeled the mass killings as "genocide in part"; however, with half a million Tutsis murdered, and the drive on the part of the government and the Hutu people to exterminate every last Tutsi, it soon became clear that Rwanda also fit the category of genocide in whole. Unlike many reports of the late 1990s that tended to interpret the violence as "age-old tribal enmity," scholars of Rwandan history point to European-created false categories between Tutsi and Hutu peoples. German and Belgian imperial colonizers labeled the tall, slim Tutsi as a foreign-born people who had conquered the shorter Hutu. This explanation became ingrained in Rwandan society as Belgian administrators chose to favor the Tutsi and use the Hutu as forced labor. This castelike system remained in place until the 1959 uprising of the Hutu, calling for an end to Tutsi domination. By 1961, Rwanda was officially declared a republic, but in reality, the Tutsi were now excluded from political positions and thousands of Tutsi fled to neighboring nations, marking them as potential traitors to the Rwandan nation.

The genocidal campaign of Hutu against Tutsi erupted in April 1994 when the plane of Rwanda's president Juvénal Habyarimana was shot down. As in the cases of the Khmer Rouge and the Turkish campaign against the Armenians, the Hutu-led government marked the Tutsi as a foreign, traitorous presence that needed to be eliminated. The elites of the government found the Hutu population willing to cooperate in the brutal murders using machetes, hoes, and other implements to kill their Tutsi neighbors. In this respect, the Hutu genocidal campaign differed from the Nazi Holocaust in that there appeared to be no end to willing Hutu participants in the murder of their neighbors.

Unfortunately, today scholars and legal experts alike can point to numerous cases of genocide such as the killings in Cambodia under the Khmer Rouge, the "ethnic cleansings" in Bosnia, and the cases of modern genocide in Rwanda and in the Darfur region of Sudan, to name but a few. Unfortunately, the mantra of "never again" that followed public awareness of Nazi crimes in the Holocaust has failed to prevent outbreaks of genocide in subsequent generations.

Beth A. Griech-Polelle

See also Bosnia Intervention; Crimes, Military; Crimes, War; Geneva Conventions; Human Rights; Kosovo Intervention; Nuremberg War Crimes Trials; Rwandan Genocide

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GERMANY

Germany is a country located in western Europe. It has a common border with nine countries: Austria, Belgium, the Czech Republic, Denmark, France, Luxembourg, the Netherlands, Poland, and Switzerland. Germany covers an area of 357,000 square kilometers and has 81.8 million inhabitants (2011), making it the second most populous state in Europe (after Russia) and the most populous member state of the European Union. The capital is Berlin.

Germany is a parliamentary democracy. The legislature consists of two chambers, the *Bundestag* and the *Bundesrat*. Members of the Bundestag are chosen every 4 years in general elections. The Bundesrat is made up of members of the 16 German states. The members of the Bundestag elect the head of government (chancellor). The head of state is the German president (*Bundespräsident*). In peacetime, the secretary of defense is the head of the armed forces (*Bundeswehr*). In time of war, the chancellor assumes that position (Art. 115a of the constitution).

With a gross domestic product of 2.6 trillion euros (2011), Germany has Europe's largest economy and is one of the world's leading exporters of manufactured goods. The German defense budget for 2012 was 31.7 billion euros. Germany has been a member of the North Atlantic Treaty Organization (NATO) since 1955, of the European Union since its inception in 1958, and of the United Nations since 1973.

This entry discusses Germany's history since World War II, with a focus on its security policy and military.

Historical Development: The German Security Policy During the Cold War

After the end of the Second World War, the victorious Allies failed to agree on a joint policy toward the defeated German Reich. In May 1949, the

American, British, and French zones of occupation became the Federal Republic of Germany (FRG, West Germany), a democratic state with a free market economy. The Soviet zone became the German Democratic Republic (GDR, East Germany), a socialist state.

During the Cold War, Germany was at the center of the East-West confrontation. The Federal Republic sought security through close cooperation with Western democracies, particularly the United States. The Western powers sought West German contributions in the confrontation with the Soviet Union. Immediately after the outbreak of the Korean War, American and West German officials discussed how West Germany could contribute to the common defense of the West. In August 1954, an attempt to create a European Defense Community failed after the French National Assembly voted against the proposal. Instead, the West German Bundeswehr came into being in November 1955 as part of NATO. During the height of the Cold War, the Bundeswehr had roughly 500,000 active soldiers.

The West German constitution (*Grundgesetz*) of 1949, which initially had not made any references to the military, was amended to provide a legal basis for creating the defense forces (Article 87a of the constitution). The amended constitution forbade unilateral West German military actions; the integration of German forces into NATO made any German aggression against its neighbors impossible (*strukturelle Nichtangriffsfähigkeit*).

The Bundeswehr's task during the Cold War was to repel a Soviet attack along NATO's eastern border. While there were nuclear warheads stationed on the territories of East and West Germany during the Cold War years, those weapons were not part of the German military arsenal but belonged to the United States or to the Soviet Union. Most nuclear weapons have been withdrawn from German territory after the end of the Cold War.

The Bundeswehr considered itself from the beginning a military in a democratic society. This referred both to the task of protecting a democratic society from external threats and to its internal structure (*Innere Führung*, leadership development and civic education). The Bundeswehr considers the soldiers "citizens in uniform." Their basic rights are limited during the time of service only to the extent that these restrictions are necessary for the military tasks they perform. Soldiers maintain active and passive voting

rights. The goal of the concept of *Innere Führung* was to make the Bundeswehr part of German society and to avoid mistakes of earlier periods when the military considered itself an elite within society or even became an exclusive “state within the state.” The *Wehrbeauftragte* (ombudsman for the military forces) investigates human rights abuses in the military and reports directly to parliament.

The German Democratic Republic was created in October 1949 and became a member of the Warsaw Treaty organization when it was founded in 1955. The strength of East Germany’s National People’s Army was roughly 170,000 men. The National People’s Army was considered one of the premier armies in the Eastern bloc.

One of the most important aspects of German reunification in 1990 was the security question. The Bonn government and the Western World War II Allies agreed that a unified Germany should not seek security outside the established institutions but as part of NATO. U.S. president George H. W. Bush discussed this question with Soviet secretary general Mikhail Gorbachev at the Malta summit in December 1989. They reached an agreement that Germany should stay a member of the Western defense alliance. The Two-plus-Four treaty of 1990 governing German unification also mandated a reduction in troop levels to 370,000. The East German National People’s Army was dissolved immediately after unification. Roughly 20,000 officers and noncommissioned officers were integrated into the Bundeswehr.

The end of the Cold War and the unification of Germany marked the beginning of new tasks for German security policy and for the Bundeswehr. Germany is now surrounded by friendly neighbors; the task of the Bundeswehr is no longer primarily to provide security for the homeland. Instead, the Bundeswehr took over responsibilities in peace-keeping missions on the Balkans, in Africa, and after 2001 in combating international terrorism. This required a change in the German population’s thinking about the military and modifications in the Bundeswehr’s structure.

New Challenges: Current Security Issues and the Structure of the Bundeswehr

Since the end of the Cold War, the Bundeswehr has undergone numerous changes. The number of active

service members has been reduced from half a million to less than 200,000 personnel.

During the Cold War, the Bundeswehr’s task was the defense of the national borders. In July 1994, at the height of the Balkan civil war, the German Constitutional Court (*Bundesverfassungsgericht*) declared that the term *defense* did not only refer to the protection of the immediate borders but also included crisis reaction and conflict prevention. This allowed the Bundeswehr to take part in UN-led operations outside the territory of NATO member states (“out of area”). The court also mandated *Parlamentsvorbehalt* (parliament approval). The Bundestag has to agree to every military intervention abroad. Since then, the Bundeswehr has participated in a number of out-of-area missions, including the International Security Assistance Force in Afghanistan.

Women have served in the Bundeswehr’s medical service since 1975. In 2000, the European Court of Justice ruled that women had the right to serve in all military functions. There are currently around 18,000 women on active duty.

Traditionally, both the West German Bundeswehr and the East German Volkarmee relied on conscripts. However, on July 1, 2011, conscription to the Bundeswehr was abolished. It is an all-volunteer force now.

Georg Schild

See also North Atlantic Treaty Organization

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GIAP, VO NGUYEN

Vo Nguyen Giap rose to prominence as the most important military figure in 20th-century Vietnam. His career encompassed World War II, the war for National Liberation from the French (1946–1954), and the war for national reunification (1960–1975), dominated by the conflict with the United States from 1965 to 1972. As founder and frequent head of the People's Army of Viet Nam (PAVN), Giap's leadership skills and strategic thinking led to military victories that, though costly, in the end brought Vietnam independence and reunification. His later literary works highlighted the importance of the military as an instrument of the Indochinese Communist Party (ICP, later the Vietnamese Communist Party) and as a powerful force behind "the revolution." This entry discusses Vo Nguyen Giap's rise to power and the struggle for Vietnamese independence.

Early Years: A Nationalist Identity

Giap was born in 1911 (Giap's birth year remains disputed and it is also listed as 1910 and 1912) in central Vietnam, then French Indochina, and being from a respected family, he attended one of the most progressive schools in Vietnam, the Quoc Huc school in Hue. As a teenager, he joined an underground Nationalist group and became one of a growing number of students to protest French colonial policies, even serving time in prison for anti-government activities in 1930. On his release, he continued his studies in history and law, worked as a journalist, and taught at a private school in Saigon. But it was as a Marxist and Vietnamese nationalist that Giap found his true calling. Joining the ICP in the 1930s, he was among the first generation of Vietnamese communists who found themselves caught squarely in the jaws of history when, in 1940, the Japanese invaded French Indochina. With the Japanese move into northern Vietnam, and eventually into all of French Indochina, the Vietnamese became, as Ho Chi Minh stated, "the slaves of slaves," as the heavy burden of French colonialism was increased by the demands of Japanese overlordship. Fearing arrest for his nationalist activities, Giap left French Indochina for China where he met up with Ho Chi Minh and other members of the ICP and helped found the Vietminh—the League for the

Independence of Vietnam—which would be Giap's political home in one incarnation or another for the rest of his career. For the Vietminh, nationalism and the "people's war" were openly identified as the means to drive the Japanese out of the country, end French imperialism in Vietnam, and finally achieve national independence. An ardent nationalist since his teens, Giap was an acknowledged proponent of Vietnamese independence, but it was with the people's war that he would make his name.

People's War

"People's war," Giap wrote, was "to educate, mobilize, organize and arm the whole people" (1961, p. 29) to participate in a combined political and military struggle (known in Vietnamese as *dau tranh*) needed for victory. Although Giap was always politically active, it was with the military aspect of *dau tranh*, or people's war, that he became widely known. Military *dau tranh* was based on the three-stage Maoist model of revolutionary warfare, which in Stage 1 called for the establishment of a popular base. The Vietminh base area was located in the mountainous areas of northern Vietnam; from there, members recruited, trained, and spread their political message among the rural population. With Stage 1 more or less accomplished, Giap's Armed Propaganda Detachments, formed in December 1944, moved into Stage 2 and utilized the surrounding countryside and a sympathetic populace to engage in low-level guerrilla activities against the Japanese.

After the Japanese coup de main against the French colonial government in March 1945, Giap's detachments began training with American soldiers of the Office of Strategic Services as part of the American effort to gain intelligence on Japanese activities in Vietnam and recruit Vietnamese agents to harass their common enemy. As it turned out, military *dau tranh* meshed well with the needs of the Office of Strategic Services, and most members of the American group formed very favorable impressions of Giap and other Vietminh with whom they worked. In April, the Armed Propaganda Detachments were absorbed into Giap's new People's Liberation Army, which would eventually become the People's Army of Viet Nam.

Although the People's Liberation Army saw very limited action, it was extremely well placed to

capitalize on the political vacuum caused by Japan's rapid surrender in August 1945. Giap and his forces left their northern bases and marched southeast to Hanoi to join in the "liberation" of that famous city from Japanese control. As relative peace and stability were reestablished, Giap paraded his best forces before the citizens of Hanoi and the American Office of Strategic Services delegation sent to oversee the Japanese surrender. In the newly established Provisional Government, Giap's duties expanded as he assumed a key post as minister of the interior. In later years, he would be North Vietnam's defense minister and commander in chief of the People's Liberation Army.

Unfortunately for Vietnam, the new peace of 1945 was not to last. The refusal of the French to accept Vietnam's independence led to a war that would continue for the next 8 years (1946–1954). During this time, Vo Nguyen Giap further honed the military skills for which he was already well known within the ICP. His advantageous use of the terrain and populace, including appeals to the people to aid the war effort in the name of the nation, combined with an emphasis on timing, planning, and carefully utilizing often meager resources, prevailed in the end against larger and wealthier enemies. Also key to Giap's successes was his ability to analyze the strategic situation, predict his enemy's moves, and plan his own accordingly. As he became the master of warfare in Vietnam, Giap concluded that maintaining well-established base areas, training troops, honing the popular revolutionary message (Stage 1), and continuing low-level guerrilla actions (Stage 2) alone could not win the war against the French. To accomplish the goals of military *dau tranh*, he contended that the Vietminh needed at least a few large, well-equipped regular units capable of engaging in both conventional and unconventional warfare, which constituted the third and final stage of Maoist revolutionary warfare.

Although Giap's new divisions did well against the French along the Chinese border in 1950, his regular forces were mauled by French forces at both Vinh Yen and along the Day River in 1951. As allowed for in a people's war, Giap took full advantage of the fluidity among stages and withdrew to his northern bases to rebuild, train, and plan. While the Vietnamese forces enjoyed some success in the final months of 1951, it was Giap's stunning success at Dien Bien Phu in 1954 that solidified his military

prowess. In that valley, which Bernard Fall called "hell in a very small place," Giap capitalized on the French failure to understand the flexibility of military *dau tranh* and the power of their political mobilization (political *dau tranh*), which made incredible sacrifices possible with a people's war. He mobilized both guerrilla and regular units to cut off French supply routes, built up artillery emplacements on what the French had assumed was impassable mountain terrain, assembled combat troops that outnumbered the French 5 to 1, and devastated French morale in what became an overwhelming battle of attrition. The victory coincided perfectly with the French-Vietnamese negotiations at Geneva, leading to an armistice that once again brought Vietnam a brief peace.

The 1954 agreement at Geneva, however, led to the creation of two nations. In the north, Giap, the minister of defense in the newly inaugurated Democratic Republic of Vietnam, would soon lead North Vietnamese forces in another prolonged war. What had become the hallmarks of Giap's style of warfare to achieve independence would be used again in an effort to reunify the country by defeating the anticommunist government of South Vietnam and its American ally.

Between 1965 and 1972, the United States and South Vietnam fought South Vietnamese communist guerrillas, guerrilla operatives from the Democratic Republic of Vietnam, and, later, People's Army of Viet Nam regulars. Giap's name became famous in the United States in conjunction with people's war in the South, the strategic success of the Tet Offensive in 1968, the diversionary siege of Khe Sanh in the months leading up to Tet, and a protracted war of attrition that sapped American public support for the war much as French public support had been depleted in the 1950s. Giap's use of people's war, based on the principles of building a solid base of popular support committed to an ideal, whether for overthrowing the colonial regime or for kicking out the foreign support of an unpopular government, would prove decisive in this conflict as well. Giap's ability to recruit and train from among a popular base and then engage the enemy on his own terms, and demonstrate clearly in engagements large and small the ability and will to fight for as long as necessary, made him a role model for other insurgents, especially in Asia. Although no subsequent revolutionaries managed to achieve Giap's levels of

success, his legend looms large. Vo Nguyen Giap is perhaps more famous in the Western world than Mao Zedong, the developer of Maoist strategy, for it is Vo Nguyen Giap who is the embodiment of victorious *dau tranh*, Vietnamese people's war, over large and powerful Western enemies.

Giap authored both books and articles addressing the art of people's war and revolution, as well as memoirs focusing on the victory at Dien Bien Phu, the Vietnamese Communist path to victory, and the war against the United States. Among the most famous are *People's War*, *People's Army*, and *Unforgettable Days*.

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See also Vietnam War

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GLOBAL POSITIONING SYSTEM

The NAVSTAR Global Positioning System (GPS) is a one-way, space-based radio source for the world's most accurate time and location information. GPS employs an artificial constellation of at least 24 earth-orbiting satellites. With four satellites in view, it is possible to know continuously one's altitude, latitude, and longitude to within a few meters and the time of day exact to within a few nanoseconds. This entry discusses the development of GPS and its users.

GPS has become the U.S. military's foremost, indispensable asset for fighting wars. Planning for the system began in 1973, and its public debut came during the Persian Gulf War. Since then, troops from all the military services have come to rely on GPS precision to synchronize operations, provide fundamental navigation information, pinpoint hostile targets, and locate each other.

Like the integrated circuit, the Internet, and other technologies with strong military connections, GPS time and location are responsible for major transformations in civilian life. GPS signals are now available continuously, globally, and at no charge to just about everyone with a receiver, with civilian users far outnumbering military users. Innovations combining GPS coordinates with portable computing power, communications, and map data have led to an explosion of new civilian applications—from time-stamping financial transactions to managing vehicle fleets to location-based advertising on cell phones. The system's federal overseers characterize GPS as a technological success story and deem GPS an indispensable but vulnerable utility.

Components

The GPS consists of components in space and on the ground. Unmanned launch vehicles deliver the satellites into space, into circular orbits 18,000 kilometers (11,000 miles) above the earth, and the satellites orbit once every 12 hours. From the constellation, accurate time and position information, derived from atomic clocks on board and from data sent from the ground, are transmitted to receivers on earth. A network of ground stations tracks the satellites, monitors their health and orbits, and sends information to them to ensure that the data the satellites transmit are accurate. User equipment can range from a sophisticated system in a military aircraft to an inexpensive receiver in a rental car or a handheld receiver carried by a hiker.

How It Works

Each GPS satellite transmits signals to indicate its location in current time. All the satellites are synchronized to transmit at the same instant. The signals, moving at the speed of light, arrive at a receiver at slightly different times because each satellite is at a different distance. The GPS receiver calculates the distance to each satellite by comparing the arrival times of each signal.

GPS depends on precise atomic frequency standards (also known as “atomic clocks”) and distributes Coordinated Universal Time, an international time scale closely synchronized with international civilian scientific bodies and shared with civilian users. The atomic clocks in the GPS system are so accurate that they can take into account Albert

Einstein's understanding of time, space, and relativity. Because GPS satellites experience less gravity and move at high velocity, their clocks appear to operate at a different rate than those on earth. Since all the clocks in the system must be synchronized, a net correction of 38 millionths of a second per day must be added to the satellite clocks' time signals. Without this tiny correction, the system could not work properly.

History

Research for a satellite-based radionavigation system began in the wake of the satellite *Sputnik* in 1957. In the years that followed, competing satellite navigation systems emerged in the Department of Defense—most notably Transit at Johns Hopkins University Applied Physics Laboratory, Timation at the U.S. Naval Research Laboratory, and Project 621B at the Aerospace Corporation for the U.S. Air Force. GPS formally began in 1973 when the Department of Defense consolidated the efforts and established the Joint Program Office under the U.S. Air Force to procure, run, and maintain the system.

GPS required the development, testing, and refinement of receivers, space-qualified atomic clocks, and other components. As designs evolved, positioning and navigation accuracy improved. Rockwell International (now a division of Boeing) was the prime contractor for building the first 40 GPS satellites, the first of which launched in 1978. By 1986, 18 satellites were in orbit, making the system usable for many applications. The full constellation of 24 satellites needed for global coverage was in orbit by early 1995. More than 30 satellites were operational after 2010.

In the opening salvos of the Persian Gulf War, the first U.S. GPS-guided weapons were delivered against eight targets in Iraq in 1991. This and subsequent conflicts in the former Yugoslavia, Iraq, and Afghanistan have demonstrated the effectiveness of the system for U.S. and allied military purposes. GPS now forms the core navigation system for U.S. military aircraft, vessels, vehicles, and personnel. It has changed the nature of weapons targeting, search and rescue, supply delivery on the battlefield, and command and control. Autonomous vehicles dependent on GPS for navigation have become increasingly important as well. Dependence on GPS is now so great that military planners are strengthening

present system vulnerabilities and developing whole new alternatives. Providing aid for forces in the air and on the ground, GPS has contributed to the use of space as a platform for war.

Civilian use of GPS grew haltingly. GPS military planners in the 1970s had foreseen eventual civilian use of the satellite signals, but at less than full accuracy. They incorporated a design feature, termed *selective availability*, that deliberately introduced timing errors into civilian transmissions. This was also intended to thwart enemy access to the higher precision military signal. Manufacturers of large GPS receivers for military users—Texas Instruments, Rockwell Collins, Magnavox, and Interstate Electronic—were the first to offer them to civilians, especially scientists and surveyors interested in precise geodetic data. The Magellan Systems Corporation marketed the first commercial handheld GPS receiver in 1989; other firms soon followed with devices aimed at hikers, boaters, and other recreational users. GPS burst into public awareness during the Persian Gulf War in 1990 and 1991. In the trackless desert, troops used GPS so extensively that there were too few military receivers. To satisfy demand, the Department of Defense acquired civilian units and temporarily suspended selective availability to allow everyone access to the more precise military signals. Eliminating selective availability in 2000 helped boost the civilian market for GPS. An explosion of applications ensued.

There are still two levels of service from GPS: (1) the Precise Positioning Service for U.S. and allied military users that is encrypted and jam resistant and (2) the Standard Positioning Service that is for civilian users.

Having access to crucial time and positioning information has long been an important goal for nations with ambitions for worldwide influence. Other nations began developing their own satellite navigation systems as alternatives to the U.S. military-controlled GPS. During the Cold War, the Soviet Union developed GLONASS (Global Orbiting Navigation Satellite System), which Russia continues to operate. After 2000, a consortium of European nations developed Galileo. Initially intended as a commercial service, it has changed to a free service similar to GPS. China and India have independent systems of their own in development, and Japan is launching satellites designed to enhance GPS. The extent to which the operators of

these systems will compete or collaborate as global navigation satellite systems proliferate remains an unanswered question.

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See also Defense, Department of; Navigation, Aerial; Navigation, Sea; Space; Time, Military

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GLOBAL WAR ON TERRORISM

The September 11, 2001, attacks on the United States focused the country and its leadership on the nature of terrorism and its real threat to American interests. The very label “Global War on Terrorism” became an embedded element of U.S. policy and the common lexicon for years. Subsequent large-scale terrorism against Spain, the United Kingdom, India, and a host of other nations reinforced a common understanding of the threat over the next decade. This entry discusses global terrorism from the Cold War era to the present, including the September 11, 2001, attacks, with a focus on U.S. policy.

Often lost in the immediate aftermath of September 11, 2001, is the lengthy history of terrorism in the modern age, particularly after World War II. Although relatively rare in the Soviet Union and many Western nations during the Cold War,

terrorist violence flourished in what was known as the Third World. Scholars have focused on the various cultural, economic, and political origins of this violence. Many revisited similar sources after the collapse of the Soviet Union and the breakdown of order in the many failed states inhabiting the post-Cold War globe.

Despite their distance from upheaval, Europe and America were not untouched by terrorism in the past 40 years. By the early 1970s, the cushion separating affluent, industrialized nations from deliberate acts of violence began to dissipate. The resurgence of the “Troubles” in Ireland, the hostage crisis at the 1972 Munich Olympics, and an increasing drumbeat of assassinations, airline hijackings, and kidnappings quickly brought home the realization that no part of the world was truly safe.

Terrorism in the Modern Era

After 1945, terrorism became an unfortunate by-product of the Cold War. Without recourse to conventional methods of power, unconventional violence became standard operating procedure for the United States, the Soviet Union, and their respective proxies. Car bombings, assassinations, as well as terror attacks against civilian and military targets were all common devices. Reliable studies of U.S. activity in Iran, Guatemala, and Cuba describe an array of methods utilized to intimidate and terrorize both real and perceived threats to American security.

By the 1970s, the growth of international terrorism accelerated even beyond Cold War standards. The attack on Israeli athletes at the Munich summer Olympics captivated and horrified a global audience. Similarly, when a civilian airliner was hijacked and diverted to Entebbe, Uganda, in 1976, the world again held its breath and celebrated when a daring Israeli mission succeeded in rescuing the hostages. Overall, terrorist incidents rose alarmingly between 1968 and 1982. Attacks focused on individuals and facilities in western Europe, the Middle East, and Latin America.

American policy during this period largely treated terrorism as a crime subject to civilian authority. At home, the Federal Bureau of Investigation and Federal Aviation Administration assumed primary responsibility for policy. Abroad, the State Department was the lead agency. By the time Gerald Ford became president, American officials increased

airport security measures in major terminals throughout the country. Precautions included an embryonic electronic system created to check passenger luggage as well as tighter visa, immigration, and customs procedures.

From 1979 onward, the Iranian Revolution and the subsequent hostage crisis defined America's particular approach to terrorism. The Carter administration's initial responses to the crisis were consistent with established precedent. With the State Department taking charge, the United States attempted a regimen of diplomatic initiatives and, when these failed, a series of economic sanctions designed to successfully resolve the standoff with Tehran. The 1980 military rescue mission was invoked only as a last resort and with great reluctance. The schism it caused with Carter's cabinet, which led to the eventual resignation of Secretary of State Cyrus Vance, represented the depths of disagreement over a military response to the hostage crisis.

Apart from the Iran situation, Carter's term ended on a bleak note regarding global terrorism. A 1979 report by the Central Intelligence Agency's National Foreign Assessment Center marked that year as the worst in terms of casualties since the agency began keeping records in 1968. In sum, what the Tehran hostage crisis represented was a mere glimmer of the future, one in which American policy and capabilities were wholly inadequate to the task of addressing terrorism.

Ronald Reagan became president in part because of the Iran hostage crisis. It allowed him to portray Carter as a weak, vacillating leader and provided the former California governor with a chance to make a clean break with what the public perceived as failed policy. Once in office, Reagan was true to his campaign rhetoric. After 1981, official U.S. policy framed terrorism under the category of "low-intensity conflict," placing it in the same category as insurgency and illegal drug trafficking. While it did not pose a direct threat to the United States by definition, the administration saw the primary danger of terrorism in the potential "cumulative nature" of problems it could cause, specifically the isolation it might create between America and its political allies and major trading partners.

From the White House's perspective, terrorism was a component of the larger Cold War conflict with the Soviet Union. Consequently, when it identified the sources of terrorism, the administration

focused specifically on state-sponsored terrorism and concentrated its efforts on host governments known to be supporting terrorist groups. American policy responses thus applied to the Soviet Union, which policymakers believed was using terrorists as Cold War proxies. They also applied to other nations, such as Libya, a country that openly sponsored terrorist attacks against the West.

Throughout the 1980s, a multiplying series of attacks against the United States and its citizens placed terrorism in the forefront of American policy. The bombing of the U.S. Marine barracks in Beirut in October 1983, killing 241 service members, sent a shockwave through the country. Smaller scale terrorist attacks continued against U.S. military personnel stationed overseas in West Germany and West Berlin. The brief period between June 1985 and December 1988 witnessed the hijacking of TWA Flight 847 to Beirut, terrorist assaults on airports in Rome and Vienna, the capture of the passenger liner *Achille Lauro* as it cruised the Mediterranean, and the midair explosion that destroyed Pan Am Flight 103 over Lockerbie, Scotland. Leon Klinghofer, a disabled passenger murdered by terrorists on the *Achille Lauro*, and Robert Stethem, a U.S. Navy diver tortured and killed during the Flight 847 standoff, came to represent the increasing furor over terrorism.

As the frequency of attacks grew, the American public became increasingly critical of policy considered too lenient toward terrorist groups. Congressional pressure to enhance U.S. counter-terrorist capability grew in concert with this discontent. In 1984, Senator Arlen Specter (R-PA) proposed changes to U.S. policy that would permit the "forcible apprehension" of terrorists. Public officials also ratcheted up U.S. rhetoric regarding terrorism and stronger countermeasures. Secretary of State George Shultz endorsed the idea of an "active defense" against the threat and called for a "preemptive capacity" to "deter terrorism by way of raising the price or 'ante' of terrorism activities" (Memorandum for the Vice President from C. Boyden Gray, 1985, p. 1).

The search for a more aggressive methodology inevitably led policymakers to the U.S. armed forces. In January 1984, the U.S. Navy authorized OP-06D, the "Red Cell" unit whose mission was to identify security vulnerabilities on American ships and installations. The Red Cell was the institutional

counterpoint to SEAL Team Six, which served as the navy's primary antiterrorist unit after 1981. The U.S. Army eventually developed Delta Group in 1977, which served as that service's equivalent of a SEAL Team. All of these actions were unified when Congress created the Special Operations Command in 1986, mandating that American special forces were responsible for the "immediate and primary capability to respond to terrorism" (Bruner, Bolkcom, & O'Rourke, 2001, p. 1).

Despite the improvements in military counterterrorism capability, American officials were reluctant to commit forces to this new mission. When the National Security Council discussed potential responses to five Americans taken hostage in Lebanon in 1985, the military option was restricted to retaliation by naval air power. At no point did senior officials seriously consider a hostage rescue mission utilizing Delta or SEAL Team Six.

The post-Cold War environment of the 1990s served as a new context for terrorism. In terms of the sheer number of terrorist attacks, the 1990s were a dangerous time. According to the Central Intelligence Agency, by 1997, American citizens and facilities worldwide made up 40% of terrorist targets, up from 25% the preceding year. The period was punctuated by a series of devastating attacks against American targets abroad, as was the case when 19 American military personnel died during the 1996 Khobar Towers bombing in Saudi Arabia. Nor was the home front immune. The first attempt to destroy the World Trade Center in 1993 shocked the country. Perhaps more disturbing was the Oklahoma City bombing in 1995, which revealed the real threat of right-wing fanaticism from within the United States itself. In the wake of nearly 1,000 dead and injured, Timothy McVeigh became the new face of domestic terrorism.

The Clinton administration's approach to this threat was mirrored by its predecessors. For the most part, the president and his national security team treated terrorism as a diplomatic and legal problem, a standard expressed in the June 1995 Presidential Decision Directive 39 *U.S. Policy on Counterterrorism*. The document made it clear that America would "deter and preempt, apprehend and prosecute, or assist other governments to prosecute, individuals who perpetrate or plan to perpetrate such attacks" (p. 1). The lead agency for policy was again the State Department. One of its first actions

was sponsoring the "Summit of Peacemakers" at Sharm al-Sheikh in 1996, which produced a pledge from 29 countries to commit greater resources to fight terrorism.

This approach produced what could be best described as mixed results. When the Federal Bureau of Investigation attempted to investigate the Khobar Towers bombing, local authorities refused to grant it equal jurisdiction, seriously impeding any progress. However, in some instances, American officials were able to win cooperation overseas. Between 1993 and 1998, 10 suspected terrorists were extradited back to the United States for trial.

The 1998 African embassy bombings were a clear turning point for U.S. counterterrorism policy. The massive explosions, which struck the American embassies in Nairobi, Kenya, and Dar es Salaam, Tanzania, on August 7, 1998, killed 224 people (12 U.S. citizens) and wounded nearly 4,500. The Islamic Army for the Liberation of Holy Sites, a group led by Saudi millionaire Osama bin Laden, claimed credit for the attacks. In response, President Bill Clinton quickly signed an executive order freezing assets owned by bin Laden. The Federal Bureau of Investigation launched a massive investigation of the two attacks. More than 900 special agents were deployed overseas, the largest operation of that type in bureau history. By the end of 1998, 11 indictments were handed down in federal court and four suspected terrorists were taken into custody.

After the 1998 embassy attacks, the administration launched a series of military operations against known and suspected terrorist facilities in Afghanistan and a "pharmaceutical" plant in Sudan. The attacks were made against terrorist organizations rather than specific individuals. Moreover, they were intended not only to be retaliatory for the embassy bombing but also preemptive to the extent that they would disrupt terrorist activity, at least over the short term.

The September 11 Attacks and Afterward

The first months of George W. Bush's presidency were replete with warnings of an impending terrorist attack. As declassified documents later proved, clear danger signs were present throughout his first months in office. However, the same claims regarding a serious threat to American security also appeared as early as June 2000 in a report by

the bipartisan National Commission on Terrorism. It was a remarkably candid document, which suggested that the United States was drifting away from combating state-supported terrorism. The report's authors believed that U.S. policy was generally too passive and overly focused on defeating the bin Laden network. Among its recommended reforms were removing existing limitations on the recruitment of Central Intelligence Agency counterterrorism informants and, importantly, that the Defense Department become the lead agency in the event of a "catastrophic attack on U.S. soil."

The September 11, 2001, attacks permanently removed the issue from the realm of speculation. For its own part, the Bush administration depicted the immediate post-9/11 period as a sea change in the American understanding of war and national security. Vice President Dick Cheney asserted this point of view in 2003:

The strategy of deterrence, which served us so well during the decades of the Cold War, will no longer do. Our terrorist enemy has no country to defend, no assets to destroy in order to discourage an attack. Strategies of containment will not assure our security either. There is no containing terrorists who will commit suicide for the purposes of mass slaughter. (p. 2)

However, as much as the administration portrayed the situation in 2001 as a clear point of demarcation, it was, in reality, the culmination of a generational war against terrorism. In this context, the attacks on New York and the Pentagon were part of the inheritance of Munich, Entebbe, the *Achille Lauro*, the USS *Cole*, and the embassy bombings in Africa.

When it was finally published by the National Security Council in 2002, *The National Security Strategy of the United States of America* established a new template for the Global War on Terrorism:

It has taken almost a decade for us to comprehend the true nature of this threat. Given the goals of rogue states and terrorists, the United States can no longer solely rely on a reactive posture as we have in the past. The inability to deter a potential attacker, the immediacy of today's threats, and the magnitude of potential harm that could be caused by our adversaries' choice of weapons, do not permit that option. We cannot let our enemies strike first. (p. 15)

Although the document indicated the importance of freedom, "human dignity," and regional alliances—allowing for a degree of continuity with Clinton—its core goal was the ultimate destruction of terrorism by military means. This basic standard defined American wars abroad for the remainder of the decade.

Military action proceeded before the new policy had an opportunity for much scrutiny. The respective invasions of Afghanistan and Iraq were, in part, justified as strikes against anti-American terrorist networks. Early operations seemed to indicate success. Once Operation Enduring Freedom unfolded in 2001, it appeared that a very small contingent of Americans, supplemented by precise tactical bombing and indigenous allies, had redefined the art of war. Many civilian leaders, most importantly Secretary of Defense Donald Rumsfeld, preached that the "revolution in military affairs" had finally arrived. Subsequent operations in Iraq, Afghanistan, Libya, and other locations have proven this assumption to be problematic at best.

Despite these significant difficulties, America's commitment to the Global War on Terrorism grew in the decade following the September 11 attacks. In Central Asia, the Pentagon solidified ties with numerous former Soviet republics by dispatching military advisory missions to them. Assistance included foreign military financing, training under IMET (International Military Education and Training), and nonproliferation, antiterrorism, and demining programs. One of the most important battlefields in the Global War on Terrorism was the Philippines. American special operations forces deployed as military trainers in November 2001 and remained in what U.S. officials called the "second front" in the Global War on Terrorism.

After September 11, 2001, American policy also focused on terrorism in Africa. Conditions within many parts of the continent—highlighted by widespread poverty, disease, and instability—made it almost an ideal ground for recruitment, even more so given the fact that 50% of the population is below the age of 15. In September 2005, the State Department named the Africa-based Salafist "Group for Call and Combat" a terrorist threat on a par with al Qaeda. In actual practice, African terrorism has extended far beyond the region. According to official U.S. estimates in 2006, as many as one quarter of the foreign fighters in Iraq

(5,000–8,000) were African. To address this challenge, the United States created a major military command (Africa Command) to eventually serve as a vehicle for military policy in the region. However, the initiative ran into widespread trouble when Nigeria, South Africa, Algeria, and Libya immediately opposed the measure, claiming that it had been made to counter growing Chinese influence in the hemisphere.

Conclusions

In some important respects, the current American Global War on Terrorism has been a victim of its own success. More than 10 years of operations have yielded a number of important victories. The American military and its allies around the world have successfully disrupted terrorist organizations and their sanctuaries. Neither countries (Afghanistan) nor particular regions (Mindanao, southern Somalia) offer terrorists the safety they once enjoyed before September 11, 2001.

But victory is incomplete and has resulted in a threat that is now more diffuse and difficult to combat. American military operations successfully disrupted al Qaeda and other groups to the point where they are no longer easily identifiable. A small-scale war against terrorism has thus become smaller. An increasingly decentralized enemy now finds sanctuary in great expanses of difficult geography—as is the case along the Afghanistan-Pakistan border and rural Indonesia—or within the crowded urban sprawl of the underdeveloped world.

The terrorist enemy has also proven to be adaptable. After the initial phase of “shock and awe,” terrorists are proving extremely resilient in the face of American efforts. Terrorist networks that survived the onslaught of 2001–2003 have adapted revised tactics to new locations to protect their viability. Ironically, many reappeared in the very Western nations that the Global War on Terrorism was originally supposed to protect. The increased incidents of militant Islamism in Europe, specifically in England, Spain, and Denmark, indicate a deliberate plan to attack vulnerable populations while enjoying a legal shield from direct military action or covert operations.

As the war against terror progresses, it also reveals the limits of direct military action. Over

the long term, the term *global war against terrorism* has proven to be a misnomer. In actual practice, this type of war obliges the United States to address the underlying causes of terrorism rather than simply its command structure or order of battle. Actual operations demand a patient approach focused on ideology, propaganda, and recruitment patterns, factors that have as much to do with socioeconomic and cultural challenges as military ones. Since 2001, the U.S. military has incorporated social science (e.g., “human terrain mapping”) into its arsenal of responses to terrorism. Counterterrorism has become a highly sophisticated form of counterinsurgency.

It is impossible to predict the future success of the Global War on Terrorism. It depends on a complex and fragile combination of factors, the least of which are the high degree of training necessary for military forces, the complex balance of civilian and military resources, and domestic political fortitude. Early indicators of the U.S. withdrawal from Iraq and the 2009 “surge” in Afghanistan are subject to much scrutiny and debate. It is likely that it will take many additional years to assess the true nature of success or failure in these key countries and other areas affected by the war.

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See also Bush Doctrine; Iraq Insurgency (2003–2011); Special Operations, Strategy

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GOLDWATER-NICHOLS DEPARTMENT OF DEFENSE REORGANIZATION ACT

Enacted after more than 4 years of intense debate, the Goldwater-Nichols Department of Defense Reorganization Act of 1986—named for its sponsors, Senator Barry Goldwater (R-AZ) and Representative Bill Nichols (D-AL)—was intended to reorganize America's armed forces to improve their interservice capabilities and eliminate inefficiencies, unify U.S. warfighting capabilities as a member of the allied and coalition forces, and harmonize Department of Defense (DOD) weapons and equipment acquisition and budgetary processes. This entry first examines the historical background out of which this legislation emerged and describes the seven main areas addressed by the act. It then discusses its most noteworthy provisions and their impact.

Background

To address perceived defects of World War II's bifurcated command structure (one for the U.S. Army and the Army Air Forces, the other for the U.S. Navy

and Marine Corps), Congress passed the National Security Act of 1947. This law placed the armed forces under a civilian secretary of defense. The chiefs of staff of the army and newly independent air force, the chief of naval operations, and the commandant of the Marine Corps comprised the Joint Chiefs of Staff (JCS), which elected a chairman who reported to the secretary of defense. Both the chairman of the Joint Chiefs and the secretary of defense report to the president, who holds the constitutional position of commander in chief of all U.S. armed forces and is the head of the National Command Authority for nuclear weapons control. The 1947 act required the JCS to provide for the unified strategic direction of the armed forces, for their operation under unified command, and for an integrated and efficient team of land, naval, and air forces.

Despite the 1947 restructuring, continuing disconnects created budgetary, training, and command-and-control issues and tactical and operational shortcomings. These included incidents during the Korean and Vietnam Wars, the retaking off Cambodia of the seized merchant vessel *Mayaguez* in 1974, and the abortive "Desert One" 1980 Iranian hostage rescue attempt. The lack of radio interoperability between army, marine, and air force units engaged on Grenada in 1983's Operation Urgent Fury (and fratricidal, aka friendly fire, incidents) was cited as an egregious example of the existing system's deficiencies. The impact of the AirLand Battle doctrine in the 1980s—focusing on "deep battle" and coordination of training, weapons, and systems required to achieve an in-depth defeat of Warsaw Pact forces in the event of a Central European war—underscored the need for greater unity of command among the services.

The Goldwater-Nichols Act's overarching emphasis was on restructuring the armed services to meet the demands of joint operations. While several senior military leaders supported the legislation, several members of the Joint Chiefs objected at the time. Their criticisms included whether the specialized attributes of the individual branches would be too subsumed into "jointness"; whether the armed services would lose budgetary and procurement power for service-specific needs; whether the emphasis on joint command would create additional bureaucracies and promote, not lessen, inefficiency; and whether shortcomings attributed by the act's sponsors to the armed services were more

properly due to a host of political issues. Over these objections, the legislation was enacted by President Ronald Reagan in 1986.

The Act's Essential Features

Congressional intent in enacting the act focused on seven broad areas:

1. To reorganize the DOD and strengthen civilian authority in the DOD
2. To improve military advice to the president, the National Security Council, and the secretary of defense and specified combatant commands (COCOMs) for the accomplishment of missions assigned to those commands
3. To ensure that the authority of the unified and specified commanders is fully commensurate with the responsibility of those commanders for the accomplishment of those missions assigned to their commands
4. To increase attention in the formulation of strategy and contingency planning.
5. To provide for the most efficient use of defense resources
6. To improve joint officer management policies
7. To enhance the effectiveness of military operations and improve the DOD's management and administration

Of these, the resulting changes were perhaps most noteworthy in four areas. The Goldwater-Nichols Act enhanced the role of the chairman of the JCS and lessened that of the individual services' chiefs and departments, expanded the roles of unified COCOMs that control U.S. forces both domestically and overseas, created a joint officer specialization for Joint Staff and JCS duties, and greatly affected appropriations, procurement, logistics, and other systems.

Enhanced Role of the JCS Chairman

Under the act, the chairman is "the principal military adviser" to the president, National Security Council, and secretary of defense. The act also established the position of vice chairman of the JCS. The chairman serves at the president's pleasure for a 2-year term and may be reappointed for up to two additional terms, and the position is rotated among the armed services. The chairman holds a four-star rank and outranks all other officers of the armed forces;

however, the chairman may not exercise military command over the JCS or any of the armed forces. To ensure that the service chiefs still retain significant voices in JCS decisions, any JCS member may submit to the chairman advice or an opinion in disagreement with or in addition to the chairman's advice being presented to the president, National Security Council, or secretary of defense; the act requires the chairman to present those views "at the same time he presents his own advice" to the civilian leadership.

Interservice Command Organization

Since Goldwater-Nichols, the individual military services and their respective chiefs no longer have primary operational control over warfighting. Instead, they are directed to organize, train, modernize, and equip forces for use by the COCOMs. The COCOMs are organized either functionally (e.g., Transportation Command) or geographically (e.g., European, Southern, Central). The COCOM's commanders—once called "commanders in chief" but since 2002 referred to as combatant commanders—exercise unified command and are empowered to use each branch of the military to achieve the COCOMs designated missions. Each combatant commander reports to the secretary of defense through the chairman of the JCS and, through the secretary, to the president. Hence, although the act increased the chairman's abilities, it also provides a greater measure of command authority to COCOM-level combatant commanders.

The role and prominence of special operations have been a long-standing area of debate among the services. The 1980 Desert One incident underscored the need for enhanced joint special operations capabilities, an area often viewed as being given short shrift by traditional military forces. Congress passed the Nunn-Cohen Amendment, creating a COCOM known as U.S. Special Operations Command commanded by a four-star officer and allocated separate funding to ensure that it has adequate, independent resources.

Officer Personnel Management

Goldwater-Nichols significantly affected officer personnel management, traditionally a matter left largely to individual services' discretion. Officers are routinely assigned to Joint Duty positions and must attend joint DOD training as part of their

professional development. This extends to general-level promotions: as a prerequisite for flag officer rank, O-6 level personnel (army, Marine Corps, and air force colonels and navy captains) must complete at least one Joint Duty assignment. Furthermore, the act specifies minimal requirements for officers to serve on the Joint Staff that assists the chairman and the other JCS members in carrying out their responsibilities. The members of the Joint Staff are selected by the chairman in approximately equal numbers from (a) the army, (b) the navy and the Marine Corps, and (c) the air force, and each officer's tour of duty on the Joint Staff is generally limited to 4 years (see Figure 1).

Procurement, Budgeting, Logistics, and the "Revolution in Military Affairs"

With respect to two chronic sources of much interservice friction—appropriations and

procurement—Goldwater-Nichols sought to curb prevailing “green-suit versus blue-suit” tensions by requiring such decisions to be made on a joint (“purple-suit”) basis. Servicewide weaponry initiatives—for example, smart weapons technology, proliferation of laser targeting designators to the small unit level, communications/information technology, and stealth systems—have benefited from the act's consequences. Joint procurement has led to substantial streamlining of procurement, supply, transportation, and budgetary processes.

Because the nature of joint warfighting and modern weapons means that the necessary training and doctrine must also be joint, some military theorists regard the Goldwater-Nichols Act as being the critical initial step required to bring about the so-called Revolution in Military Affairs, with its focus on enhanced, closely integrated C4ISR processes—command, control, communications, computers, intelligence, surveillance, and reconnaissance—and

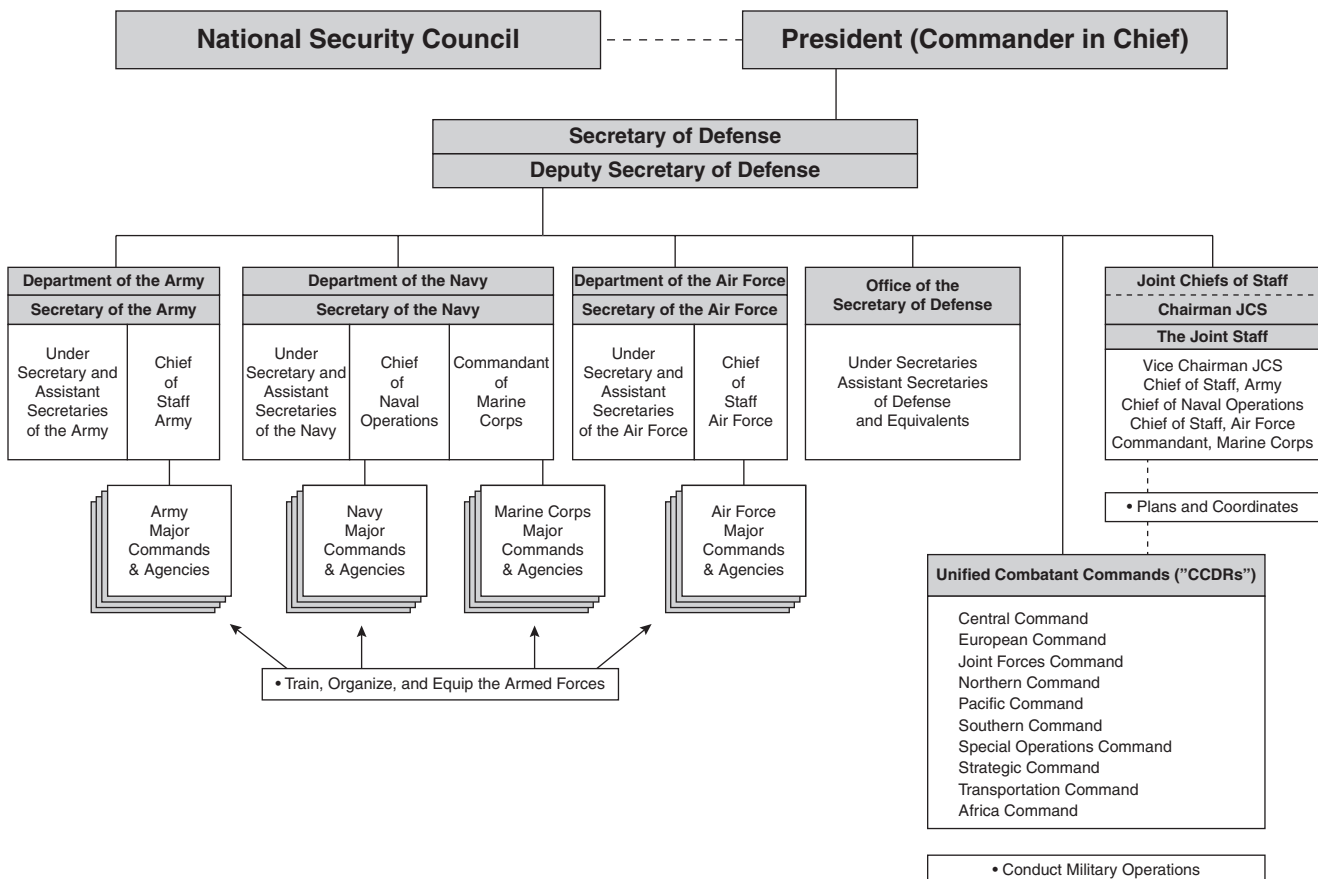


Figure 1 Post-Goldwater-Nichols Organizational Structure, U.S. Department of Defense

Source: Chad Pelton, adapted from organizational chart originally prepared by ODA&M, Office of the Secretary of Defense, U.S. Department of Defense (January 2005).

substantial reliance on unified information technology systems across the battlespace. It is difficult to see how the Revolution in Military Affairs's emphasis on information technology-driven "team warfare," as in the army's Stryker brigade combat teams, could be fully implemented without Goldwater-Nichols's foundation.

Consequences, Criticisms, and Open Issues

The act's first combat test was Operation Just Cause, the 1989–1990 Panama operation that deposed Manuel Noriega's regime. Compared with Urgent Fury, Just Cause resulted in fewer friendly fire incidents and generally manifested better integration between the services. The Persian Gulf War of 1991 (Desert Shield/Desert Storm) was widely touted as having validated Goldwater-Nichols's goals as to the benefits of unified command and coordination between the U.S. military, as well as in the context of alliance/coalition warfare.

Even the act's reforms were unable to bring about the achievement of American goals in the next two operations—Restore Hope in Somalia (1992–1994) and Uphold Democracy in Haiti (1994–1995). While the Persian Gulf War was a classic AirLand Battle campaign involving essentially symmetric forces, both the Somali and Haitian operations were contingency operations requiring complex politico-military operations coupled with humanitarian missions usually handled by civilian/nongovernmental organizations. The rise of asymmetric warfare in the 21st century, as encountered in Iraq and Afghanistan, may pose challenges to Goldwater-Nichols's unitary model. In general, however, military operations since the act have gradually evolved from more of a deconfliction of roles between the services (as manifested during the Persian Gulf War) to greater interoperability and perhaps a growing interdependence among the branches.

Concerns linger as to whether joint oversight over budgetary and procurement matters hamstringing the individual branches' needs. Commentators posit that joint procurement makes it harder for those systems required for highly specific tasks to survive in an increasingly unified budgetary/acquisition process. Similarly, critics suggest that constant expectations for "jointness" in much operational planning have inevitably resulted in more layers of command and superimposed new bodies of doctrine and requirements over preexisting ones.

Some historians and political scientists have commented that the Goldwater-Nichols Act's enhancement of the role of the chairman has lessened, not strengthened, civilian control over the U.S. military. Despite its strictures that the chairman shall not exercise military command over the services' chiefs, by placing so much power in the hands of one officer, Goldwater-Nichols has essentially provided the chairman with a substantial level of authority and has reduced the number of sources for military decisions officially available to the president as the nation's commander in chief.

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See also Afghanistan; AirLand Battle Doctrine; Asymmetric Warfare; Civil-Military Relations; Command and Control; Congress, U.S.; Constitution, U.S.; Defense, Secretary of; Haiti, U.S. Intervention in; Iraq Insurgency (2003–2011); Logistics; Military Command Staffs; Officer Career Fields; Persian Gulf War; Politics, Military Participation in; President as Commander in Chief; Somalia Intervention

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GREEN BERETS

See Special Forces, Army

GUANTANAMO BAY PRISON

The prison at the U.S. naval station in Guantanamo Bay, Cuba (often abbreviated “Gitmo” or GTMO), is a detention facility for terror suspects, and has been in operation since its establishment by President George W. Bush in 2002. The legality of Guantanamo, particularly its military commissions and interrogation techniques, has been the major source of controversy surrounding the prison since its inception. While the Obama administration made a pledge to close Guantanamo within the president’s first year in office, there has been little change in the operations of the detention center. Guantanamo currently remains open and operational, and has held about 800 detainees since its establishment. This entry examines the history and controversies surrounding the Guantanamo Bay prison.

History

The naval station at Guantanamo, the only U.S. military base in a communist nation, has been under

U.S. control (through an indefinite lease) since the end of the Spanish-American War in 1898. Under the terms of Cuban-American treaty in 1903 (and reaffirmed in 1934), the United States had a right to maintain a naval station at Guantanamo in perpetuity. Although never formally annexed by the United States, the U.S. Navy has exercised full control over this territory. Although Fidel Castro after coming to power in 1959 had demanded that the United States vacate Guantanamo, even cutting off power and water at one point, he never militarily sought to challenge the base. Although primarily a naval base, Guantanamo had, prior to the attacks on September 11, 2001, been used to house Cuban and Haitian refugees in the 1990s. The naval station itself was historically surrounded by both Cuban and U.S. minefields until President Bill Clinton ordered the dismantling of U.S. mines at the station in 1996.

In 2002, President Bush established the detention center for prisoners taken during the War in Afghanistan. The inmates were housed at Camps Delta, Echo, Iguana, and X-Ray (now closed). Because of the complicated nature of U.S. control and Cuban sovereignty, the inmates at Guantanamo were not granted traditional prisoner of war allowances, leading many groups, including the American Civil Liberties Union and the International Red Cross, to protest the operations at Guantanamo.

The Bush administration sought a number of legal opinions on its operations there, especially regarding the “enhanced interrogation techniques” described in a 2003 memo to Deputy Attorney General John Yoo. This report concluded that degrading treatment did not necessarily constitute torture, as long as the pain caused to the prisoner did not constitute pain as severe as organ failure. In *Rasul v. Bush* (2004), the U.S. Supreme Court ruled that prisoners at Guantanamo had standing to bring habeas corpus claims in federal courts. The courts rejected the Bush administration arguments that presidential powers as commander in chief to hold detainees were above judicial review and that federal courts lacked jurisdiction over Guantanamo since it was legally part of Cuban soil. The legality of Guantanamo was further challenged in the U.S. Supreme Court in *Hamdan v. Rumsfeld* (2006). In a complex ruling, the Court declared that the protections of the Geneva Conventions applied to enemy combatants. It also found that the president as commander in chief did not have an inherent right to establish military tribunals but must seek congressional authorization.

In response to *Hamdan*, Congress in late 2006 provided formal authorization of military tribunals to try detainees at Guantanamo under procedures that deviated from those in civilian and military courts under the Uniform Code of Military Justice.

Current Issues

Cases like *Rasul* and *Hamdan* increased public debate over the legality of Guantanamo, and the issue spilled into the 2008 presidential election. As a candidate, Senator Barack Obama publicly committed to closing Guantanamo if elected, and immediately following his inauguration as president in 2009, he signed an executive order that mandated the closure of the prison within 1 calendar year. Shutting down the detention facility has proven to be a much more difficult task than initially anticipated, and while Obama attempted to create a system in which detainees would be tried by the federal court system, congressional action in the 2011 defense spending authorization prohibits the courts from being used to try Guantanamo detainees.

In April 2011, the WikiLeaks organization publicly released hundreds of files related to the detention center, a number of which reveal major flaws in the operations of Guantanamo. The documents show that innocent detainees were sometimes held for several months before their release, while others (including documented al Qaeda members), who may pose real threats to the United States, were sometimes released to foreign nations. In many cases, prisoners were also transferred to Central Intelligence Agency prisons on foreign soil, and the chaos and inefficiency of determining the guilt or innocence of the detainees was highlighted in the documents.

The debate over torture at Guantanamo was revived in the spring of 2011 with President Obama's executive order reinstating military commissions to try detainees. The debate was expanded in May 2011 with the killing of Osama bin Laden in Pakistan, which was aided by information obtained through Central Intelligence Agency's "enhanced interrogation techniques." However, the final word on whether these tactics were responsible for gathering vital information is yet to be determined, as the relevant Central Intelligence Agency documents are still classified.

There are about 166 prisoners remaining in Guantanamo today, and the prisoners fall into three categories: (1) enemy combatants, (2) prisoners with

pending criminal charges, and (3) prisoners not yet cleared for transfer to other countries because of U.S. concerns over their safety in those countries' prisons. Due to the congressional block (the Ike Skelton Defense Authorization Act for 2011) against using the federal court system to try detainees, the Obama administration reinstated military commissions at Guantanamo.

In April 2012, the United States authorized a military tribunal for Khalid Sheikh Mohammed at Guantanamo and four other men suspected of involvement in planning the September 11, 2001, attacks. The White House had initially planned to try Khalid Sheikh Mohammed in a New York City courtroom, but the reinstitution of military commissions caused the trial to be moved. The debate over the military commissions has continued to the present day, and while WikiLeaks increased public attention to the treatment of detainees at Guantanamo, the issue of enhanced interrogation techniques still remains at the forefront of the discussion on Guantanamo.

Conclusion

While Guantanamo remains open and an issue of contention in American policy, President Obama has banned the heavily debated "enhanced interrogation techniques" used during the Bush administration, and the number of prisoners at the detention center has steadily decreased since 2009. The promise to close Guantanamo represented an attempted break with the controversial and internationally unpopular policies of the Bush administration, but the debate over trying detainees by military commissions versus the federal court system will likely continue public debate over the legality of U.S. actions at Guantanamo.

Hillary Jean Sebeny

See also President as Commander in Chief; U.S. Supreme Court; War in Afghanistan

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GUERRILLA WARFARE

The term *guerrilla war* originated during the Spanish Peninsular War of 1808–1814. Throughout the 19th and early 20th centuries, it was used synonymously with *small war* and *la petite guerre* to describe a situation in which a great power's conventional army fought against an irregular indigenous armed force. After 1945, this was understood to mean an ethnic or national liberation struggle against a European colonial occupier or, later, the governing regime of a postcolonial "new nation." Either side in a guerrilla struggle could receive support from an external patron, as was the case in Vietnam, where the United States shouldered the primary burden of counterinsurgency operations. Guerrillas rely on rapid movement, ambush tactics, acts of terror, and support from local noncombatants to minimize their weaknesses and exploit the vulnerabilities of their stronger opponents. The outcome of most such struggles has hinged on the question of whose violence was better calibrated to secure and maintain control over the civilian population: the guerrillas attempting to establish a new political and social order or the government fighting to retain its legitimacy and authority.

This entry traces guerrilla warfare from the Napoleonic period through the colonial wars of the 19th century, the partisan struggles of the 1940s, the decolonization conflicts of the 1950s and 1960s, and the Indochinese Wars of 1946–1975. After the al Qaeda attacks of September 11, 2001, and the subsequent campaigns in Afghanistan and Iraq, the U.S. military abandoned the term *guerrilla warfare* for the more expansive concept of *counterinsurgency*, which emphasizes an integrated and

sustained civil-military effort to retain or regain control over populations mobilized by insurgent groups. Although guerrillas frequently employ terror, modern terrorism is a transnational phenomenon in which very small groups mount periodic high-visibility operations in pursuit of large, transformative goals, whereas guerrilla movements and modern insurgencies are protracted efforts attacking sovereign states from within.

American diplomats and soldiers committed two grave analytic errors when they began to confront guerrilla movements in the Third World during the 1960s. The first was an insistence that all liberation struggles were proxy wars in the Cold War confrontation between the United States and the Soviet Union, and not primarily responses to local histories and conditions. The second was an overinvestment in tactics and technologies to destroy the individual guerrilla *fighter*, and not the political initiatives required to neutralize the *organization* sustaining the guerrilla and the *grievances* motivating him to fight. In the most protracted struggles, the length and cost of the conflict eroded the legitimacy of the stronger power, and the guerrillas won. However, during some conflicts, guerrilla forces failed to establish, or later forfeited, broad support among the people, particularly in Latin America.

Historical Overview to 1960

Guerrilla is the diminutive of *guerra*, Spanish for war. However, in English, *guerrilla*, little or small war, came to mean an irregular *soldier*, and by extension the *type* of war he wages, rather than *guerrillero*, the original Spanish term for the individual soldier. The Spanish Peninsular War (1808–1814) marked the point where irregular warfare, as an adjunct to conventional maneuver warfare, first emerged. In Spain, nationalists and antiliberals took up arms to resist a French *diktat* against the Bourbon crown and an initially unopposed occupation of Madrid. *Guerrillero* bands, often led by Catholic priests, sprung up throughout Spain, conducting ambushes and counterambushes of small detachments and couriers, summary execution of prisoners, destruction of supply trains, and assassination of local Spanish liberals and collaborators. These bands provided timely and accurate intelligence to General Arthur Wellesley's Anglo-Portuguese force sheltering

behind, and later attacking out from, the defenses of Lisbon in exchange for materiel support in the common struggle against Napoleon. Recently, Thomas M. Huber developed the concept of “compound warfare” to refine our understanding of this type of conflict, which combines characteristics from both guerrilla and maneuver warfare. In Huber’s analysis, wars frequently occur between opponents of very unequal conventional capacities. To drive the stronger power out of its territory, the weaker opponent must secure the assistance of a third power, and then balance its effort between an internal guerrilla force practicing selective terror against occupying forces and collaborators, and a smaller conventional force-in-being, which must be able to retreat into and emerge from a sanctuary along its borders where its opponent cannot enter. Other compound wars include the American Revolution, 1775–1783; the Chinese Communist resistance to Japan and victory over the Kuomintang, 1937–1949; both Indochina Wars of 1946–1975; and the Russo-Afghan struggle of 1981–1989. In the American Revolution, the patriots’ sanctuary was the vast hinterland, into which the British army was loath to penetrate. The Chinese Communists had Yunnan Province, the Viet Minh the Ap Bac region adjacent to China, and the North Vietnamese their logistical bases in Cambodia and Laos, while the Afghan mujahideen could withdraw to and emerge from Pakistan. In each of these struggles, the guerrilla component was critical to the eventual defeat of the stronger opponent.

Between 1815 and 1914, the professional soldiers of Great Britain and the continental powers would see most of their active service in the pacification struggles that marked the expansion of their respective new empires in Asia and Africa. These “small wars” produced sophisticated discussions of both the operational and tactical arts against “native” or “savage” opponents. The classic compendium in English of the small warrior’s craft was Royal Engineer Colonel Charles E. Callwell’s *Small Wars* (1906, revised 1914). However, absent from all treatises on colonial warfare is any acknowledgment that indigenous forces could command enough political legitimacy to compel *political* negotiations with the colonizing power. For British, French, and Dutch soldiers, the central task was to coerce guerrillas into submission. Only then could modification of the European-colonial relationship be considered. Contemporaneously, American soldiers and marines

distilled the lessons of the Philippine-American War of 1899–1902 and the Caribbean “banana wars” of 1914–1934 into something that approximated later theories of counterinsurgency. This process was reflected in the U.S. Marine Corps’ *Small Wars Manual* (1935, revised 1940), which stated that the defeat of the guerrilla force in the field was an enabling event necessary to achieve the fundamental aim of the overall campaign: the social, economic, and political development of the people freed from the depredations of the guerrillas. However, lessons from the Philippines, Haiti, the Dominican Republic, and Nicaragua vanished from the American military’s institutional memory in the aftermath of the great amphibious and maneuver campaigns of the Second World War and the emerging demands of the Cold War.

Another category of irregular warrior emerged in the mid-20th century: the partisan. The German occupation of eastern and then western and southeastern Europe produced ferocious, if small-scale, struggles in rural France, Italy, Greece, and Yugoslavia, and the vast areas of the Soviet Union occupied for varying lengths of time by the German army before its eventual collapse, to which the various national partisan movements made significant contributions. While many partisans were uniformed soldiers who had evaded capture by the occupiers, others were armed civilians reminiscent of the 18th-century *levy en masse*: left-wing political militants, conservative patriots, and intellectuals. In East and Southeast Asia, the Japanese also faced partisan movements of varying degrees of size, tenacity, and allied support in Burma, French Indochina, Dutch Indonesia, the Philippines, and China. The Greek communist partisan movement transformed itself into an insurgency against the royalist restoration in Greece, while armed resistance in French Indochina and Dutch Indonesia became the nucleus of subsequent national liberation movements that sought to prevent the return of the former colonial occupiers in the aftermath of the sudden Japanese military collapse.

The most sophisticated, sustained, and successful insurgency of the 20th century was the “people’s war” of the Viet Minh and North Vietnamese, an extension of Mao Zedong’s earlier synthesis of *protracted warfare*. In protracted warfare (usually translated into English during the 1960s as *revolutionary warfare*), guerrilla warfare was one of

three forms of fighting, along with “positional” and “mobile” warfare, to be hierarchically employed as objective conditions dictated. The overall struggle could take decades to develop from initial establishment of a clandestine political organization to the final victory against the enemy’s conventional maneuver forces. In his 1930 exhortatory essay “A Single Spark Can Start a Prairie Fire,” Mao distilled the essence of guerrilla warfare as “the enemy advances, we retreat; the enemy camps, we harass; the enemy retreats, we pursue” (p. 124). Guerrilla warfare was understood as a temporary, transitional means of husbanding strength and allowing time for the development of progressively more sophisticated forms of military organization and technology. A protracted struggle would move through three successive stages: (1) Mobilization, (2) the Strategic Equilibrium, and (3) the Strategic Offensive, with the most critical political decisions being made at the temporal points of transition between stages. Both the Chinese and North Vietnamese communists progressed from “guerrilla” to “mobile” warfare as the waning strength of their opponents permitted. Thus, 1961’s “guerrilla in black pajamas” walking down the Ho Chi Minh trail with a captured French rifle and a few Chinese hand grenades foreshadowed the Soviet-supplied T-54 tank crashing onto the grounds of the South Vietnamese Presidential Palace in April 1975.

Vietnam and Beyond

The 1960s was the “decade of the guerrilla.” These years witnessed the Cuban Revolution, Soviet President Nikita Khrushchev’s January 1961 “Wars of National Liberation” speech, the final wave of decolonization struggles in Asia and Africa, the emergence of “flexible response” as the United States’ doctrine for deterring Soviet expansion in an era of nuclear parity, and an explosion of academic studies of “limited,” “unconventional,” and “guerrilla” warfare. Unfortunately, the understanding of guerrilla warfare within the national security community remained subordinated to the nation’s overall strategic posture: the global containment of the USSR. Neither scholars with influence in the corridors of power nor soldiers in positions of command grasped the implications of the term *protracted* in Mao’s doctrine of protracted war, or its North Vietnamese refinement.

The Kennedy administration conducted a much-publicized expansion of the American unconventional warfare capability: the U.S. Army Special Forces (Green Berets), the U.S. Navy SEALs, and the Air Force Air Commandos. However, this marginally increased level of attention to a third form of struggle neither nuclear nor conventional failed to solve the United States’ problem during the Vietnam War of 1965–1973. A fundamental assumption of U.S. policymakers was that the guerrilla, anywhere in the Third World, was either a misguided peasant resisting “modernization” or a tool of Soviet subversion led by indigenous Marxists. The possibility that he or she might have genuine grievances that must be addressed politically by the national leadership (the key insight of post-2006 U.S. counterinsurgency doctrine) was never seriously addressed. Second, the guerrilla was viewed as presenting novel and potentially difficult challenges *tactically*, but not at the operational or strategic levels of war. When the U.S. troop bases in South Vietnam expanded during 1965, the army tasked its Special Forces teams to organize Montagnard minority groups into anticommunist guerrilla forces, while the “big battalions” conducted airmobile operations along the Cambodian and Laotian borders. Internal pacification, the single most important mission, was left to the army of the Republic of Vietnam. Thus, the overall U.S. effort remained stalemated, as neither the senior military leadership nor two successive commanders in chief understood the struggle to require a protracted, integrated counterinsurgency campaign supported by a unified effort to build the institutional capacities of the Republic of Vietnam, as opposed to a counterinfiltration guerrilla-killing campaign, in the face of numerous obstacles to the implementation of that effort, including the profound limitations of the South Vietnamese government and military.

Another form of guerrilla struggle during the 1960s was the Cuban concept of the *foco*, or focal point, a form of vanguardism that succeeded only once, in Cuba, and which could not be replicated elsewhere in the hemisphere, as its chief proponent, Ernesto “Che” Guevara, discovered in Bolivia in 1967 at the cost of his life. Embrace of the *foco* hinged on a belief that a small band of dedicated and charismatic fighters could create the conditions for a successful insurrection simply by spectacular initial attacks on symbols of the hated regime.

However, the Cuban Revolution's "triumph" occurred because a corrupt ruling elite had already been delegitimized by the island's educated, U.S.-oriented middle class, the very elements who, ironically, were expropriated by the Revolution after its Leninist turn. The Maoist emphasis on long-term preparation of a deep-rooted political organization was replaced in *focoismo* by an existential leap of faith. Subsequent movements outside Cuba frequently collapsed into sterile terrorism, triggering ferocious repressive campaigns lasting years and ending with the death or capture of high-profile "urban guerrilla" leaders such as Carlos Marighella (Brazil, 1969), Raul Sendic (Uruguay, 1972), or Abimael Guzman (Peru, 1992). Attacks against revered symbols of the *patria*, or homeland, made political concessions unthinkable, while the eagerness of security forces to counterescalate indefinitely with extreme brutality, unrestrained by independent legal structures, inflicted widespread trauma on the populations so afflicted.

Conclusion

In fall 2006, the American effort to contain simultaneous Sunni and Shia insurgencies in Iraq seemed doomed to certain and immediate failure. However, the *possibility* of success was snatched from the jaws of *certain* failure with a revitalization of the U.S. counterinsurgency doctrine, as enshrined in Field Manual 3-24, *Counterinsurgency*, and the Iraq troop surge of 2007–2008, in both of which General David Petraeus assumed a directing role. Using Field Manual 3-24 as a "playbook" for his subordinate commanders, Petraeus directed the American effort away from the "kinetic" targeting of insurgent cells to the pursuit of population security and the suppression of interethnic violence and expanded efforts to achieve the political compromises necessary to assert the sovereignty of the Government of Iraq. Whatever the U.S. military achieved in Iraq resulted not from the killing of individual insurgents but on an understanding of the insurgency's internal contradictions and vulnerabilities, a lesson that the United States has taken a very long time to learn.

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See also Asymmetric Warfare; Attrition Warfare; Counterinsurgency; Iraq Insurgency (2003–2011); Terrorism; Vietnam War; Warfare, Unconventional

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GULF WAR SYNDROME

The Persian Gulf War, also called the Gulf War or Gulf War I, began on August 2, 1990, when Iraq invaded neighboring Kuwait. On January 17, 1991, multinational forces led by the United States acted to circumvent Iraq's invasion and annexation of Kuwait, largely through air strikes. The ground war began on February 23, 1991, and ultimately ended on February 28, 1991.

In the months following their return to the United States, Gulf War veterans began to report various ailments. Ill veterans and the news media were at the forefront of the often controversial notion that there was a Gulf War syndrome that was linked to service in the Persian Gulf. While some viewed the syndrome as a new disease, others insisted the symptoms experienced by Gulf War veterans were

either unrelated to their service or were manifestations of posttraumatic stress disorder (PTSD). More than 20 years later, the military, government, and medical community have yet to reach a consensus, with disagreements ranging from identifying a list of symptoms, potential causes of illness, and the validity of Gulf War syndrome as a new disease. In 2008, the Research Advisory Committee on Gulf War Veterans' Illnesses determined that there was a serious multisystem illness, affecting approximately 25% of the 700,000 American veterans of the Persian Gulf War. Following this report, the Veterans Administration (VA) formally requested the Institute of Medicine (IOM), a not-for-profit organization under the National Academy of Sciences, to evaluate all available data. The resulting *2010 Gulf War and Health: Volume 8. Update on the Health Effects of Serving in the Gulf War* found that there is not sufficient evidence to support the establishment of Gulf War syndrome as a new disease. This entry examines the debate over whether Gulf War syndrome is a new disease or a manifestation of other disorders, and it discusses controversial findings.

Emergence of Gulf War Syndrome

In preparation for war against Saddam Hussein's army, all American military personnel were required to receive vaccines and oral medications. The aim was to safeguard troops from the potential use of nerve gasses, like sarin and mustard gas, and biological weapons, including anthrax and botulinum toxin. One of the oral medications used to protect soldiers from nerve gas exposure was pyridostigmine bromide. Soldiers began to feel the effects of the medication in-theater, with symptoms akin to low levels of nerve gas exposure. On returning home from the Persian Gulf, veterans began to report symptoms that were not in themselves indicative of any one disease. Symptoms included fatigue and sleep disturbances, skin rashes, rheumatologic disorders, headaches and memory loss, shortness of breath and respiratory problems, gastrointestinal disturbances, and sensitivity to common chemicals.

Numerous studies indicate that, in the years following their deployment to the Gulf region, Gulf War veterans reported generalized symptoms at rates two to three times higher than veterans of other foreign wars. While there was no official

acceptance of a new disorder, clinicians generally classified most of the symptoms as musculoskeletal or psychological. Many believed that veterans were experiencing PTSD manifested predominantly through physical rather than emotional complaints. Other mood disorders were also used to explain the increased somatic complaints among returning Gulf War veterans.

Clinicians and scientists sought other causes for the rise in illness among Gulf War veterans and the Gulf environment. Although environmental hazards varied by location throughout the war, scientists believed that this mysterious set of symptoms could be explained if there was a link between the vaccinations and oral medications soldiers took prior to and during the war with exposure to various toxins. In 1998, Congress established the Research Advisory Committee on Gulf War Veterans' Illnesses. By January 2002, the then secretary of veterans affairs Anthony J. Principi appointed members to the committee, which included physicians, pharmaceutical executives, and veteran's health advocates. Clinicians represented multiple fields, including neuroanatomy, neurobiology, rheumatology, neurogenetics, internal medicine, epidemiology, neurotoxicology, teratology, and immunology. The goal of the committee was to recommend necessary research related to the health of Gulf War veterans to the secretary of veterans affairs. In 2008, the committee presented its findings and recommendations, officially stating that there was scientifically based evidence supporting the earlier hypotheses that Gulf War syndrome was caused by the pretreatment medications and vaccines when the veteran was also exposed to pesticides and other chemicals.

Conflicting Reports, New Protocols

The official report of the Research Advisory Committee on Gulf War Veterans' Illnesses concluded that Gulf War syndrome is caused by conditions experienced while soldiers were serving in the conflict. The combination of the prophylactic nerve agent pyridostigmine bromide with pesticides used during the war is believed to cause this syndrome. Other interactions, including multiple vaccinations and exposure to additional environmental toxins, may also play a role. Environmental toxins include the petroleum smoke from more than 600 oil wells that were set ablaze. There is no evidence that

exposure to depleted uranium, the anthrax vaccination, or infectious diseases played a direct role in Gulf War syndrome. New research suggests that Gulf War veterans develop amyotrophic lateral sclerosis at higher rates than other veterans. Gulf War veterans potentially exposed to nerve gasses are developing and dying from brain cancer at rates higher than other veterans. Given the complex symptom profile and past assertions by clinicians, the report clearly differentiates Gulf War syndrome from PTSD and other psychological illnesses. Moreover, the rate of PTSD among Gulf War veterans is lower than veterans of other foreign wars.

After considering the Research Advisory Committee's findings, the VA looked to the IOM for additional research. Its report, *Gulf War and Health* (2010), offers views that were more favorable to the VA. It agreed that veterans deployed during the Gulf War often reported symptoms indicative of multi-system illnesses. However, the IOM concluded that Gulf War syndrome was not a new, unique disease, but accepted that there are multisymptom illnesses that are unexplained and believes they are linked to service in the Gulf War.

The study details the various health outcomes it believes are linked to service in the Gulf War. According to the IOM study, the only health outcome definitely linked to Gulf War deployment is PTSD. There is limited causation between deployment and amyotrophic lateral sclerosis, fibromyalgia, and other chronic pain disorders. The report found that there is insufficient data to conclusively link deployment to any specific cancers, blood disorders, multiple sclerosis, cardiovascular disease, and respiratory disorders.

After reviewing both the Research Advisory Committee and the IOM's findings, the VA made the decision not to classify Gulf War syndrome as a disease. However, the VA continues to treat the complex symptoms that plague a third of all deployed Gulf War veterans each year. While there is no known cure for the symptom profile, clinicians have had some success treating the symptoms. However, there is little evidence to suggest that the affected veterans' health improves with time. As veterans present with worsening symptoms, researchers continue to search for a successful treatment protocol. As indicated in the IOM study, new, larger research trials are being designed that are more representative of the deployed population, include deployed and

nondeployed soldiers during the Gulf War, create better classification systems for symptoms, and better incorporate each soldier's social history, including tobacco and alcohol use. As new studies are planned, the struggle between veterans groups and the VA continues. The VA is reluctant to give a name to the set of symptoms many Gulf War veterans face. Many affected soldiers believe that identifying Gulf War syndrome as a disease would be a positive step on the often uncertain path of treatment.

Rachel Elise Wacks

See also Medicine, Military; Medicine, Veterans; Persian Gulf War; Posttraumatic Stress Disorder; Warfare, Biological

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GUNS, MACHINE

Originally conceived and implemented in the late 19th century, the machine gun is an automatic weapon capable of sustained fire. From submachine guns to heavy automatic weapons, the caliber of ammunition rapid fired and the size of the gun bore determine the designation of the gun. Reflecting the birth of industrialized warfare and used in mass quantities during World War I, machine guns have inflicted millions of casualties and subsequently

changed the nature of warfare. They remain a permanent fixture on the contemporary battlefield. This entry discusses the development of machine guns and types of machine guns in use today.

Historical Development

Despite their widespread military appeal, the impetus for adopting machine guns began in the private sector. During the 19th century, newly formed corporate entities found particular utility in the concept of sustained automatic fire for the purposes of dissuading working-class protests. Though initially wary of employing them against each other, European colonial powers married the machine gun with their expansionist designs, depending on them as force multipliers to deter natives from resisting European colonial influence. This led to the famous adage of the historian Hilaire Belloc in *The Modern Traveller*, 1898: “Whatever happens, we have got The Maxim gun, and they have not” (p. 37).

Richard Gatling was the first to patent a modest-sized, reliably functioning machine gun in November 1862. Crank operated, it fired 200 rounds a minute. Gatling cited the American Civil War (1861–1865) as the inspiration for his invention; ironically, he believed the gun would obviate the need for massive mobilization because a single soldier could wield the firepower of hundreds with a single Gatling gun. Though the gun only saw service in the very last year of the war, it impressed other nations, including England, Japan, and Russia, which quickly placed orders for Gatling guns.

In 1884, Gatling’s hand-cranked version gave way to Hiram Maxim’s gun. It was a “true” machine gun, capable of continuous fire by harnessing recoil energy to eject and load cartridges. The user merely had to depress the trigger to sustain fire. Though at first Maxim had difficulty persuading militaries to adopt his creation in their service, eventually, by way of a competitive set of corporate mergers, his gun achieved moderate sales success and made it to European powers in the two decades following its invention. It was on the battlefields of World War I, however, that sales skyrocketed and the true potential of the Maxim gun was realized.

The machine gun came of age during World War I. At first, the major European powers failed to recognize the potential of Maxim’s gun, now 21 years old. Nevertheless, the weapon increased in

prominence as the war progressed until, eventually, it came to dominate the battlefield. As the Western Front settled into a stalemate, the combatants distributed machine guns more and more throughout their lines to resist massive waves of infantry assault. The power of industrialized warfare, replete with artillery, gas attacks, and machine guns, created a vast wasteland known as “no man’s land” between the opposing European forces. In this climate, warring powers threw away entire generations of men against skillfully placed machine guns.

World War I revealed the potency of sustained fire against infantry assault. Following that conflict, men such as John Browning, John Thompson, and Mikhail Kalashnikov began to develop and refine the machine gun into what would become its modern iteration. Their focus was to maintain the level of automatic fire while improving portability for use in offensive and defensive combat schemes.

Contemporary Utilization

In their contemporary designs, the submachine gun, light machine gun, recoilless automatic rifle, and vehicle mounted crew-served machine gun all developed from the desire to make the machine gun more compact and transportable. Following drastic increases in portability and compactness, the immense firepower the machine gun provides has spread throughout the modern battlefield, permitting greater flexibility and lethality for smaller units. In addition to its use within the infantry, machine guns are also found in varying forms on naval vessels, aircraft, and land vehicles serving in a variety of roles to include suppression, support, and anti-aircraft.

In the contemporary world, the machine gun remains a potent and flexible staple of warfare. Within the U.S. Army, three of the most common variants are (1) the M249 SAW (Squad Automatic Weapon) manufactured by Fabrique Nationale de Herstal, (2) the M240B (commonly referred to as the M240 Bravo) awarded to Colt manufacturing in Fall of 2009, and (3) the M2 .50-caliber machine gun manufactured by General Dynamics, U.S. Ordnance, and Fabrique Nationale de Herstal. The SAW, which can be fired from a bipod, the hip, or underarm, provides its squad great mobility as well as a high-sustained rate of fire capable of matching the firepower of 10 to 20 riflemen. Capable of



A U.S. soldier with the 3rd Squadron, 2nd Stryker Cavalry Regiment, looks down the sight of his M249 light machine gun in Azizullah, Afghanistan, January 4, 2011, in preparation for Operation Air Wolf.

Source: U.S. Army photo by Corporal Robert Thaler (released).

providing more accurate and stable firing than the lighter SAW at longer ranges, the M240B is a tripod-mounted, general-purpose machine gun effective for supporting and suppression fires, serving as an integral part of its unit fire direction plan. Categorized as a heavy machine gun, the M2 .50-caliber is one of the most storied machine guns with an equally versatile history. Standardized in 1933, the .50-caliber and its numerous iterations have served as tank, aircraft, and antiaircraft weapons. One of the reasons for the gun's flexibility derives from the interchangeability of its parts, permitting the weapon to be used in a variety of roles on the battlefield. All three machine guns—(1) the M2 .50-caliber, (2) the M249 SAW, and (3) M240B—reflect the exigencies of modern combat, which require both overwhelming

firepower and unmitigated mobility to maximize the offensive and defensive capabilities of the smallest military units in order to dominate a sector of the battlefield.

Michael Doidge

See also Arms, Small

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HAGUE CONVENTIONS

The Hague Conferences of 1899 and 1907, also known as the Hague Peace Conferences, are two extremely important events regarding international law and were held in The Hague, Netherlands. As of June 2007, the First Hague Convention had 73 signatories and the Second Hague Convention had 85. A third Hague conference was to take place in 1914, later rescheduled to 1915, but never materialized due to the inception of World War I. The initial conference was requested by Czar Nicholas II of Russia in 1898. Invitations to the conference were received with great excitement and optimism. The conference was set to focus largely on disarmament and obligatory arbitration. Several agreements and declarations regarding the rights and laws of war were created from the conference and later ratified by several states. Although the Hague Convention attempted to change the mentality that if one wanted peace one had to prepare for war, the goal of disarmament was largely a failure. One of the greatest accomplishments that came out of the conferences was the establishment of the Permanent Court of Arbitration, the oldest institution for international dispute resolutions. This achievement preceded and, in several ways, set the groundwork for the Permanent Court of International Justice, which was created in 1920 as a semiautonomous organ of the League of Nations. Thus, the conference may have failed regarding disarmament but was able to drastically improve the laws of war and, furthermore, was able to make advancements in the codification

of such laws. This entry describes the content of the Hague Conventions of 1899 and 1907.

The First Hague Convention (1899) was made up of four main sections and three separate declarations. The four sections included (1) the pacific settlement of international disputes, (2) the laws and customs of war on land, (3) the adaption to maritime warfare of principles of the Geneva Convention of 1864, and (4) the prohibition of launching projectiles and explosives from balloons. The declarations to the convention were on (1) the launching of projectiles and explosives from balloons; (2) the use of projectiles, the object of which is the diffusion of asphyxiating or deleterious gases; and (3) the use of bullets that expand or flatten easily in the human body.

The Second Hague Convention (1907) was largely an expansion of the previous with some modifications of and additions to previous agreements. There was also a greater focus on naval warfare. The convention was made up of 13 sections, 12 of which were ratified and later entered into force. These included (1) the pacific settlement of international disputes, (2) the limitation of employment of force for recovery of contract debts, (3) the opening of hostilities, (4) the laws and customs of war on land, (5) the rights and duties of neutral powers and persons in case of war on land, (6) the status of enemy merchant ships at the outbreak of hostilities, (7) the conversion of merchant ships into warships, (8) the laying of automatic submarine contact mines, (9) bombardment by naval forces in time of war, (10) adaption to maritime war of the principles of the Geneva Convention, (11) certain restrictions

with regard to the exercise of the right of capture in naval war, (12) the creation of an International Prize Court—this section was not ratified, and (13) the rights and duties of neutral powers in naval warfare.

There is no doubt that both Hague Conventions have clearly had a large impact on the laws of war and how states interpret them. In fact, both Hague Conventions as well as the Geneva Conventions make up the Laws of Armed Conflict and are, as such, an integral part of International Humanitarian Law. Reviewing the restrictions clearly stated in the proclamations of the conference helps illustrate their impact. For example, bullets that either expand or flatten easily within the human body on impact have been removed from any states' arsenals. Furthermore, the declaration has now become customary international law; the prohibition of such bullets applies to all states, including those that have not ratified the treaty. This means that the prohibition of such bullets has become such a fundamental law that no state dare violate it. If there is any violation of the conventions, it can be prosecuted by the International Criminal Court.

The U.S. government and its armed forces have especially been influenced by the conventions in both their interpretations and implementations of the laws of war presented in each conference. Examples of this influence can be seen in the U.S. armed forces' adherence to such laws as targeting only enemy combatants, the humane treatment of all individuals (both civilians and soldiers alike), and the prohibition of unlawful killing and torturing of detainees as well as medical personnel. Furthermore, the U.S. armed forces must always attempt to protect all enemies who have surrendered as well as cause no more damage than is needed to accomplish their mission. All of these policies have been implemented with stronger force, following the declarations made more than a century ago in The Hague, Netherlands.

Michael P. O'Neill

See also Geneva Conventions; Laws of War; Nuremberg War Crimes Trials; Tokyo War Crimes Tribunal

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HAITI

Haiti is a small Caribbean nation that shares the island of Hispaniola with the Dominican Republic. With its capital in Port-au-Prince, Haiti occupies the western third of Hispaniola, a total of 27,750 square kilometers (10,714 square miles), roughly equivalent to the size of the state of Maryland. Originally called Ayiti, “land of high mountains,” by the indigenous Taíno Amerindians, the island is rough and mountainous with a mix of tropical and semiarid climate. In 2011, Haiti’s estimated population numbered more than 9.7 million people.

The history of Haiti tells a story of unceasing decline, marked by revolutionary accomplishment and deterioration that has left the country in shambles. Once the richest colony in the world, Haiti is today the poorest nation in the Western Hemisphere. Glimmers of democracy in 1990 quickly faded as political instability, economic hardship, and natural disasters continually interrupted any chance of recovery and development. This entry discusses the history of Haiti dating back to its colonial period, paying particular attention to political and economic factors that have weighed so heavily on its people.

Early History

Haiti first encountered the West when Christopher Columbus discovered Hispaniola in 1492. The territory transferred to French rule in 1697 and flourished economically on the backs of African slaves in one of the world’s cruelest systems of colonial slavery. Influenced by the French Revolution, Haitian slaves

began a decade-long rebellion against the French colonial government in 1791. The famed slave general Toussaint l'Ouverture defeated French, English, and Spanish efforts, only to be kidnapped and left to die in a French prison. Haitians under the vicious leadership of Jean-Jacques Dessalines ultimately continued the war and won their freedom in 1804.

Despite independence, pervasive cultural divisions survived the collapse of the colonial system and remained in Haiti's culture. After the collapse of plantations, Creole-speaking Blacks returned to agricultural work while French-speaking mulattos gravitated to politics, cities, and agricultural export business. The division shaped Haiti's future for years to come and largely defined who acquired wealth and power. Faced with a French invasion and re-enslavement in 1825, Haiti's government agreed to pay 150 million gold francs to its extortioners; the debt consumed most of the young nation's wealth until 1947 and greatly hindered political and economic development.

Constant political turmoil and European interest in Haiti spurred the United States into a military intervention and subsequent occupation that lasted from 1915 to 1934. Occupation forces including marines and navy personnel took over Haiti's finances, rebuilt infrastructure, and established a professionalized Haitian military. In spite of improvements, forced labor, racism, and civilian deaths at the hands of marines turned Haitians against the occupation. Not long after the U.S. forces left in 1934, Haiti reverted to political instability as the imposed institutions quickly disintegrated.

After years of instability, the Duvalier family dictatorships consolidated power and ruled Haiti from 1957 until 1986. Led by father, François "Papa Doc" Duvalier, and, later, son, Jean-Claude "Baby Doc" Duvalier, the regime ruled with fear enforced by ruthless paramilitaries, including the carefully crafted Tontons Macoutes and Leopards. During their reign, the Duvaliers enjoyed enormous foreign aid and military support that built their security apparatuses while they embezzled millions intended for public infrastructure. Their legacy remained into the 2000s, as some Duvalierist Haitians preferred the stability of the dictatorship regardless of the violent repression and murder that accompanied it. Pressure from the Haitian people forced Jean-Claude into exile in 1986, when he absconded to France with hundreds of millions of dollars stolen from the Haitian people.

Despite the repressive grip of the Duvalier regime, Haiti witnessed the rise of social movements as Haitians increasingly demanded change during the 1980s. In rural areas, farming groups came together to improve farming infrastructure and form cooperatives, while urban groups focused on workers' and women's rights as well as fighting poverty. Haiti's poor fought an uphill battle and faced constant violent reprisals by post-Duvalier military regimes and former Tontons Macoutes. Father Jean-Bertrand Aristide, a charismatic Catholic priest from Port-au-Prince's La Saline slum, arose as a champion of liberation theology and Haiti's poor. In spite of efforts to silence him, Aristide pushed on in defiance to become a symbol of the social justice movement with staunch support from Haiti's poor.

Haitian Democracy and Economy

During Haiti's 1990 UN-observed election, Aristide won by a landslide 67% of the vote in a field of 12 candidates. His campaign arrived late but won over poor Haitians when Aristide criticized the hierarchy of the Catholic Church, the rich elite class, and the United States for obstructing Haitians from achieving true justice and equitable democracy. Many considered his populist agenda to raise the minimum wage, redistribute land, enforce taxes, stop drug trafficking, and separate the military from the police as a radical attack on established powers. Aristide became Haiti's first democratically elected president, but Haiti's legacy of instability returned only a few months later.

Eight months after Aristide's election, the Haitian military under General Raoul Cedras led a coup d'état in September 1991. Intrigue surrounded the coalescence of leaders including Cedras, who received U.S. training, and his associates, who had deep ties to drug trafficking. Between 1991 and 1993, the military government and various paramilitaries killed and jailed thousands of Haitians, particularly those associated with social movements and Aristide's Lavalas coalition. One prominent paramilitary led by Emmanuel Constant, the Front for the Advancement and Progress of Haiti, had significant ties with the U.S. Central Intelligence Agency. The violence forced thousands of poor Haitians and political refugees to flee to destinations including the United States, where the migrants sparked public concern over illegal immigration.

The international community levied UN sanctions against General Cedras's military regime, but U.S. presidents George H. W. Bush and Bill Clinton made exemptions for American companies to continue business as usual. Many argue that these exemptions helped the military regime and elite Haitian businessmen continue to profit from oil and exports, in addition to a resurgent illicit drug trade long associated with Haitian military and police forces. In Washington, D.C., President Aristide lobbied the U.S. government and the United Nations to restore his presidency. An initial effort during the 1993 UN Governor's Island Agreement fell through, but a UN Security Council resolution ensured Aristide's return.

With permission from UN Security Council Resolution 940, the United States began to train for a military intervention later named Operation Uphold Democracy. Pentagon planners prepared for both a forced and a permissive entry mission, but last-minute negotiations headed by the former president Jimmy Carter and accelerated by threats of military invasion led to a peaceful transition. Twenty thousand U.S. soldiers and 2,000 international personnel led an interim peacekeeping mission meant to secure Haiti, stabilize civil administration, and train police officers before Aristide's formal return. Before leaving office, Aristide disbanded the Haitian military with strong public support for a future free of military oppression. Aristide was replaced in 1995 by his prime minister, René Préval, who led a much less contentious but similar administration.

Once rich in agricultural resources, Haiti's agricultural sector had slowly wasted away. At its colonial height, Haiti produced two thirds of the tropical fruit imported by Europe. It continued to export coffee, sugar, and cotton, among other crops, until a serious decline during the Duvalier period. At the same time, deforestation left only 2% of Haiti's forests and worsened flooding, soil fertility, and erosion. Free market agreements and foreign aid also flooded Haiti with extremely low-cost, subsidized foodstuffs that crushed Haiti's small farmers. Unable to survive, rural Haitians migrated to sprawling urban slums with high hopes only to find little or no access to water, food, and health care.

Also during the 1980s and 1990s, Haiti witnessed the expansion of low-wage manufacturing. By 1984, Haitian factories ranked ninth in the production of U.S. assembled goods that ranged from baseballs to T-shirts. International trade partners and

financial institutions, including the U.S. Agency for International Development, touted manufacturing as Haiti's economic savior, but factory jobs only paid an average of \$1.60 per day. Low pay and antiunion provisions earned Haiti's sweatshops negative publicity in the United States. Both Aristide and Préval fought to raise the minimum wage, and Préval won significant improvement in unemployment despite privatization of government-owned corporations.

Aristide's Return and Coup

In 2000, Aristide swept back into the presidency with 92% of the vote in an election marred by widespread charges of fraud. President Préval left office in 2001 and peacefully transferred power to Aristide. During the final year of Préval's presidency, opposition parties fomented parliamentary gridlock that carried into the 2000 elections. Accusations of fraud in the parliamentary elections soon led to a U.S.-induced aid embargo that blocked \$500 million in Inter-American Development Bank loans despite remediation of the initial conflict. Without outside aid, Aristide stretched the meager Haitian budget to accomplish major infrastructural improvements before another coup removed him in 2004. As civil unrest spread through Haiti, the former Front for the Advancement and Progress of Haiti and military forces swept into the capital. Controversy over Aristide's flight from Haiti remains, pitting his assertion of kidnapping against the U.S. State Department's contention that he fled voluntarily with their assistance. The U.S. and international forces arrived a short time later with 3,000 soldiers under Operation Secure Tomorrow in February 2004. The U.S.-led effort attempted to quiet the unrest prior to the takeover by the UN Stabilization Mission in Haiti (MINUSTAH) that June.

Haiti After Aristide

Haiti's misfortune remained long after the coup with continued reprisals, political turmoil, and popular unrest. Shortly after Aristide left Haiti, reprisals against Fanmi Lavalas party supporters mounted as key criminals were allowed out of prison. The 2006 elections restored René Préval as president amid more disputed elections. In the following years, Préval confronted a food shortage crisis in 2008 that brought angry mobs into the streets. Making matters worse, UN occupation forces met widespread



Soldiers patrol a crowd of demonstrators during a protest in Port-au-Prince. On September 23, 1993, the UN Security Council authorized the establishment and immediate dispatch of the UN Mission in Haiti for a period of 6 months. In 1991, President Jean-Bertrand Aristide was ousted in a military coup, living in exile until September 1994, when a 28-nation multinational force, led by the United States, intervened and occupied Haiti until Aristide was allowed to safely return to office.

Source: © Les Stone/Sygma/Corbis.

disapproval over slum raids that commonly wounded and killed civilians and a 2010 cholera outbreak that claimed 5,000 lives. Leaked U.S. diplomatic documents from WikiLeaks later detailed the troubled U.S.-Haiti relations between 2004 and 2010, including Préval's struggles over oil, minimum wage improvements, UN occupation forces, and the 2010 earthquake.

On January 12, 2010, an earthquake of magnitude 7 in Haiti killed between 200,000 and 250,000 Haitians and wrought damages estimated between \$8 and \$14 billion, primarily in Port-au-Prince. In response to the earthquake, the U.S. launched Operation Unified Response with 17,000 troops that provided much needed medical care, logistical support, and a ground security force despite existing

UN peacekeepers. Over the next year, the international community pledged \$4.6 billion, but 1 year later, less than half had been disbursed. International aid had appeared to promise a brighter future for Haiti, but the miserable status quo returned.

Haiti's Future

Moving on from the earthquake, Haiti's future remains as unpredictable as ever. Elections in December 2010 again sparked angry debates over legitimacy that only slightly quieted after a 2011 runoff that declared the former musician Michel "Sweet Micky" Martelly as Haiti's new president. The resurgence of Duvalierism and Martelly's efforts to re-create the Haitian military raise questions about the future and viability of

Haitian democracy. Additionally, the return of the former exiled leaders Jean-Claude Duvalier and John Bertrand Aristide excited Haitian politics. The 2011 expiration of the Interim Haiti Recovery Commission charged with distribution of foreign aid further stands to threaten post-earthquake aid as donors worry over the misuse of funds in the commission's absence. Finally, promises to lift Haiti's poor from despair come into question with the national infrastructure and economy in ruin and environmental squalor threatening the productivity of rural agriculture. The only certainty is that Haiti's recovery will be an uphill battle as difficult as ever.

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See also Caribbean; Haiti, U.S. Intervention in

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HAITI, U.S. INTERVENTION IN

Beginning with the Spanish-American War in 1898 and throughout the first four decades of the 20th century, military forces of the United States of America occupied much of Central America. Many reasons were given for these interventions in other sovereign nations, such as protecting American interests, quelling indigenous rebellions, establishing democratically based governments, maintaining political stability, and minimizing European influence. The U.S. Marine Corps played significant roles in these

interventions and ongoing operations that came to be known euphemistically as “banana wars” or officially as “small wars.” Of the many deployments by marines, Haiti represented the most challenging occupation because of its political corruption, economic exploitation, constant infighting, and religious division. This entry discusses the history of U.S. intervention in Haiti, lessons learned by the U.S. military, and historical interpretations of the intervention.

Historical Overview and Key Events

Since its bid for independence in 1804, Haiti endured many bloody rebellions and violent changes in government. In the years between 1911 and 1915, for example, six Haitian leaders were overthrown and replaced in rapid succession. The nation's economic situation was also in poor shape because its government had slipped into debt to the United States, Germany, and other nations. Haiti's president Vilbrun Guillaume Sam established a dictatorship in early 1915, but he could barely control the government, let alone maintain order in the nation as a whole. Sam was overthrown, and his body torn apart by an angry mob. The chaos threatened American commercial and financial interests and political stability in Haiti and the region. A stable Haiti would help ensure a peaceful Caribbean and a secure Panama Canal in the face of increasing German threat after the First World War started. Thus, it should have come as no surprise when the president of the United States Woodrow Wilson ordered 340 marines and sailors to land in Haiti's capital of Port-au-Prince and restore order on July 28, 1915. This began a 19-year occupation by the American military during which as many as 3,000 marines served in Haiti.

Ever the progressive and idealist, President Wilson hoped that the American presence in Haiti could help its people negotiate a resolution to their internal conflicts, establish a democratic system, and organize an indigenous police force, known as a constabulary, capable of supporting a new government. In the summer of 1915, Rear Admiral William B. Caperton, the first American commander, declared martial law and took control of Haiti's custom houses. The Haitians found themselves forced to elect a president—Philippe Sudré Dartiguenave—whom the Americans would find malleable and agreeable. In reality, however, neither the Americans nor their several client rulers exerted real power in

the countryside as long as bandits, mercenaries, and revolutionaries, whom the marines called *cacos*, disrupted the functions of the Haitian government and undermined American influences. During these early years, Major Smedley D. Butler of the Marine Corps won notoriety in Haiti and received a congressional Medal of Honor for fighting to suppress the Haitian insurgency. As many as 5,000 *cacos* enjoyed relative success when led by charismatic leaders like Charlemagne Peralte in 1918. However, he and other leaders were eventually captured or killed, and the *cacos'* level of activity declined by 1922.

Differences in class, race, language, and religion compounded the difficulties facing the American marines in Haiti. A split existed between a wealthy minority of mixed-race *mulâtres* in the urban areas like Port-au-Prince and an illiterate majority of Black *noirs* in the urban slums and the rural agrarian communities. Adding to this was the fact that Haiti's elite spoke French, while the lower classes spoke Creole, which combined French and West African languages. Finally, the *mulâtres* followed Roman Catholicism, but the remaining Haitian populace practiced a mixture of Catholicism and voodoo. The two groups were thus incompatible. The marines grew to detest the urban Haitian elites as corrupt and oppressive, and voodoo practices notwithstanding, many marines developed sympathy for the poor Haitian peasants.

Haiti finally achieved relative stability in 1922 under American-backed client governments and the able leadership of John H. Russell, a Marine Corps brigadier general and the American high commissioner with rank of ambassador extraordinary, who directed civilian and military activities of the American occupation until 1930. A significant expansion of infrastructure in Haiti occurred during his watch. Among the highlights were construction of 1,000 miles of new roads and nearly 200 bridges as well as new hospitals and public buildings. Russell's initiatives also brought safer drinking water and improved sanitation to Haitian cities. Sugar and cotton increasingly became significant exports as Haiti's economy grew. Much of the new revenue, however, went to fund Haitian debt or to pay for American occupation forces. Russell achieved less success in establishing democracy in Haiti because elections were often farcical victories for the candidate or referenda supporting American interests.

One key to American efforts in Haiti was the Gendarmerie d'Haiti, a constabulary force that was renamed the Garde d'Haiti in 1928. Major Butler held the rank of major general, and Marine Corps sergeants received commissions as officers in Gendarme and Garde. The most well-known sergeant was Faustin Wirkus, who held the Haitian rank of lieutenant. He tried to learn Creole and understand voodoo practices on the island of La Gonâve where he served as commanding officer. Wirkus's exploits were popularized in the book *The White King of La Gonave* in 1931. Indigenous Haitians served as the rank and file in the Gendarmerie and Garde, and some eventually joined the officer corps. As the 1920s progressed, the Haitians accounted for the majority of the 2,000-man-strong constabulary force, while the number of marines in Haiti shrank to 500 during that decade. But the real influence and power consistently rested with the marines in the Gendarmerie and Garde.

The year 1929 marked a turning point in the American occupation of Haiti and heralded a withdrawal 5 years later. Economic problems caused labor strikes and street violence. In one incident, a marine patrol opened fire on rioting demonstrators in the coastal town of Aux Cayes and killed 12 Haitians. This so-called Aux Cayes Massacre caused a negative shift in American public opinion regarding the marines in Haiti. The tragedy also motivated the newly elected U.S. president Herbert Hoover to appoint the Forbes Commission, headed by and named after the former American governor of the Philippines, W. Cameron Forbes. The resulting investigation determined that American forces should leave Haiti. The Forbes Commission's finding helped usher John H. Russell out of Haiti, and the position of high commissioner was not replaced or renewed. Hoover began withdrawing American troops from Haiti and other Central American nations, and his successor, President Franklin D. Roosevelt, finished that process. In the place of occupation forces, Americans initiated a policy of Haitianization of government, judicial, and military functions designed to prepare Haiti for independence and autonomy. Haitian officers assumed more and greater authority in the Garde as they replaced exiting marine officers. The intervention ended, and the last marines left Haiti on August 1, 1934.

Despite idealistic intensions and often the best efforts, the legacies of the American occupation of

Haiti were those of missed opportunities and short-term successes. Haiti would eventually plunge once again into periodic shifts between dictatorship and anarchy. The elites still controlled enough resources to oppress the impoverished masses, and the Garde d'Haiti devolved into a vehicle for strongmen and coups d'état.

Lessons Learned and Historical Interpretations

Marines in Haiti enjoyed some significant successes, and many lessons can be gleaned from the intervention in Haiti. Marines led by the likes of Smedley D. Butler and John H. Russell helped establish Haiti's first, albeit marginally professional, constabulary security force in the Gendarmerie d'Haiti and later the Garde d'Haiti. These provided not only means for Haitians to gain vested interests in perpetuating a stable regime but also means for training Haitians in practical skills to help perpetuate that stable regime. Marines with help from the Gendarmerie and Garde halted banditry and rebellion of the *cacos*, which in turn made the rural areas safer and the benefits of secure communication and transportation more tangible for the Haitians living in the countryside. Americans supervised the construction of roads, hospitals, and other important public works designed to further stabilize and modernize Haiti's infrastructure. Marines undermined the power of the wealthy urban *mulâtres* and decreased the rampant corruption in the Haitian political and judicial systems. Marines laid a foundation for what they hoped would be democratic elections. In all, these efforts represented attempts to protect the Haitian populace and improve their everyday lives in hopes that they would find fewer reasons to turn to rebellion as an act of desperation or disruption. The marines, however, rarely appreciated or utilized cultural factors, like the Haitian practice of voodoo, to their advantage. Instead, marines too frequently tried to stop the practice of voodoo, and thus, they alienated many otherwise friendly Haitians.

Many of the lessons learned in Haiti and the rest of Central America were compiled by the Marine Corps Schools in Quantico, Virginia, in the 1930s and published in the *Small Wars Manual* in 1935 and in a revised and finalized version in 1940. Many decades later, these efforts in Haiti resemble what is termed *nation-building* in Operation Iraqi Freedom and Operation Enduring Freedom.

Moreover, the *Small Wars Manual* served as an important foundation for the recent *Army-Marine Corps Counterinsurgency Field Manual* completed in 2006.

One historical interpretation of the American intervention in Haiti and the Marine Corps's participation in the subsequent occupation can be found in the conventional histories of the Marine Corps like Allan R. Millett's *Semper Fidelis: The History of the United States Marine Corps* and James McCrocklin's *Gard D'Haiti: Twenty Years of Organization and Training*. Both of these books provide detailed narratives that include some analysis of the reasons for American successes or failures in Haiti as well as operational lessons to be learned from Haiti. They do not delve into issues of morality or ideological motivations for American intervention that the revisionist historian Hans Schmidt examines in *Maverick Marine: General Smedley D. Butler and the Contradictions of American Military History* or that the postmodernist scholar Mary Renda explores in *Taking Haiti: Military Occupation and the Culture of U.S. Imperialism, 1915–1940*. Schmidt traces what he sees as the evolution of Smedley Butler from a hard-fighting marine supporter of American intervention to a bitter critic of American imperialism. Butler's experiences in Haiti played a formative role in his change of opinion. Renda takes a different approach to Haiti by portraying the American occupation as a whole and marines in particular as agents of a *mission civilatrice*—American style. She argues that racism and paternalism provided twin cultural motivators for the mostly Anglo-Saxon, Protestant, Caucasian marines to try to force the Haitians to change and become more like the Americans. Apart from these historical interpretations is Keith B. Bickel's *Mars Learning: The Marine Corps Development of Small Wars Doctrine, 1915–1940*. Bickel's analytical survey of Marine Corps operations throughout Central America illuminates the learning processes and organization transformations of the Marine Corps during these 25 years and thereafter.

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See also Asymmetric Warfare; Caribbean; Counterinsurgency; Guerrilla Warfare; Haiti; Marine Corps, U.S.; Nation-Building; Occupations; Operations, Jungle; Warfare, Unconventional

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HALLIBURTON

Halliburton was one of the most prominent military support service providers in the 1990s and early 2000s, until its subsidiary Kellogg Brown & Root (KBR) separated from the company in 2006. Since then, Halliburton has operated within its core competency, the energy sector, while KBR continues to provide construction and engineering services as well as military support services, along with its joint ventures like Vinnell-Brown & Root and Vinnell Corporation, currently a subsidiary of Northrop Grumman. This entry examines the history and global scope of Halliburton and its subsidiaries.

Halliburton, founded in 1919, is one of the major providers of services and products in the energy industry. The company operates in 80 countries around the world with more than 100 subsidiaries. In 2002, Halliburton split its business into two distinct

entities, Halliburton Energy Services Group and KBR, to protect its assets from asbestos lawsuits that its subsidiary Dresser Industries, acquired in 1998, was involved in. KBR separated from Halliburton in 2006. The reasons given for separation vary: that KBR was a sideline to Halliburton's main interest of business, that KBR was fighting asbestos lawsuits, that its financial status was not very good and it was involved in inquiries of overcharging U.S. troop support in the Middle East, and that Halliburton's management believed that the value of KBR was not reflected in Halliburton's stock price, thus the two companies could realize their stock prices if separated. Halliburton restructured its operations into Eastern and Western Hemispheres in 2006, and in 2007, it restructured around two major divisions: (1) Drilling and Evaluation and (2) Completion and Production. The Drilling and Evaluation segment consists of Baroid Fluid Services, Sperry Drilling Services, Drill Bits, Wireline and Perforating Services, Testing and Subsea Services, Landmark and Consulting, and Project Management. The Completion and Production segment includes Production Enhancement Services, Completion Tools and Services, Cementing Services, and Boots & Coots, which consists of intervention services, pressure control, equipment rental tools and services, and pipeline and process services. Halliburton moved its operational headquarters to Dubai, leaving its offices in Houston. As of 2010, Halliburton revenues were \$18 billion.

Brown & Root was the main force behind Halliburton's involvement in military supply services. Founded in 1919 and incorporated in 1924, Brown & Root specializes in engineering and construction. In 1963, Brown & Root was sold to Halliburton for \$36.7 million, yet the two companies maintained separate operations under a loose corporate structure. Brown & Root focused on engineering and construction, while Halliburton operated in the oil sector. However, economic recession and languishing oil prices in late 1970s and early 1980s forced the two companies to establish a more streamlined corporate structure. Brown & Root Services (BRS), a subsidiary of Halliburton, was founded in 1986 to focus on government operations and support services. In 1998, KBR emerged with the addition of an oil-pipe fabricator, M.W. Kellogg, and operated as the subsidiary of BRS for military support services. In 2006, KBR was separated from Halliburton, and

it now operates independently in the areas of engineering, procurement, and construction in 45 countries on five different continents as well as provides military support services.

BRS has been providing military services in different forms since World War II. During World War II, BRS was awarded the construction of the Corpus Christi Naval Air Station and several U.S. Navy warships. During the Vietnam War, BRS won part of a \$380 million contract to build airports, bases, hospitals, and other facilities for the U.S. Navy in South Vietnam. In 1988, Vinnell-Brown & Root was awarded the contract for running support services at Incirlik Base in Turkey, along with two minor bases in Ankara and Izmir.

The main expansion in military support services came in the 1990s as the outsourcing of military services gained momentum and reached its peak in the 2000s, particularly after wars began in Afghanistan and Iraq. In the post-Cold War environment of the 1990s, military outsourcing became a viable option for conducting military operations given decreased military budgets, shrinking troop levels, and political constraints on using military force. Outsourcing military support services was considered advantageous as it freed troops from base duties and enabled higher numbers of troops at the front line by keeping troop levels at politically viable levels. Outsourcing was also considered economically cost-effective; it could decrease military spending, although the cost-effectiveness of military outsourcing is still a highly debated issue.

In the post-Cold War environment, BRS/KBR won contracts ranging from military planning to logistics and base support operations in the Balkans, Africa, the Middle East, and Central Asia. In 1992, BRS was awarded the U.S. Army's Logistics Civil Augmentation Program for preparing and detailing civilian assistance in providing logistical support for U.S. troops deployed in contingency military planning, and later that year, BRS was asked to review and update its plans. In December 1992, BRS was asked to support U.S. troops in Somalia in the wake of Operation Restore Hope. Following Somalia, BRS supported U.S. troop deployments, with increasing amounts of support in Rwanda (Operation Support Hope), Haiti (Operation Uphold Democracy), and Kuwait (Operation Vigilant Warrior). In 1995, BRS was awarded \$546 million to support U.S. soldiers deployed in the peacekeeping operations in Bosnia

and Herzegovina led by the North Atlantic Treaty Organization's Implementation Force, although their support often extended to the U.S. allies involved in the mission. Although BRS lost the Logistics Civil Augmentation Program contract in 1997 (which was won again in 2001), the operations of BRS in the Balkans continued. In 1999, as the North Atlantic Treaty Organization initiated the Kosovo campaign, KBR provided logistical support for U.S. forces as well as nongovernmental organizations, such as the Red Cross, in building and operating camps for refugees in Albania and Macedonia. Following the September 11, 2001, terrorist attacks, KBR was handed much of the logistical support and base construction work of U.S. forces in Afghanistan, Uzbekistan, and Iraq. In 2010, Vinnell-Brown & Root was awarded a \$335 million contract by the U.S. Air Force for base support operations in Turkey and Spain, in addition to its contracts in Egypt, Oman, and Saudi Arabia.

Çağlar Kurç

See also Logistics; Northrop Grumman

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HAMAS

Hamas (an acronym for Harakat al-Muqawama al-Islamiya, or the Islamic Resistance Movement) is a Palestinian political and militant movement founded in 1987 by Sheikh Ahmed Yassin, who preached and coordinated charitable work in the West Bank and Gaza Strip through the Muslim Brotherhood movement in Egypt. Yassin, who had worked in the region for the Muslim Brotherhood since 1973, established Hamas as a local political wing of the organization following the outbreak of the first intifada in December 1987. The organization of Hamas is split among three main pursuits: (1) the political wing, (2) the military wing, and (3) a charitable and social work wing. Hamas is currently the party in

power in the Gaza Strip region of the Palestinian Authority and has been engaged in civil conflicts with the ruling Fatah party since the 2006 legislative elections in Palestine. This entry examines the history, activities, and leadership of Hamas.

Hamas departed from the nonviolent principles of the Muslim Brotherhood from its early days, and its founding charter calls for the destruction of Israel as well as the replacement of the current Palestinian Authority with an Islamist state in the West Bank and Gaza Strip. Among its stated goals are to “raise the banner of Allah over every inch of Palestine,” and it has maintained that the waging of holy war against Israel was the responsibility of every Palestinian Muslim. The militarized wing of Hamas operates as Izz ad-Din al Qassam Brigades, responsible for rocket attacks against Israel and for suicide bombings through 2008.

The first Hamas suicide bombing took place in Israel in 1993, just months before the Israeli-Palestinian peace accords at Oslo, and it is estimated that Hamas is responsible for more than 350 separate terrorist attacks since that time, the numbers of which escalated quickly following the Oslo accords. In 2009, Khaled Mashal, the current leader of Hamas, indicated his willingness to come to a settlement with Israel at 1967 borders, provided East Jerusalem would become the Palestinian capital and Palestinian refugees would be allowed to return. Hamas was excluded from peace talks for not recognizing the state of Israel. Hamas currently has about 1,000 members and thousands of supporters throughout the region and the world.

Because Hamas is the party in power in the Palestinian Authority legislative body, they have some public funds at their disposal, though much of Hamas’s budget comes from donations, particularly from private donors or sympathetic states such as Saudi Arabia and Iran. Some of Hamas’s money, somewhat controversially, also comes from the Islamic charities in the United States and Canada that donate through Hamas-backed groups. It has been estimated, however, that about 90% of Hamas’s budget is dedicated to charity work and social services within the Palestinian Authority. Hamas’s activities within the Palestinian Authority involve social and cultural welfare programs, including establishing schools, soup kitchens, mosques, and sports teams, and much of Hamas’s support comes from the group’s reputation for political

honesty and lack of corruption. The charity work has not enabled the group to enjoy consistent public support, however. In June 2011, a public opinion survey of Gazans indicated that 67% of the population would support demonstrations in favor of regime change.

In 2006, the Palestinian Authority held its first legislative elections since 1996, and after the Battle of Gaza in 2007, Hamas ousted the rival Fatah party as the ruling party in the Gaza Strip while Fatah retained control over the West Bank regions. Since that time, there has been political and military-civil conflict between the two groups, and the conflict has left the Palestinian Authority politically divided.

Despite the split between the two regions, Hamas only holds control in Gaza, and its leadership has been at odds with the leadership of Gaza’s prime minister, Ismail Haniyeh. The Fatah-affiliated president of the Palestinian Authority, Mahmoud Abbas, also the chair of the Palestine Liberation Organization, is recognized internationally as the leader of the Palestinian State. In 2011, Abbas was responsible for the bid for full Palestinian statehood at the United Nations. There have been several attempts since 2011 to reconcile the two parties in the Palestinian Authority, but these attempts have met roadblocks not only from Fatah and Hamas but also from the Israeli prime minister Benjamin Netanyahu, who opposed the reunion in 2011 as Hamas still does not recognize the state of Israel. However, the possibility of reconciliation may have increased after Abbas’s speech in favor of Palestinian statehood at the United Nations, as public opinion polls showed an increase in Abbas’s popularity, which may aid talks with Hamas going forward.

Hamas has encountered some difficulty with other former allies as well. After Khaled Mashaal, based in Damascus, refused to publicly express support for the Syrian government’s crackdown against rebels in 2011, Hamas lost support from Syria and Iran, forcing the group to relocate to Egypt and Qatar and leading to a Hamas declaration of support for the Syrian rebels. This loss of support is doubly painful for the group, as the Palestinian Authority has been locked in deep budget shortfalls and has operated under threat of being cut off from foreign aid from the United States and the European Union over the group’s refusal to renounce violence.

Currently and in the near future, the largest issues facing Hamas involve relations with the Palestine Liberation Organization and Fatah, as well as Hamas's willingness to be a part of negotiations with the Israelis, which would require the group to recognize Israel's statehood. Getting fuel to Gaza became an issue in 2012, when Hamas was unable to receive the fuel it had begun purchasing from Egypt instead of Israel, and the region's only power plant shut down. Peace talks with Fatah also stalled in 2012, leaving the future of the Hamas government in the Palestinian Authority uncertain at best. The United Nations, after a diplomatic visit in July 2012, found little hope in the economic situation in Gaza and expressed little current hope for the renewal of peace negotiations between Israel and Palestine. Hamas still faces a number of problems and questions about its militant ideology in its quest for legitimacy in Palestine.

Hillary Jean Sebeny

See also Israel; Middle East Conflict

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HANSON, VICTOR DAVIS

In the decades around the turn of the 21st century, the historian, classicist, and opinion journalist Victor Davis Hanson emerged as one of the leading public

intellectuals in the United States. Born into a farming family in California's central valley in 1953, Hanson worked on the family raisin farm before and after earning a Ph.D. from Stanford University in classical Greek history in 1980. In the years since, he has authored or coauthored more than 15 books and scores of articles, book chapters, and opinion pieces. This entry discusses Hanson's writings and his views on war making.

Hanson's importance to military science comes in two areas. The first is as a scholar of the ancient world, in particular warfare in ancient Greece. The second is as a commentator on contemporary military affairs, especially in the time after September 11, 2001. Hanson's particular attribute has been to link these areas, drawing ideas from antiquity into the present day.

Hanson emerged as a leading classical scholar and military historian with *Warfare and Agriculture in Classical Greece* (1983, 1998, rev. ed.), *The Western Way of War: Infantry Battle in Ancient Greece* (1989), and *The Other Greeks* (1995), books that made groundbreaking arguments for connections between agriculture in Greece's terrain and climate and the manner in which the Greek city-states waged war. In short, Greek agriculture and individual land ownership led to a style of warfare that emphasized decisive battle according to mutually agreed-on rules of conduct. That fundamental style, with many small variations, came to dominate Western war making all the way until the present. In making his case, he used his experiences as a farmer to inform his understanding of the past. It is not surprising that for him the process also worked in reverse—he came to see clear connections from the distant past to the modern day.

Indeed, much of Hanson's early career focused on making the classical age relevant to the present. Those efforts included a number of coauthored arguments for a revival of classic studies in higher education and, more germane to this entry, for a chain of continuity in a Western way of war from antiquity to the present. For example, *Carnage and Culture* (2001) drew out the argument of *The Western Way of War*, reviewing battles between Western and non-Western forces throughout history to demonstrate the particular traits—freedom, decisive battle, mobilized citizenry, individual land ownership, reason, free markets, discipline, individualism, and self-critique—that together allowed for the rise of the West in world history. *Ripples of Battle* (2003) made the case that battles, the most intense and unforgiving of human

activities, became embedded in human society and culture through history, memory, literature, and art, all of which gave war great power as a shaper, for good and ill, of civilization.

When the present became more violent after September 11, Hanson had placed himself perfectly to comment on the current state of affairs. The first run of *Carnage and Culture* appeared in the summer of 2001, and at the same time, Hanson, a lifelong Democrat, began writing regularly for the conservative publication *National Review*. In the years since, he has been an ardent supporter of the American war effort, and a strong critic of those who oppose the war. Many of his writings in this vein have been captured in two collections, *An Autumn of War* (2002) and *Between War and Peace* (2004), and he has also been a frequent contributor to the *New York Times*, *Wall Street Journal*, *Commentary*, *Claremont Review of Books*, *New Criterion*, *Policy Review*, *Wilson Quarterly*, and *Weekly Standard*, along with giving frequent television interviews and providing a steady stream of writings on various weblogs. His direct influence on policy reached its highpoint during the presidency of George W. Bush, when he met with the president, and when Vice President Dick Cheney brought him in for a discussion of war, history, and human nature.

Hanson's views have not gone unchallenged. Although his views on the nature and dynamics of Greek warfare are generally accepted, including his later work on the Peloponnesian War, *A War Like No Other* (2005), many influential military historians have strongly disagreed with the Western way of war thesis and all of its derivatives. Most critics offer two major counters to Hanson's argument. The first is that non-Western powers have, on multiple historical occasions, decisively defeated Western forces. The Mongols offer a striking example of a non-Western way of war having no difficulty whatsoever crushing European armies in battle. The second is that they see nothing like an unbroken chain linking the Greek hoplite (soldier) to the fighting men and women of Western powers today. For example, in his book *Battle* (2004), the historian John Lynn took particular issue with what he called Hanson's "universal soldier" argument. Lynn found it highly questionable to try to link the experiences, motivations, and actions of individual soldiers across so broad an expanse of time and place as all of Western history. The resulting debate has informed and enriched the fields of military and world history.

Nor has Hanson, now a scholar at the Hoover Institution, commented on current affairs without opposition. Critics of the Global War on Terrorism have also turned their attention to Hanson from time to time, maintaining that his interpretations provide nothing more than historical justification for faulty or even criminal acts of war.

There is a certain irony to Hanson's professional career path and his success in linking scholarship and commentary. To a degree, the critiques of Hanson the scholar and Hanson the pundit have also been linked. The linkage has been largely unfortunate, because the politics of punditry tend toward a heated style of discourse that overshadows historical debate. Hanson's very success has led to a penchant among some to too readily or blithely dismiss his scholarly work. Nevertheless, whatever his specific interpretations on matters historical and contemporary, the work of Victor Davis Hanson is always informed and has been an interesting and constructive contribution to military science.

Thomas Bruscino

See also Levels of War

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HAZING

Hazing captures the historical pages of ancient rites of passage and military tradition. The sounds and images of yelling sergeants beating their fists on the sides of buses full of new recruits serve as a form of psychological intimidation. The goal of such acts of intimidation is to gain immediate control, attention, and respect.

The ultimate purpose is to instill a sense of esprit de corps, bonding, and a military presence in recruits from diverse backgrounds and experiences. Another goal is to turn military "outsiders" into "insiders" through suffering and surviving common hardships as a team. However, fine lines exist between hazing, abuse, and torture. This entry defines hazing and discusses types and consequences of hazing.

Kicking recruits as they depart the bus on arrival for basic training clearly crosses the line and becomes physical abuse. Another common strategy is to move through the barracks in the middle of the night, banging metal garbage can covers. Blood pinning new military pilots requires piercing their chest with the sharp pins of aviator wings. Many other initiation rituals may still prevail; however, commanders do not officially condone them.

Noncommissioned officers in direct supervision of recruits walk a fine line between military tradition and hazing, which is illegal. Traditional punishments for failure to comply with military direction and orders include multiple push-ups and running in place for extended periods while the recruit holds a weapon over the his or her head. Adverse weather conditions are of no consequence. The administration of these punishments must be fair and reasonable and should not extend beyond the abilities of the recruit.

Hazing Defined

The term *hazing* is not limited to any form of initiation or “rite of passage.” According to the army, hazing involves inflicting or encouraging others to inflict physically painful activities on another member of the service. Physically striking someone is the obvious form of hazing. The more subtle forms of hazing include forcing or requiring the consumption of excessive amounts of food, alcohol, or other substances. The famous West Point case of 1898, when Cadet Oscar Booz endured constant torment, beatings, verbal ridicule, and forced consumption of hot sauce represents one example.

Hazing that includes psychological and verbal abuse may prove more harmful over time. Psychological abuse involves a substantial range of emotional abuse and is not limited to the following: (a) causes another military member to suffer; (b) exposes soldier to an activity that is cruel; (c) is abusive, humiliating, or oppressive; and (d) encourages a service member to engage in dangerous, illegal, or demeaning behaviors. Dire consequences can result when a seemingly innocent celebration or the “rite of passage” becomes the venue for bullying, abuse, or psychological torture.

In addition, abusive hazing results in harming multiple victims: (a) the abused, (b) those who do not participate but witness the abuse, and (c) the family or friends left with the aftermath of the abuse.

Military Significance

According to army regulations, hazing is prohibited in all cases, including off-duty or unofficial activities or unit functions. Hazing can occur superior to subordinate, among peers, and even directed toward senior military personnel by those of junior rank. The expressed or implied consent of the service member is not a defense to the violation of Army Regulation 600-20. The Marine Corps has a similar regulation: no marine may engage in hazing or consent to acts of hazing (Marine Corps Order 1700.28). Military hazing defies definition because of the constant innovations and variations the human mind can contrive.

Military Law

Some drill instructors may believe that tearing recruits down psychologically and physically enables them to put the recruit back together into a preferred military personality. New recruits are humiliated so that basic training staff can restructure their personalities into disciplined combatants. These noncommissioned officers instruct the military behaviors and concepts that are necessary to succeed in battle. Occasionally, these behaviors will place military personnel in conflict with the Uniform Code of Military Justice.

Some hazing rituals are malicious and involve beating, kicking, and traumatic injuries that may lead to death. Historical evidence exists for burning, branding, mutilating, and sexual abuse. The most frequently administered behaviors are excessive drill calisthenics that may result in death. These forms of hazing will likely result in military imprisonment and possible dishonorable discharge from military service for the offender.

Commanders are responsible for every hazing occurrence in their command, even if they were not present. The defense of not having any knowledge of the incident will not prevail; commanders cannot abdicate their command responsibilities. These officers can receive adverse officer evaluation reports and be relieved of command, which means the end of their careers.

If military officers participate in the hazing conspiracy, they are subject to military prosecution under the authority of the Uniform Code of Military Justice. If the commander or officer gave an order (direct or implied) or participated in the

hazing death of military member, that commander or officer is legally culpable. In the cases of negligent or reckless deaths, long prison sentences and harsh penalties might prevail.

Hazing Consequences

Hazing is supposed to inculcate military values, test recruits under stressful situations, and mimic hostile environments. The goal is to eliminate recruits who cannot perform under stressful combat conditions. The rationale is that the elimination of weaker recruits will ultimately save lives in battle. Hazing opponents suggest that this philosophy produces the opposite results in life-threatening combat scenarios.

Opponents cite instances regarding the Russian army in Chechnya. Russian units that reported the highest tradition of hazing were the first to break ranks and flee under enemy fire. Instructors who explain the underlying foundation for military tactics can achieve the service members' rational compliance and superior training objectives. Blind obedience and hazing are inferior training strategies.

Brutal hazing does not support the rationale for building group solidarity and may serve a destructive purpose. The possibility of negative and unintended consequences may unfold in real combat scenarios. The negative consequences from hazing that unfold from the in-group, rather than from the enemy (out-group), engender hostility, suspicion, and distrust of commanders, leaders, and fellow combatants.

Certainly, the worst of hazing has adverse psychological consequences that may lead to adverse combat performance and dysfunctional behaviors. Hazing activities that lead to physical injuries, like brain or organ damage and sexual abuse, can never be justified. Some opponents have suggested that hazing may eventually lead to *fragging*, the deliberate release of a grenade near military leaders. The outcome of the activity is to vent hostility and injure or incapacitate the targeted leader.

Psychological trauma related to abusive hazing is more difficult to assess. Adverse stress reactions and trauma vary among individuals, which may include depression and posttraumatic stress disorder. Those individuals who experience traumatic stress prior to combat are more likely to experience posttraumatic stress disorder. Traumatic episodes are cumulative; more stress and trauma from those who are

trusted remain particularly harmful. Bullying and abuse from respected leaders are especially toxic. The psychological harm to military personnel is immeasurable.

Conclusion

Military leadership seeks to instill esprit de corps and build respect for the accomplishments of air force, army, Coast Guard, marine, and navy personnel. Military hazing "rites of passage" can be dangerous and life threatening. Sadistic bullying and abusive behaviors should receive a zero-tolerance approach from commanders and military leaders. Unharnessed hazing is counterproductive to achieving military core values, may alienate service members, and destroy unit cohesion and bonding.

Thomas E. Baker

See also Abuse, Family and Child; Constitutional Rights, Personnel; Court-Martial; Uniform Code of Military Justice

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HELICOPTERS

Helicopters are a type of aircraft that generate lift using a horizontal propeller, unlike the vertical propellers of airplanes. Using a secondary propeller to keep the aircraft from losing control due to the massive torque created by the force of the main propeller, helicopters are capable of hovering and executing delicate maneuvers that modern jet fighters are unable to do. Helicopters have been developed to serve two main roles. The helicopter's initial, and primary, role was as a transport for ferrying troops or equipment to the front lines or evacuating them as necessary. Its second role is as a weapons platform for the support of units deployed in the

field. The helicopter's inherent maneuverability and its ability to hover for sustained periods allow it to provide sustained and accurate fire on enemies, at ranges closer than that at which an attack aircraft could safely deploy ordnance. This entry describes the types and characteristics of helicopters in use today by armed forces, focusing on the U.S. military.

Early History

Much like the Wright brothers, early inventors had to deal with a number of engineering issues to create an efficient model. Issues arose from attempting to generate sufficient lift with different models of propellers, dealing with the vibrations created by the motor as well as the operation of the helicopter. Patience and perseverance by Igor Sikorsky, a notable aircraft inventor who shifted his focus toward helicopters, led to the VS-300A, known as the R-4 Hoverfly, the first helicopter. It saw very limited service during World War II as a rescue helicopter, transporting wounded away from the battlefield. Following the war, a number of other models were developed, with the intent of transforming the transportation market by providing helicopters that were less expensive and simpler than the family sedan. To this end, the Bell Helicopter Model 47 became the first helicopter for the civilian market. Its military variants would see service in the Korean War and later during the Vietnam War.

Transport Helicopters

The idea of using helicopters as a means of transportation arose from the difficulty experienced by the world's armies in surmounting the terrain. Even for the world's most modern militaries, terrain provides obstacles that could delay an offensive or provide the enemy the chance for a withering counterattack. Given the fact that helicopters do not need a long runway for takeoff and landing, they are able to transport soldiers and materiel to almost any location in an area of operations. Though planes were used in the past to deploy paratroopers in large numbers behind enemy lines, helicopters were able to place the soldiers exactly where they were needed and offered the option of quick extraction or evacuation if necessary.

Transport helicopters were first widely used during the Korean War, initially for reconnaissance, medical evacuation, and rescue missions. However,

the helicopter was soon found to be very flexible. Marine helicopters were used for target spotting for artillery, as well as for the use of special operations teams. Snipers used helicopters as mobile platforms to limit Korean infiltration of allied lines.

The ability to deploy soldiers rapidly would later be used to great effect by the British in their campaign to retain control of Malaysia. Controlling an area of 50,000 square miles made the helicopter's use a necessity. Similarly, the French used the helicopter during their Indochina campaign. In response to the Vietnamese rebels encircling and ambushing long convoys, transport helicopters were positioned in such a way as to encircle the rebels and then strike at them from both sides.

America's entry in the Vietnam conflict saw the use of similar techniques for transport aircraft as in the previous conflicts, but on a greater scale. Every year that the Vietnam War continued saw the need for greater numbers of transport helicopters. At the same time, it was quickly realized that transport helicopters were not immune to ground fire. The Battle of Ap Bac, in 1963, saw the deployment of 15 helicopters. Five were shot down and only one returned without battle damage. During the weeklong Battle of Ia Drang in 1965, transport helicopters deployed and redeployed battalions, repositioned artillery to provide improved support angles, and airlifted supplies to the soldiers. Thanks to the logistical support of transport helicopters, Ia Drang saw the defeat of three regiments of the North Vietnamese army. This battle led to the Jitterbug battle tactic, where helicopters would identify enemy sites, mass forces to create a cordon around the area, and then assault the enemy with airborne ordnance and a ground sweep. This tactic was effective if the army units had the mobility that helicopters provided and the large number of troops necessary for an effective cordon of an area. This tactic continues to the present day but is rarely used for conventional operations. Most modern helicopter operations involve the deployment or retrieval of special operations forces.

Transport helicopters were also used to recover downed pilots. Sparing them from death or an extended captivity at the hands of the North Vietnamese, recovery missions also provided soldiers a valuable morale boost. However, the enemy quickly adapted to these missions and prepared ambushes instead of capturing pilots. These missions continue to the present day, with Quick Response

Forces always at the ready to respond to the downing of an aircraft or helicopter.

Throughout Vietnam, the standard transport helicopter for the U.S. Army was the UH-1 Iroquois, colloquially known as the “Huey.” Though initially underpowered, its performance and carrying capacity would improve with the later D and the H models. The Huey’s versatility and toughness remain legendary, though the helicopter was rather loud. The Huey would be used in concert with aircraft and attack helicopters to suppress the enemy and allow the vulnerable helicopters the time needed to complete their mission and return to base. The Huey remains in service, with the most recent model, the UH-1Y Venom, entering service in 2004.

The CH-47 Chinook was the second major transport helicopter used during the Vietnam War. Using two counterrotating rotors resolved the need for a tail rotor, allowing the helicopter to direct its power toward lift and thrust. The Chinook was designed as a heavy transport helicopter, delivering significantly heavier loads to the field. Its focus was thus shifted toward the deployment of heavy artillery pieces or the evacuation of large numbers of wounded soldiers, leaving the Huey with the role of troop transport. In addition, Chinooks were also used in emergency evacuations of bases in the latter years of the conflict, as the American forces steadily scaled back their presence. The Chinook, like the Huey, would be steadily modernized and still sees service to this day.

Following Vietnam, the U.S. Army developed the UH-60 Black Hawk with the intent of replacing the Huey as the primary transport helicopter. The Black Hawk was designed with survivability in mind. Armored against small arms fire, the aircraft is also equipped with redundancies to prevent mechanical failures and is designed to crush progressively to safeguard passengers. Black Hawks are capable of moving up to 11 armed soldiers or an artillery piece with its operators and ammunition. In addition to this air assault role, Black Hawks also provide emergency medical evacuation services and have been modified for command purposes and for electronic warfare. Specially modified versions of the Black Hawk were used in the May 2, 2011, operation to eliminate the al Qaeda leader Osama bin Laden. Using technology and material from the F-117 stealth bomber, these specially designed Black Hawks featured modifications including an angular body to prevent radar detection and more rotors to lower the sound of the engines. These modifications allowed the helicopters to move in undetected, though the crash of one of the helicopters led to the unveiling of some of the stealth technology.

The Soviet Union, unlike the American army, initially amalgamated the transport and attack helicopters in a single vehicle. The Mi-8 is a multipurpose helicopter, significantly larger and heavier than the American counterpart, the Huey. The transport variant of the Mi-8 can contain up to 30 soldiers, while



U.S. Army UH-60 Black Hawk helicopters land in Paktika Province, Afghanistan, January 24, 2011.

Source: U.S. Army photo by Specialist Zachary Burke (released).

the attack version of the aircraft has machine guns and six external hardpoints to allow for the storage of rockets and guided missiles. The successor to the Mi-8 was the Mi-24 Hind. This variant favored the attack role, with a smaller cargo region allowing a maximum of eight soldiers. The Hind is also armed with either a 12.7-millimeter machine gun or 30-millimeter cannon with four hardpoints that allow it to carry antitank missiles, rockets, grenade launchers, or extra fuel tanks. Both helicopters saw use in the Soviet Campaign in Afghanistan from 1979 to 1989, where they were used against the unconventional mujahideen. The helicopters were effective during this campaign, though casualties mounted when the mujahideen were armed with modern antiair weaponry and 12.7-millimeter antiaircraft guns.

Attack Helicopters

The realization that transport helicopters were not invulnerable and provided tempting targets to enemy antiaircraft gunners led to calls for the installation of weaponry to suppress enemy fire and allow the transports to deploy the soldiers more effectively. The French were the first to field attack helicopters during their campaign in Algeria. Armed with machine guns, rockets, and, eventually, guided missiles, attack helicopters would strafe the target zone a number of times to suppress enemy fire before the transports would arrive to deploy soldiers.

The first American attack helicopter was an armed form of the UH-1 Iroquois. However, the drag that resulted from arming the helicopter significantly slowed it down, limiting its use in combat operations. The AH-1 Cobra, its replacement, was thus designed specifically for the role of bearing weaponry. Based on the Iroquois design, the Cobra had the gunner sitting behind the pilot, allowing for the fuselage to be thinned greatly. The Cobra sacrificed all other possible functions for the attack role and was armed with Gatling guns, rocket pods, and automatic grenade launchers. Gunships were able to target enemy positions in the sides of narrow valleys where fixed-wing aircraft were unable to operate. The development of the tube-launched, optically tracked, wire-guided missile (also known as TOW missile) allowed attack helicopters to target heavy armor. Cobras remain in service today in various models. The most recent model, the AH-1Z Viper,

is designed to incorporate modern electronic technology, including night vision technology, to allow the helicopter to continue operating into the 21st century.

Operation Desert Storm saw the deployment of the AH-64 Apache, an improvement on the Cobra design. Armed with a 30-millimeter cannon, the Apache has four hardpoints for rockets or helicopter-launched fire-and-forget missiles. Its primary role as an attack helicopter was that of destroying conventional enemy forces. Using night vision technology, Apaches were able to destroy targets as far as 4 miles away with their missiles, often without the enemy being able to launch a counterattack.

Apaches would also see action in Operation Enduring Freedom in Afghanistan. By this stage, a number of Apaches had been upgraded to the AH-64D Longbow design, incorporating new digital technology allowing the aircraft access to a secure data link and a comprehensive view of the battlefield. Operation Enduring Freedom saw the Apache deployed to an unconventional war similar to Vietnam. During Operation Anaconda, an assault on enemy positions in the Shah-i-Kot Valley, Apaches assumed a number of roles, from reconnaissance to direct attack and designating targets for forward artillery positions. They provided close air support for the troops on the ground and eliminated enemy mortar positions. Given the lack of armored targets in Afghanistan, the load-out was adapted to favor rockets and extra fuel tanks in the place of helicopter-launched fire-and-forget missiles, providing increased mobility and ammunition for lighter targets.

Operation Iraqi Freedom began as a conventional war, with Apaches deployed against enemy armor, destroying tanks and armored personnel carriers as well as lighter targets such as technicals, trucks armed with a heavy machine gun. The Iraqis had adapted to helicopters during the previous war, hiding weapons behind tree lines and palm canopies and within urban areas. Tanks were provided as bait, with plain-clothes units hidden in ambush points. In response to these developments, Apaches adapted to close-combat missions, firing on targets while moving to provide a more difficult target. After the defeat of the conventional forces, Apaches adopted a role similar to that in Afghanistan, providing a screening force ahead of the main body of ground forces as well as support fire once the enemy

was engaged. Apaches are often deployed using aerial reconnaissance drones to target insurgents laying ambushes or improvised explosive devices on roads. Despite claims that attack aircraft are better able to provide close air support for allied forces, helicopters are able to provide effective support fire at ranges less than those of aircraft. At the same time, attack helicopters are capable of providing more surgical supporting fire than planes. Apaches were used regularly to destroy enemy snipers who targeted the green zone in Baghdad. The use of attack aircraft against smaller targets is not possible as their weaponry is too large and destructive for such surgical strikes.

The Cobra and Apache have served on the front lines for almost 50 and 30 years, respectively. This has been possible with constant updates and upgrades to keep the machinery technologically modern. Though the U.S. Army did look into the possibility of deploying a new stealth helicopter, the RAH-66 Comanche, high development costs and the limited use of such specialized equipment led to the scrapping of the project in 2004.

In the past decade, Russia has also begun fielding specialized attack helicopters. Of the many variations, the Mi-28A Havoc is the most numerous. Similar in appearance to the Apache, the Havoc is designed specifically as an attack helicopter and has no transport capabilities. The crew cabin is heavily armored, and the windshield is designed

to withstand 12.7-millimeter antiaircraft fire. Four hardpoints on the wings allow a vast array of weaponry. The night version of the Havoc, the Mi-28N, incorporates an improved electronic combat system and night vision technology to allow the helicopter to operate at night.

Radu Venter

See also Aviation, Army; Close Air Support

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The Russian Mi-28.

Source: Photo by РоссинДенисвладимРови

HELMETS

A helmet is a type of military headgear designed to protect the wearer's head in combat. Helmets are among the oldest forms of personal protective armor. Most contemporary militaries utilize Kevlar and other composites to create light but strong head protection for combatants. This entry discusses the development of helmets and looks at helmets in use today.

Archaeological evidence has revealed that, as early as the third millennium BCE, Sumerian, Babylonian, and Assyrian warriors wore primitive helmets made of rawhide, bone, and/or copper into battle. By the mid-23rd century BCE, helmets constructed out of such primitive material began to fall out of use, in favor of ones made of bronze. The refinement of iron smelting in the 9th century BCE brought about the end of dominance of bronze helmets on the battlefield and ushered in the era of iron helmets. The era of iron lasted but a fleeting moment, for by 950 CE, steel helmets were king. In the mid-17th century, the use of helmets in battle declined rapidly because of the proliferation of accurate black powdered firearms. By the 18th century, the appearance of helmets on the battlefield all but vanished, except for the occasional uses as elaborate, purely decorative, headwear. After being relegated as decorative headgear for more than 200 years, the hazards of World War I necessitated the reappearance of functional helmets on the battlefield.

The battlefields of World War I were unlike anything seen before. The sheer amount of carnage and death caused the various nations at war to look for ways to protect their troops. One of the main problems that needed addressing was how to protect a soldier's head from projectiles, such as shrapnel and small arms fire. The most obvious answer to this problem was to develop some sort of helmet. French General Louis Adrian was the first to come up with the idea for a mass-produced steel combat helmet. It is said that General Adrian came up with the idea after a chance encounter with a wounded soldier. The story goes that on seeing a soldier with a head wound, General Adrian inquired how he survived. The soldier replied that he owed his life to a metal bowl he was wearing under his cap to help protect his head. From this inquiry and increasing field reports of head wounds, Adrian set to work on creating what would turn out to be the first modern combat helmet. Soon after France began fielding the

Adrian helmet in 1915, the other belligerent nations followed suit.

World War I helmets such as France's Adrian helmet, Britain's Jeane Kirkpatrick, and Germany's M-16 helmet were not designed to stop bullets but rather to protect the wearer from shrapnel and deflect small arms fire. The idea behind them was to keep the wearer alive, though not necessarily unwounded, while at the same time allowing the helmet to be as light and comfortable as possible. Reports after the war confirmed that such helmets significantly reduced the number of head wounds and the mortalities from them.

After World War I, the modern combat helmet continued to evolve. By World War II, nearly all industrial nations had adopted some sort of combat helmet for use by their armed forces. America adopted the iconic M-1 in 1941, Germany the notorious M-35 in 1935, and Britain the Mk III "turtle" helmet in 1944. While these helmets offered superior protection to their World War I counterparts—thanks to improved designs, thicker walls, and harder steel—their ability to protect the wearer's head was limited by the fact that steel is a fairly heavy material. The thicker the steel, the more protection it could offer, yet that added protection resulted in added weight. While it would have been easy for any nation to create a steel helmet capable of stopping even the largest of rifle rounds, the weight of such a helmet would make it completely impractical to wear. Because of this, most nations continued to issue combat helmets based on World War II designs well into the 1980s.

In 1983, after it was in service for more than 41 years, the U.S. military began phasing out the M-1 combat helmet in favor of the Personnel Armor System for Ground Troops helmet, which completely revolutionized the modern military helmet. This helmet was like no combat helmet before it, pioneering the use of lightweight Kevlar. Kevlar allowed the U.S. military to field a helmet that was superior to its steel counterparts in nearly every way. Realizing the advantages of space-age materials like Kevlar and ballistic nylon, by 2011 most developed nations abandoned the use of steel helmets.

Currently, the United States and other developed nations are in the process of developing combat helmets not only with superior ballistic protection but also with the ability to protect the user's head from blunt force trauma and concussive waves caused by explosions. While helmet designers have been aware of the importance of incorporating blunt

force trauma and concussive wave protection into their designs, only recently have militaries decided that a helmet's ability to protect a soldier from such forces is just as important as its ability to protect a soldier from shrapnel and projectiles. This change of attitude is a direct result of the high number of cases of traumatic brain injury suffered by coalition forces in Afghanistan and Iraq, the majority of which were caused by improvised explosive devices. Some of the proposed design features that may be seen in the next generation of combat helmets are integrated face shields and/or neck braces.

Robert Van Trombley

See also Armor, Body; Combat Load; Traumatic Brain Injury; Uniforms; Wounds and Injuries

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relation of events on the battlefield. In this particular pursuit, the historian searches for details adequate to an accurate accounting of events compressed into a very narrow timeline. As one author put it, “At the centre of the history of war there must lie the study of military history—that is, the study of the central activity of the armed forces, that is, *fighting*” (Moyar, 2007, p. 226).

Commanders and armies are quite naturally the most important actors in military history. Foot soldiers provide the muscle for maneuver and combat. Their officers supply the intellect behind grand strategy and battlefield tactics. The interaction of these two groups, in combination with military technology, terrain, and the other circumstances surrounding conflict, provide the basis for a large body of military history.

Military history of this type essentially treats its subject as a science, an empirical exercise in logistics, weaponry, tactics, and command. In the past, military historians have studied war in terms of the geometry of lines and columns or the physics of artillery trajectories. When Theodore Roosevelt published *The Naval War of 1812* (1882), he applied his era's profound faith in rationalism to describe the most decisive elements of human conflict.

A separate school of thought treats military history more as an art than as a science. Authors like Carl von Clausewitz, who described war as “the business of the people,” invest their analysis in intangible factors like the “will” to win or the ability to act with decisiveness in the heat of battle. War from this point of view is unpredictable, the outcome of battle resting on the precarious foundation of human nature. In the late 20th century, academics like John Keegan pursued what would be called the “new military history”—an approach that incorporated the broader topics of society and culture into the study of war.

Despite the apparent division of methods, it is important to understand that empirical and non-empirical approaches to military history are not mutually exclusive. Any good institutional history will reveal a distinct “culture” residing within the individual units or branches of the armed services of any country. A number of authors, Rick Atkinson being prominent among them, have found effective ways to reconcile the science of war with its more human qualities. This entry examines works of military history by authors from antiquity to the present.

HISTORY, MILITARY: APPROACHES TO

For centuries, military history has had a simple purpose. In its most basic form, it is an exercise in description. Military history is a chronicle, a detailed

Military History in Antiquity

The origins of the Western tradition of military history are in Greece. In the works of Thucydides and Herodotus, the reader may find the first systematic approaches to the subject of war. For his own part, Herodotus engages both the tangible and intangible features of the Persian Wars. His history provides an exhaustive examination of the host marshaled by Xerxes to invade Greece. He offers a detailed catalog of the weapons, armor, and individual appearance of the forces assembled from the many nations that made up the Persian Empire of the time. Conversely, Herodotus also indulges in relating the lengthy discourse among the Persian leadership that reportedly presaged the invasion. The focus here is the warnings and omens presented to Xerxes regarding his plan and his unwillingness to heed them.

Thucydides's *History of the Peloponnesian War* pursues military history from a different tack. His work is informed in part by a more traditional approach to military operations. Thucydides questions Homer's account of the invasion fleet that sailed against Troy by breaking down the exact numbers of soldiers and crew inhabiting each ship. However, what guides most of his narrative is the political interaction between the Greek city-states. From this perspective, campaigns and tactical accomplishments are incidental to the overall story. What matters most are the dynamics surrounding the leaders embroiled in conflict.

Military historians of ancient Rome followed methods similar to their Greek predecessors. Tacitus, for example, provides a complex mixture of the greater political events and strategic considerations that surrounded the military campaigns of his era. His narrative includes Tiberius's concerns regarding the placement of his legions as well as their political loyalty to the empire. Yet he is also able to impart the viciousness of Rome's campaigns against the German tribes and the tenuous nature of its fight amid the trackless swamps and forests of Rome's northern European frontier. His operational history is embellished by an eye for detail: night movement made bright by starlight, the particular placement of legions on the march and in line of battle, or the scene that the Roman army found on discovering Varus's slaughtered legions.

The work of Vegetius provides a fascinating example of history as a useful, practical tool, but

with some of the inherent limits that often encumber academe. On its face, his *Epitome of Military Science*, written in the latter days of the empire, offers a practical guide to Roman recruitment, training, and other military practices, drawing specifically from the "ancient" times or early days of the empire. In its precision, the reader draws confidence from Vegetius's assertion that proper training and discipline are paramount in constructing an effective military force. In fact, European military affairs after the fall of Rome were heavily influenced by this basic assumption.

However, the *Epitome* is also a product of its times. Missing is adequate attention to siege warfare or naval affairs, which lacked importance at a point where Rome battled nomadic barbarians. Also implicit in Vegetius's writing is his chauvinism, specifically with respect to the superiority of true Romans against the foreign cultures that lay outside the empire. Regardless, because it joins Rome's formidable military traditions and the influences that defined the later empire, the *Epitome* is an important bridge between the greatness of antiquity and what followed soon afterward.

Military History and the Middle Ages

Military history during the Middle Ages reflected the period in which it was written, when much of European intellectual pursuits were defined by decline and derivation. When Einhard wrote the biography of Charlemagne, he borrowed heavily from Suetonius's *Lives of the Caesars*. It is also clear that Einhard's (1960) goal was less to offer a balanced account of European wars than to illustrate his primary subject's greatness:

Such are the wars, most skillfully planned and successfully fought, which the most powerful king waged during the forty-seven years of his reign. He so largely increased the Frank kingdom, which was already great and strong when he received it at his father's hands, that more than double of its former territory was added to it. (p. 40)

In the *Song of Roland*, the reader finds a new influence on Western military history, that of the church. The 12th-century account of war between Frankish knights and Christian Basques is meant as a chronicle of events. However, in the description of Roland's death, a more important purpose becomes apparent:

Ay-Roland knew that death was near. He lay
 On a high hill looking toward Paynim Spain,
 And beat his breast, crying "Forgive, O God,
 The wrongs that I have wrought Thee,
 since the day
 When I was born unto this day when here
 I am foredone." He raised his iron glove
 To the blue sky, and so the angels came
 On wings of gold to take his soul to God.

However, even when inspired by faith, military history during the Middle Ages could also be straightforward. In the histories that recorded the Christian crusades, one may find a more literal approach to events that includes key actors and the actions of European armies converging on the Holy Land. In *Memoirs or Chronicle of the Fourth Crusade and the Conquest of Constantinople*, Geoffrey de Villehardouin describes the conquest of Constantinople in 1204 after crusaders entered the city: "Then followed a scene of massacre and pillage: on every hand the Greeks were cut down, their horses, palfreys, mules, and other possessions snatched as booty."

In sum, the writers who addressed European military affairs offered a useful, albeit limited glimpse of their times. Viewed through the lens of devotion to secular or religious grandeur, history lost the broader worldview so typical of antiquity. As Europe approached the Renaissance and the Enlightenment, it regained this perspective, and military history would take another step forward.

Modern Approaches to Military History

When European conventional wisdom began to gravitate toward science and "systematized common sense," to use David Hume's phrase, it returned military history to the scope and scale of the classical age. Edward Gibbon's *Decline and Fall of the Roman Empire* is perhaps the most famous example of military history produced during the great Age of Reason. Gibbon's penchant for detail is evident from the very start of his work as he describes the organization of Roman legions, their weaponry, equipment, separate service branches, and a host of other information. In another important sense, his work is also a tribute to Greek and Roman methodology. As was the case with historians of antiquity, Gibbon pays scant attention to the tactical parts of

Rome's many military campaigns. In their place, he focuses on the importance of civil-military relations to Roman politics. His account of the conspiracies hatched within the Praetorian Guard against a succession of Roman emperors illustrates the importance of this core group to the empire's stability.

However, writers of this age were not content to simply construct a better means to recount the past. They also saw history as a device through which a rational actor could apply previous instances of success or failure to learn and progress. This was clearly the case with respect to understanding the science of war. In the restored writings of Tacitus and Vegetius, European military leaders sought a form of human-made precision that would create victory on the battlefield.

In this vein, Antoine-Henri de Jomini's *The Art of War* is an exercise in categorization. Throughout his landmark work, the author attempts to delineate both the broad purposes of war and its specific functions. De Jomini not only lends his analysis to diplomacy and grand strategy but also attends to the minutiae of lines and columns on the field of battle. His work is ambitious in its purview but reflects his time's confidence in the cumulative value of reason.

Carl von Clausewitz's *On War*, first published in 1832, is similar to de Jomini in that it attempts to glean practical examples from military history. His goal was to provide guidance on the many facets that constitute modern war: from specific tactical actions that govern specific battles to the strategic objectives of war itself. To accomplish this, Clausewitz borrowed liberally from 18th- and early-19th-century European wars to provide case studies for his guiding principles.

It is important to understand that neither Clausewitz nor de Jomini treated the practice of war as a pure science. Both men were representative of a school of thought known as "Military Romanticism" that appeared at the start of the 19th century. While they acknowledged the validity of reason and the applied lessons of history to war, both authors were far less sure than previous thinkers about the predictability of conflict. Consequently, in *The Art of War*, de Jomini painstakingly constructs classifications for the types of wars fought but recognizes that subjective, irrational factors sometimes win the day. Regarding "Offensive Wars to Reclaim Rights," he admits that "in wars of this nature no rules can be laid down." For his own part, Clausewitz believed

in the psychological momentum created by successful military engagements, citing Frederick the Great's victory at the Battle of Soor in 1745.

The study of war existed between the two poles of science and romanticism for much of the 19th century. However, as the period drew to a close, the imperatives of the industrial age gave greater suasion to the science of war. New generations of European and American officers looked again to reason to improve their vocations. Contemporary military history reflected this emphasis. In their search for authenticity, writers again gravitated to leaders, armies, and the nuts and bolts of operational military history. Many were inspired by the empirical approach adopted by the German historian Leopold von Ranke, which emphasized observable evidence as the foundation of historical analysis. Military affairs, dependent as they were on measurable events, from the physics of weaponry to the linear geometry of the battles themselves, seemed ideally suited to this new school of thought.

Militaries of the 19th century reinforced this utilitarian approach to history by incorporating it into advanced curriculum designed to train senior officers and their staffs. Helmuth von Moltke, who served as Chief of the German General Staff from 1857 to 1888, used the study of past campaigns to prepare his leadership for contemporary war. Germany's battlefield victories in 1866 and 1870 vindicated von Moltke's approach and encouraged other modern industrialized nations to copy his methodology. As it contemplated the need for a more potent military at the end of the century, the United States joined this group with the creation of the Naval War College (1884) and the Army War College (1901).

Although World War I shattered faith in the progressive value of science and industry, military history kept up its own momentum in the doldrums between the two World Wars. The works of J. F. C. Fuller and B. H. Liddell Hart were dedicated to addressing the tragic failures of the Great War, but with methods familiar to the past. Fuller's *The Foundation of the Science of War* (1926) was a collection of lectures at the British Staff College that interspersed operational theory with historical examples drawn from 2,000 years of Western history.

Perhaps because of popular disinterest, military history declined in public importance between the two World Wars, possibly reflecting the public's revulsion against the horror on the Western Front

from 1914 to 1918. By the 1930s, some scholars openly questioned whether or not military history could be considered an academic field given the overall decline in interest. In the United States, one effort to combat this trend was the creation of the American Military History Foundation in 1933.

World War II had a significant impact on the study of military history throughout the Western world. The enormity of the event and the qualitative changes that it introduced to the practice of war produced an array of subjects ripe for academic study. There was a ready audience for such work. The millions of veterans produced by the war entered civilian life with fresh memories and an ongoing curiosity about a conflict that had transformed their lives. In many cases, former servicemen with access to advanced degrees, as was the case with the G.I. Bill in America, readily joined the ranks of postwar historians to make their own contributions to the discourse. In the United States, many of these authors worked for the government, which directly subsidized the study of history for the sake of professional development within the military and the national security community.

Even as military history grew in popularity, academic debates emerged as to its methodology and purpose. While the more traditional focus on leaders and operational history continued to be strong elements of historical study, by the 1960s a number of scholars in the field began transitioning to what they labeled the "new" military history. This school argued that social and cultural factors had a direct bearing on the practice of war. When John Keegan examined British participation at Agincourt, Waterloo, and the Somme in *The Face of Battle*, he took the perspective of the men on the field to find realism. Still later, John Dower introduced the element of race into the Pacific campaigns of World War II in his 1986 study *War Without Mercy*.

Current trends in military history reflect a combination of new and traditional techniques. The discipline retains a focus on the empirical elements of combat. Of particular interest has been the rapid succession of breakthroughs in military technology. However, many authors have also been able to incorporate the more human elements of the story without diverging too far into historical biography. Perhaps the best examples of this combination are Rick Atkinson's and Max Hasting's recent histories of World War II.

Other historians have successfully taken the concept of a “new” military history one step further by addressing the finite particularities of gender, culture, and identity. In Carole Reardon’s *Pickett’s Charge in History and Memory* (1997), the author moves beyond the clash of arms that occurred at Gettysburg in 1863 and includes the evolving retelling of a battle that took on an epic character for the American South and the nation as a whole. Reardon notes that Pickett’s division ceased to be an agglomeration of men after their defeat at Gettysburg. Instead, they became symbols of the South’s “Lost Cause” that redrew the event for generations of Americans. In Emily Rosenberg’s *A Date Which Will Live* (2003), the author picks up Reardon’s thread by addressing Pearl Harbor not simply as an event measurable by order of battle but also by its broader—and evolving—meaning to a society that was not present to witness the disaster firsthand. Reardon and Rosenberg both point to a quality recognized by authors such as Clausewitz that historical accuracy and historical interpretation are two malleable and evolving sides of the same academic coin.

Conclusions

Military history clearly has evolved to the point where it enjoys the same relevance as other subfields in the discipline. In part, this is because the current wars against terrorism and insurgency have engendered greater attention to military studies in general. As one author noted with respect to modern military affairs: “Fitness for purpose is a crucial concept when judging the applicability of weaponry, but such fitness is frequently misunderstood by putting stress on the capacity for employing force, rather than the ends that are sought” (Black, 2004, p. 1224). The cohort of officers emerging after the September 11, 2001, attacks, perhaps best represented by General David Petraeus but also including H. R. McMaster and David Kilcullen, embraced academe as a means to understand and circumvent threats to the United States. In cases where lives literally hang in the balance, history, anthropology, linguistics, and a host of other disciplines have become part of the conventional portfolio of modern military operations. Specialists in these fields commonly accompany maneuver units in Iraq and Afghanistan, departing for good the safety of the ivory tower. The extent to which the American military has adopted nonvio-

lent (i.e., “nonkinetic”) tactics is a testament to their institutional influence.

Military historians have also earned their relevance through the inclusive and rigorous methodologies they apply to the discipline. A field dominated by its traditional focus on leaders and battles now regularly incorporates elements of the “new” military history. These features, whether applied by contemporary scholars such as Reardon or old standard bearers like Stephen E. Ambrose, make military history the viable, popular field that it is today.

Michael D. Gambone

See also American Battle Monuments Commission; Archives, Military; Museums, Military; Oral History; Political Science and International Relations; Thucydides; Upton, Emory

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HISTORY, NAVAL: APPROACHES TO

American naval history remains a popular subject for authors hailing from a variety of backgrounds. At the start of the 21st century, this trend shows little evidence of decay. This entry examines classic interpretations of the history of the U.S. Navy as well as works completed since the end of the Cold War.

Classic Interpretations

Perhaps the most well-known military theorist in American history was Alfred Thayer Mahan. Mahan, a naval officer who served in the Civil War, believed that the study of history could be used to understand the nature of naval warfare and could prescribe effective patterns of operations for contemporary navies. *The Influence of Sea Power Upon History, 1660–1783* (1890) catapulted Mahan into international recognition for his views on sea power and national strength. Through an examination of various naval conflicts between western European states, Mahan argued that sea power was an essential component of nations aspiring to great power status. He stressed the importance of seaborne commerce for economic development, particularly for the growing industrial and economic strength of the United States. To protect and defend these sea lines of communication, the United States needed a navy composed of large, modern warships trained and equipped for operations against a force of similar composition. This perspective was not the traditional role of the U.S. Navy, which, in the late 19th century, was built to prevent raids on American merchants by pirates or other small naval powers.

Mahan held that the proper role for a navy was to secure command of the sea by engaging and defeating the main fleet of the enemy in a decisive action as quickly as possible on the outbreak of war. In pursuit of this goal, Mahan argued for new naval construction as well as the expansion of overseas American possessions to provide bases. These colonies would increase the operating range of the U.S. Navy, enhancing its reach and strength, while simultaneously expanding the American economy. Over time, Mahan's views were gradually reduced in naval circles to an emphasis on a large, modern navy with less emphasis placed on the underlying foundation of a vibrant seaborne trade.

The second historian to have an enduring impact on the U.S. Navy's understanding of its own history was E. B. Potter. Dr. Potter lectured for many years at the United States Naval Academy and in conjunction with Admiral Chester Nimitz wrote *Sea Power: A Naval History* (1960). *Sea Power* served for many years as the standard textbook on naval history at the academy. The book emphasized the navy's World War II experience, highlighting the role of naval leadership, command of the sea, amphibious operation, and the influence of technological development on naval combat.

Recent Works

In the years since the end of the Cold War, works on American naval history continue to give unequal attention to different sections of the navy's history. World War II remains the most popular subject, in part due to the abundance of documentation available on the navy's role in that conflict. Civil War naval history has received a breath of new life as scholars examine the war's last underexplored subjects. The navy's experience between the two World Wars and during the early Cold War has become fruitful terrain for naval historians.

Surveys and Other Broad Works

Robert Love's two-volume *History of the U.S. Navy* (1992) provides the most in-depth coverage of the broad sweep of American naval history. Love contends that utilitarianism is the one constant in U.S. naval history, casting naval officers as pragmatic above all else. Love also highlights the role of the navy, particularly in the 19th century, in setting and executing American foreign policy. George Baer's

One Hundred Years of Sea Power: The U.S. Navy, 1890–1990 (1994) covers the navy's 20th-century experience in a single volume. Baer argues that naval strategy must be guided by national policy as set by American political leaders. The navy should never become detached from government policy, though this can be difficult when national policy is unclear, which Baer argues was the case for much of the century. Baer divides the century in two. Prior to 1945, the U.S. Navy sought a single, decisive engagement with its opponent, whereas power projection dominated American naval thinking during the Cold War. With regard to the Cold War era, Baer is critical of the naval aviation community's opposition to a balanced fleet in which aircraft carriers played a leading role, as opposed to the leading role. Kenneth Hagan's *This People's Navy: The Making of American Sea Power* (1991) covers the entire history of the U.S. Navy from a critical, New Left perspective. Hagan sees constant competition between those supporting smaller, less costly ships built for commerce protection and raiding and those supporting larger fleets built for an offensive sea control mission. As a result, Hagan prefers the 18th- and 19th-century navies to the 20th-century one, due to the prominence of small squadrons in that period. Stephen Howarth's *To Shining Sea: A History of the United States Navy, 1775–1991* (1991) is similar in coverage, though written in a narrative style that highlights the cooperation between the Royal Navy and the U.S. Navy in World War II, particularly the campaign for control of the Atlantic. H. P. Willmott's two volumes (out of a planned three) of *The Last Century of Sea Power* emphasize the productive capacity of the American shipbuilding industry and are replete with detailed charts and graphs.

Utilizing a topical, rather than chronological approach, Michael Palmer's *Command at Sea* (2005) focuses on command and control structures in naval history. Palmer argues that while naval doctrine and tactics are important, effective navies combine tactics with a decentralized command and control system that gives significant decision-making authority to local naval commanders. He notes that continued advances in communications technology have made this approach more and more difficult to practice. Despite its title, Frank Uhlig's *How Navies Fight: The U.S. Navy and Its Allies* (1994) uses a series of historical examples to demonstrate that the U.S. Navy has traditionally fought

to protect or attack sea lines of communication or to support troops on shore. Craig Symonds's *Decision at Sea* (2005) provides an overview of U.S. naval history by examining five central naval battles. Finally, Andrew Gibson's and Arthur Donovan's *The Abandoned Ocean: A History of United States Maritime Policy* (2000) covers government policy on seaborne commerce with deep ties to naval matters. The authors argue that during the Cold War the U.S. Merchant Marines became substantially more dependent on government subsidies due to the need for a fleet of transports in the event of a general war with the Soviet Union. At the same time, rising overseas competition limited expansion in U.S.-flagged merchant ships.

Revolution and Early Republic

Due in part to published collections of primary source documents, early American naval history has been the subject of several recent works. Spencer Tucker's *The Jeffersonian Gunboat Navy* (1993) examines the performance of the president's signature naval project from 1805 to 1816. Tucker notes the utility of the gunboats in enforcing the embargo and their failures in operations against the Royal Navy in the War of 1812. Christopher McKee's *A Gentlemanly and Honorable Profession: The Creation of the U.S. Naval Officer Corps, 1794–1815* (1991) argues that the U.S. Navy's first civilian leaders created the organizational conditions for developing effective officers, such as a decentralized command and control system.

The most noticeable trend in early American naval history has been toward biographies. John Schroeder's *Matthew Calbraith Perry: Antebellum Sailor and Diplomat* (2001) contends that the commodore was the central naval officer of the era, highlighting M. C. Perry's interest in technology and his concern for the welfare of both officers and enlisted men. David Skaggs's *Oliver Hazard Perry: Honor, Courage, and Patriotism in the Early U.S. Navy* (2006) illustrates the role of political patronage in the career of another young naval officer, O. H. Perry. Skaggs highlights O. H. Perry's skills as an operational commander during the War of 1812, particularly during the Battle of Lake Erie. Claude Berube and John Rodgaard's *A Call to the Sea: Captain Charles Stewart of the USS Constitution* (2005) cover the 60-year career of one of America's

most successful early frigate captains. The authors contend that as a squadron commander after the War of 1812, Steward was a particularly skilled naval diplomat.

Civil War

As one of the few underexplored aspects of the Civil War, naval history has grown significantly in recent years. Spencer Tucker's *Blue & Gray Navies: The Civil War Afloat* (2006) is a broad survey of the naval war based on the most recent scholarship that should serve as the starting point for naval investigations. Stephen Taaffe examines the roles of President Lincoln and Secretary of the Navy Gideon Welles in selecting and removing squadron commanders in *Commanding Lincoln's Navy: Union Naval Leadership During the Civil War* (2009). Though the Civil War was the U.S. Navy's first squadron-level conflict, Taaffe argues that Lincoln's practical delegation to Welles and Welles's wartime improvement in identifying and promoting commanders was a major contribution to Union victory. Craig Symonds's *Lincoln and His Admirals* (2008) covers much of the same material as Taaffe, emphasizing the role of personality in the naval high command and the relationship between Gideon Welles and Assistant Secretary of the Navy Gustavus Fox. Gary Joiner's *Mr. Lincoln's Brown Water Navy: The Mississippi Squadron* (2007) also explores the role of personality in interactions between the navy and army at the level of commanders, interactions that were most frequent along the rivers and canals of the western theater. Joiner concludes that due to the lack of an agreed-on structure for coordinating operations, cooperation was heavily dependent on the personalities of senior army and navy commanders being compatible. In *Industrializing American Shipbuilding: The Transformation of Ship Design and Construction, 1820–1920* (2006), William Thiesen argues that the Civil War placed a critical role in the American shipbuilding industry's shift from an artisan, craft-based style to a more scientific, technical approach to naval construction. William Roberts also deals with shipbuilding practices in *Civil War Ironclads: The U.S. Navy and Industrial Mobilization* (2002). Roberts argues that the navy's 20th-century pattern of utilizing the project office concept and developing connections with inland shipbuilders had its roots in the Civil War.

A recent debate in the Civil War naval scholarship centers on the experience of African American sailors in the U.S. Navy. Steven Ramold's *Slaves, Sailors, Citizens: African Americans in the Union Navy* (2002) began the discussion by arguing that Black sailors received better treatment from the navy as an institution as did Black soldiers from the army. Ramold highlights progressive naval racial policy on issues such as pay, legal recourses, and promotion to make his case. Barbara Tomblin's *Bluejackets and Contrabands: African Americans and the Union Navy* (2009) supports Ramold's position by analyzing the risks taken by Union sailors and warships to aid Black sailor's families still behind Confederate lines. Michael Bennett disagrees with Ramold and Tomblin in *Union Jacks: Yankee Sailors in the Civil War* (2004), arguing that racism was prevalent in White naval circles throughout the war, using letters and diaries from White sailors as sources.

Mahan and the New Navy

Mahan's conclusions on the nature and effectiveness of sea power have been the subject of several recent works. Jon Sumida's *Inventing Grand Strategy and Teaching Command* (1997) argues that Mahan was not solely concerned with promoting a navalist program to the American public. Mahan also sought to analyze and explain sound command decisions made by past naval leaders in an effort to demystify the process for younger officers. The contents of a conference at the Naval War College on Mahan were published in *The Influence of History on Mahan* (1991), in which a variety of naval historians presented a series of papers on Mahan's thought and influence.

The navy in Mahan's day was also marked by the steady professionalization of the officer corps and the deployment of increasingly modern, metal warships. Mark Shulman's *Navalism and the Emergence of American Sea Power* (1995) surveys this period, noting the active efforts made by navalists to garner public support for increased warship construction. Shulman examines the fundamental changes in the navy's technology and doctrine in a series of topical chapters. James Bradford's edited volume, *Crucible of Empire: The Spanish-American War & Its Aftermath* (1993), examines the first combat performance of the New Navy, emphasizing the informal cooperation between army and navy officers that helped bring the war to a rapid conclusion.

World War I

For a broad, thorough survey of the U.S. Navy's role in the First World War, see William Still's *Crisis at Sea: The United States Navy in European Waters in World War I* (2007). Still uses topical chapters to discuss everything from sailors' health to relationships with allies. The author argues that Vice Admiral William Sims deserves praise for determining that the Americans could best assist the Royal Navy by focusing on antisubmarine warfare. Rodney Carlisle's *Sovereignty at Sea: U.S. Merchant Ships and American Entry Into World War I* (2009) emphasizes the role that German submarine attacks on American-owned and -operated merchant ships played in President Wilson's decision to enter the war. Noting that aircraft were first employed by the U.S. Navy in the war, Geoffrey Rossano's *Stalking the U-Boat: U.S. Naval Aviation in Europe During World War I* (2010) demonstrates the challenges of building a naval aviation branch in a foreign territory in the midst of a combat situation.

Interwar

Increasingly, naval historians have highlighted the technological advancement of the interwar years, particularly with regard to aircraft, and the navy's broadly successful adaptation to these new realities. In *Battle Line: The United States Navy, 1919–1939* (2006), Thomas and Trent Hone survey the interwar navy, examining training, life at sea, and procurement, among other subjects. The authors argue that the navy's effectiveness during World War II was entirely dependent on a core body of trained, organized, and motivated sailors and officers that was developed before the war. John Kuehn's *Agents of Innovation: The General Board and the Design of the Fleet That Defeated the Japanese Navy* (2008) demonstrates the critical role of the General Board, a policy group composed of midlevel and senior officers, in fostering a culture of innovation within the navy. Kuehn argues that the board worked with the Naval War College to promote rigorous testing and experimentation of proposed technological and doctrinal developments. Edward Miller's *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897–1945* (1991) describes how the navy developed a war plan and then largely executed its pre-war plan in the Pacific campaign of World War II.

In *All the Factors of Victory* (2003), Thomas Wildenberg chronicles the life and work of Admiral Joseph Reeves, particularly in the development of carrier aviation doctrine. Wildenberg credits Reeves with presciently emphasizing high operating tempos and high aircraft capacity for the navy's small but growing number of aircraft carriers. Finally, Phillips O'Brien in his *British and American Naval Power, 1900–1936* (1998) argues, in contrast to traditionally negative accounts, that the 1922 Washington treaty system was a successful formula for naval parity between the U.S. Navy and the Royal Navy in a time of rapidly evolving technology and a changing international strategic situation.

World War II

Malcolm Murfett recently completed a new, synthetic survey of the Second World War at sea, *Naval Warfare 1919–1945: An Operational History of the Volatile War at Sea* (2009), that provides in-depth coverage and analysis of the U.S. Navy's role in the conflict. Murfett emphasizes that events occurred in rapid succession around the globe, forcing naval commanders to repeatedly move back and forth between theaters. A recent trend in American World War II studies has been an emphasis on shipbuilding. Thomas Heinrich's *Ships for the Seven Seas* (1997) examines the collection of shipbuilding companies centered on Philadelphia, with particular emphasis on the World War II period. Michael Lindberg and Daniel Todd's *Anglo-American Shipbuilding in World War II: A Geographical Perspective* (2004) highlights the conglomerations of shipbuilding companies in specific geographic regions in each nation and provides valuable reference data on naval construction. Gary Weir's *Building American Submarines, 1914–1940* (1991) and *Forged in War: The Naval-Industrial Complex and American Submarine Construction, 1940–1961* (1993) illustrate the flow of money, expertise, and personnel between the Portsmouth navy yard and the Electric Boat Company that built much of the navy's wartime submarine fleet. Weir argues that personal connections between business executives and naval officers were more important than official linkages through the mid-Cold War period.

As archival material on clandestine activities becomes available, several historians have taken the opportunity to investigate the navy's intelligence

apparatus and operations. Alan Bath's *Tracking the Axis Enemy: The Triumph of Anglo-American Naval Intelligence* (1998) highlights the role of intelligence in the Anglo-American relationship. Bath argues that collaboration between the two naval intelligence services was closest during the convoy battles of 1942–1943 and was less coordinated in other theaters. Phyllis Soybel's *A Necessary Relationship: The Development of Anglo-American Cooperation in Naval Intelligence* (2005) also examines intelligence cooperation, arguing that the American intelligence service reacted passively to Royal Navy initiation through 1942, both in intelligence sharing and equipment exchanges. Douglas Ford's *The Elusive Enemy: U.S. Naval Intelligence and the Imperial Japanese Fleet* (2011) examines the development of American naval intelligence and its impact on American naval doctrine in the Pacific. Ford concludes that American intelligence lacked sufficient information on the Japanese navy early in the war but gained experience through prolonged contact in combat.

Other studies on coalition warfare include Ian Cowman's *Dominion or Decline: Anglo-American Naval Relations on the Pacific, 1937–1941* (1996), which emphasizes the divide between the Royal Navy and the U.S. Navy with regard to prewar Pacific planning. Kevin Smith's *Conflict Over Convoys: Anglo-American Logistics Diplomacy in the Second World War* (1996) discusses the role of maritime shipping in the “special relationship” and argues that political leaders on both sides of the Atlantic were unprepared to handle the logistical challenges of global warfare. Charles Koburger highlights American concern over Vichy France's efforts to rebuild the French fleet and the diplomatic challenges for American naval officers dealing with French colonies in the Caribbean in *Franco-American Naval Relations, 1940–1945* (1994).

Cold War

Historical works on the U.S. Navy's role in the Cold War have become more common as the conflict recedes into history. David Winkler's *Cold War at Sea: High-Seas Confrontation Between the United States and the Soviet Union* (2000) provides a good survey of the navy's conflict with the Soviet Navy and its transition into a power projection role. Edward Marolda's edited volume, *The U.S. Navy in*

the Korean War (2007), is a collection of essays that provide broad treatment of the various roles performed by the navy in the conflict. Malcolm Muir's *Black Shoes and Blue Water: Surface Warfare in the United States Navy, 1945–1975* (1996) highlights the role of technological change in the Cold War navy, particularly the influence of nuclear power and missiles.

R. L. Schreadley's *From the Rivers to the Sea: The United States Navy in Vietnam* (1992) covers the breadth of the navy's involvement in Vietnam from the critical perspective of a naval veteran of the conflict. Thomas Cutler's *Brown Water, Black Berets: Coastal and Riverine Warfare in Vietnam* (2000) emphasizes the experience of American and Vietnamese sailors serving in riverine or littoral waters. Cutler argues for the effectiveness of naval interdiction efforts using advisor reports and captured North Vietnamese documents.

Paul Stillwell's *The Golden Thirteen: Recollections of the First Black Naval Officers* (1993) was one of the first works to examine the experience of Black sailors in the post–World War II navy. Robert Schneller's *Breaking the Color Barrier: The U.S. Naval Academy's First Black Midshipmen and the Struggle for Racial Equality* (2005) argues that the midshipmen's success in any given time period was predicated on the national, naval, and personal racial attitudes and policies as well as the abilities of the individual midshipmen.

Edward Marolda's *Shield and Sword: The United States Navy and the Persian Gulf War* (1998) stresses the navy's culture and provides an in-depth analysis of naval leadership, concluding that the Persian Gulf conflict marked a shift in the navy's thinking from the high seas to littoral regions.

Conclusion

U.S. naval history is a vibrant field within the broader military history and American traditions. Numerous scholars continue to publish high-quality works on a variety of naval topics each year. In recent years, studies have emphasized logistics, the U.S. Navy as an institution and an organization, social naval history, the shipbuilding industry, strategic planning, and naval officer education. Biographies of lesser known innovators and officers are also beginning to appear, as the most popular commanders and naval leaders have already been covered.

The Naval Institute Press, the University Press of Florida, and the University of South Carolina Press regularly publish naval histories, in addition to the Naval History and Heritage Command's in-house publishing shop. Naval history articles are frequently found in the *Journal of Military History*, the *International Journal of Naval History*, *Naval History*, *Proceedings*, *The Northern Mariner*, and the *Journal for Maritime Research*.

Corbin Williamson

See also History, Military: Approaches to; Museums, Military; Navy, U.S.; Strategy, Naval; U.S. Naval Institute; Warfare, Surface

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HIV/AIDS

The acquired immunodeficiency syndrome (AIDS) is an infectious disease caused by the human immunodeficiency virus 1 and 2 (HIV-1 and HIV-2). Infection spreads through transfer of fluids from one person to another, mainly through sexual intercourse and also through intravenous drug use and blood transfusions. HIV is a retrovirus that impairs immune system function, leaving those afflicted open to infections, such as pneumocystis pneumonia and cytomegalovirus. When AIDS first appeared as a medical category in the 1980s, no effective treat-

ment existed, and the disease led almost inevitably to death. The U.S. military acted quickly to screen inductees and active service personnel. Currently, no cure exists for AIDS, but successful treatments can control the disease. Within the U.S. military, AIDS cases have declined to a small number, and the disease has no impact on military effectiveness. In developing countries, however, AIDS poses major issues for uniformed services. This entry discusses AIDS and HIV in the U.S. military.

The first cases of AIDS appeared in 1981 among gay men in Los Angeles and later in other parts of the United States and in other populations, including intravenous drug users and Haitians. By 1984, researchers in the United States and France identified the HIV retrovirus responsible for the infection, and a team at the National Institutes of Health developed a blood test for HIV infection by identifying HIV antibodies in blood samples. That same year, the first known case in the U.S. military appeared when an army recruit fell ill after vaccination for smallpox. After being admitted to Walter Reed Medical Center for treatment, he was diagnosed with AIDS. He died 18 months later.

In response to the AIDS epidemic, the Department of Defense instituted a policy of testing all military personnel. All recruits receive tests for HIV along with their physical exams during induction. Positive tests exclude them from service. Active-duty personnel are tested on a regular basis. Those who test positive are retained but excluded from overseas deployment. Commanders and medical personnel would order the HIV-positive service member to inform any potential sexual partner that he or she is HIV positive; failure to do so would make the service member subject to disciplinary action under the Uniform Code of Military Justice. These policies, taken together, reduced the number of active service personnel with HIV infection from 2,853 in 1986 to just 550 in 1991. By 2002, HIV infection in the military was only 1 or 2 in 10,000, one tenth the rate in the general U.S. population.

AIDS became one of the central issues discussed when the military reviewed policies excluding gays and lesbians from service. Globally, the major means of transmission of HIV is through heterosexual intercourse. In the United States, however, up to 75% of infections are due to male homosexual relations. When President Bill Clinton, in 1993, ordered a review of military policies regarding gays and

lesbians in the services, the perception that AIDS was a “gay disease” still held sway. Many within the military argued that recruiting gays and lesbians would increase HIV infections within the military. Also, military personnel are often vaccinated with live-virus vaccines. This was seen as a risk for inducing AIDS in those who were already HIV-infected. Related to this was the concern about the military blood supply. On deployment, military personnel often act as blood donors for medical emergencies. The original policies regarding exclusion of HIV-infected recruits had identified the blood supply as a central concern, and this concern reemerged during the discussions that led to the adoption of the Don’t Ask, Don’t Tell policy in 1994 (repealed in 2011).

When physicians first identified AIDS in the 1980s, no successful treatments were available. Since the 1990s, treatment of HIV-infected individuals with combinations of antiretroviral agents has successfully reduced both mortality and morbidity related to HIV infection. In the U.S. military, those with HIV infection can continue to serve, and only 4% to 8% leave the service due to AIDS or HIV-related medical problems. The success in treating HIV infection has led to a lowering of concerns about infection and its consequences in the general U.S. population and within the military. This change in attitude appears to have led to an increase in risky behavior among military personnel. Condom use across the military services is about 50%, with a documented decline in condom use among naval officers in the 2002–2005 period. The navy, which has the highest rate of infection, is at particular risk. Only about 5% of military personnel stationed in the United States make use of commercial sex workers, who are considered a high-risk population for HIV transmission. But with its worldwide deployment, naval personnel are far more likely to employ commercial sex workers. One study in 1993 showed that 42% of sailors on a 6-month tour had used commercial sex workers. In the 10 years following 1999, rates of HIV infection in the navy doubled to 36 positive tests for 100,000 sailors tested.

Although AIDS remains a personal tragedy, within the U.S. military, the infection rate is much lower than in the civilian population. Periodic testing and excellent medical care provide means for containing the harm from HIV infection. The situation in the militaries of many developing countries is starkly different. Rates of infection among the young men in

uniformed services in the developing world are 2 to 5 times higher than in the civilian populations, with sharp increases in infection rates during mobilization. These countries generally have less access to antiretroviral drugs needed for treatment. Some authorities estimate that for countries where the AIDS epidemic has become most widespread, up to half of military personnel are infected. Not only are the uniformed services at high risk for contracting HIV infection, but they become a major source of spreading HIV infection along with other sexually transmitted infections.

John C. Spurlock

See also Gays and Lesbians; Medicine, Military; Sexually Transmitted Diseases

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HOMELAND SECURITY

See Civil Defense

HOMELAND SECURITY, DEPARTMENT OF

The Department of Homeland Security (DHS), which came into existence on March 1, 2003, was the largest national government reorganization

since the creation of the Department of Defense, the Central Intelligence Agency, and the National Security Council, all outcomes of the National Security Act of 1947. The new department, the result of the Homeland Security Act of 2002, was organized by bringing together 22 disparate organizations and entities from across the national government. Notable inclusions in the new department are the Federal Emergency Management Agency, the Secret Service, the U.S. Coast Guard, the Border Patrol, the U.S. Customs, several entities related to immigration, and the new Transportation Security Agency. Also included in this array were several offices from the Department of Justice. Though the purpose of the department was clearly outlined in the legislation, over time the mission space was defined around preventing, protecting from, responding to, and recovering from incidents of national significance. Though the nation is perceived to be safer and expectations remain high for this new organization, the overall performance of the department has been disappointing and a chasm between the homeland security apparatus at the national level and that of the 39,000 general purpose jurisdictions at the state and local levels has remained problematic. This entry examines the development of the DHS and discusses challenges and future directions.

The Beginning: 9/11

Following the devastating terror attack on the United States on September 11, 2001, the legislative and executive branches of the national government took swift action to form an organization that might address how to secure the nation from devastating acts of terror. Immediately after the attacks of 9/11, government entities at all levels began working together to ensure that “homeland security” would be a national effort, not just a federal one. However, this level of goodwill and cooperation would not last for long. Inside the new department, the various agencies were having difficulty sorting out roles and mission space. Many of the units brought into the new department were still performing duties that had little or nothing to do with homeland security. There were also clear disagreements over what should or should not be done in building national homeland security public policy. Over time, a bevy of national policy documents were issued that,

unfortunately, could be characterized as top-down, one-size-fits-all, federal-centric, and focused on terrorism through weapons of mass destruction. This approach was not congruent with the evolution of homeland security thinking at the state and local levels of government.

After the initial shock of the attacks was absorbed and the first burst of grant funding had been dispersed to state and local governments, those jurisdictions below the national level absorbed homeland security responsibilities into the public safety and emergency management domains. Though terrorism was certainly a large concern for most of the larger metropolitan areas in the country, other concerns affected the judgments—and budgets—of smaller jurisdictions. Terrorism was but one of many “hazards” that concerned most local governments. Their orientation toward an “all-hazards” approach to protecting their constituents was galvanized by the far more common occurrences of flooding, wild fires, earthquakes, tornados, and hurricanes. Similarly, with each passing year, grant funding from the national government dropped off precipitously. At one point in the immediate aftermath of 9/11, some 19 grant programs were dispensing funds to state and local governments, of which only about half were controlled by the new department. To this day, special grant funding for emergency management, fire services, and law enforcement are still not controlled by DHS.

Many of the difficulties encountered in the new department can be assigned to institutional pathologies. For instance, though oversight in Congress of the Department of Defense is found in some 36 separate committees in the House and Senate, the DHS must answer to 80 committees, even though the Defense budget is 10 times that of DHS. All together, 412 of the 435 representatives and all 100 senators have committee assignments with DHS oversight responsibilities. Officials at the DHS are constantly being called to Capitol Hill to provide testimony. This intrusion into the daily workings of a nascent department has had a deleterious impact on retention and morale. Furthermore, each of the secretaries charged with running the department has conducted extensive studies and has led countless attempts to reorganize.

Apart from the issues related to state and local budget, revenue, and tax constraints, perhaps the greatest shortfall in developing cooperation with

Congress and state and local governments has been the resistance at DHS to engage elected officials in the policy development process. In a host of initiatives that include the development of public policy documents dealing with national preparedness, officials representing the executive branch have been remiss in reaching out to elected officials, particularly at the state and local levels. The face of an incident is not that of the local emergency management director or police chief. The face of the incident is likely to be a mayor or a governor. State and local executives and legislators have not been included in the development of homeland security public policy.

In summary, the instability caused by the constant organizational upheaval and institutional conflicts have only exacerbated the problems facing the Department of Homeland Security. Matters were not helped by the perceived weak performance of the new department during Hurricanes Katrina and Rita in the late summer of 2005.

Challenges and Change

Hurricane Katrina was a late summer storm that came ashore near the city of New Orleans, Louisiana. Though significant warning was available, a host of problems arose that left the most vulnerable elements of the population of the city in harm's way. After the storm made landfall, several of the protective dikes around the city gave way, flooding the lowest, and poorest, neighborhoods and destroying nearly all real and personal property in the area. The vivid pictures of people stranded on rooftops and huddled together in the Superdome broadcast on the news left the impression that government at all levels had abandoned those most vulnerable. Though the reality was quite different, the perception and narrative were set. The new department, given its first test, had failed. In particular, the Federal Emergency Management Agency and the president were to take most of the blame. When Hurricane Rita came ashore in Texas a month later, things were not much better. In the area around Houston, individuals who had escaped Katrina were again asked to evacuate to avoid the devastation of this newest storm. Again, DHS did not cover itself with glory.

In the aftermath of Hurricanes Katrina and Rita, Congress passed legislation that was intended to correct perceived shortfalls at the national level,

particularly when DHS would be called on to assist state and local governments in the future. Though many of the post-Katrina recommendations have been adopted, there remain significant disconnects between the national government and those charged with protecting citizens at the state and local levels.

Between 2007 and 2010, DHS has issued a host of documents that were intended to broaden the outreach to state and local government stakeholders and to expand federal government support of all hazard policies that dominate actions at the lower levels of government. Regardless of the rhetoric used to socialize these new documents, the policies within are still focused predominantly on terrorism and are even more federal-centric than in the past. This approach to homeland security national public policy has resulted in some interesting outcomes across the country. Making matters worse has been the devastating impact of a stressed economy, felt hardest at the state and local levels.

Over the past decade or so, jurisdictions seeking support from the national government through presidential disaster declarations have increased dramatically. Because of the 24-hour news cycle, most administrations have yielded to the pressure of showing some activity, particularly in the form of advancing support through financial means to victims of natural disasters. The tendency of the national government to grant these declarations has had some significant unintended consequences. Though cooperation and mutual aid have become more common among jurisdictions, there are some interesting dynamics occurring. When jurisdictions share common borders, the governments have a greater inclination to build formal mutual aid agreements. This interlocal cooperation is most prevalent in metropolitan areas where the core city holds a significant fraction of the population. Cooperation among jurisdictions occurs even in smaller metropolitan areas that have several distinct governments sharing a common regional interest. However, as has been identified in several studies, some smaller urban areas that are some distance from major urban centers have underfunded various responder functions knowing, or anticipating, that larger jurisdictions will come to their aid if catastrophes occur. The risk calculations associated with this pathology are reflected in public budgets. Though formal agreements dominate arrangements in urban areas,

such is not the case in less populated regions of the country.

Small urban centers and rural areas form mutual aid arrangements based on personal relationships and informal agreements. Most of these jurisdictions lack the administrative and operational capacity to develop their own source capabilities, and because resources are scarce, governments are incented to find partners with whom they might form support bonds. One need look no further than the events in Greensburg, Kansas, or Parkersburg, Iowa, both devastated by tornados in recent years, to see how this type of cooperation plays out. Furthermore, emerging research seems to indicate that political culture may influence the willingness of governments to cooperate in homeland security preparedness efforts.

Since the beginning of the economic downturn in 2008, state and local jurisdictions have been faced with extraordinarily difficult policy decisions related to revenue and spending priorities. Any expectation on the part of the national government that these government entities would change funding levels to enhance public safety, emergency management, or homeland security is misguided and uninformed. Nearly every state has had to find ways to balance budgets without affecting areas such as education, economic development, public health, job training, and transportation infrastructure. Often, rather than enhancing public safety capacities, elected officials must reduce funding to this area to meet the expectations and preferences of local and state constituents. Though the disconnect between the national government and the rest of the country may be profound, there are initiatives being considered that may someday close the distance between levels of government in homeland security public policies.

One of the most significant changes in national-level policy has been the merging of the Homeland Security Council with the National Security Council. The concept that national security encompasses homeland security seems a step in the right direction. Furthermore, programs such as those outlined by the Project for National Security Reform, a bipartisan research effort focused on revamping the entirety of the national security apparatus, offers organizational, legislative, and administrative options that will enhance interagency cooperation that is currently functioning at less than efficient levels.

Future Directions

Though the DHS has yet to fulfill its promise, the future seems brighter. As the number of homeland security professionals at the national, state, and local levels increases, policy options offered by DHS are more likely to be sensitive to and considerate of the vagaries of governing at the state and local levels. Similarly, as the economy begins to recover, more revenues flowing into public coffers will most certainly lead to increased cooperation among jurisdictions and expanded administrative and operational capacities in each jurisdiction around the country. Perhaps of greater significance is the advancement of new concepts of community resilience that reflect a more holistic approach to the protection of constituents that better reflects the preferences of citizen-voters. Through the interdisciplinary study of the social intelligence of a community, elected officials and responder professionals can identify at-risk populations, develop policies that mitigate risk, and focus on those factors that unnecessarily divert resources from safe, secure, and self-sustaining neighborhoods and communities.

Samuel H. Clovis Jr.

See also Border Patrol; Civil Defense; Natural Disaster, Military Response to; 9/11 (2001); Terrorism

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HUMAN RIGHTS

The military defines human rights as freedoms, immunities, and benefits inherent to all human beings. These are not concessions by governments but rather they derive from the inalienable and universal dignity of human persons. Human rights include fundamental protections for individuals such as freedom from genocide, slavery, murder, torture, cruel or degrading treatment, prolonged arbitrary detention, and systematic racial discrimination. While governments do not bestow these rights on their citizens, they are required to guarantee them.

In international relations, human rights function to help secure peace, deter aggression, promote rule of law, combat crime and corruption, strengthen democracies, and prevent humanitarian crises. Since World War II, the United States has included the promotion and respect for human rights, as embodied in the Universal Declaration of Human Rights, as a central goal in its foreign policy. The military, as the defender and promoter of U.S. foreign policy goals, is often tasked with this objective. The U.S. military believes that adhering to both the law of armed conflict and international human rights law will result in a more comprehensive prevention of abuse.

The United States, however, is not the only actor concerned with protecting human rights in the global arena. Since the 1970s, the international community has increasingly viewed human rights protection as a duty falling not only within the jurisdiction of national governments. Transnational advocacy networks and civil society actors have worked to shift the definitional understanding of sovereignty to require global actors to act if governments were not protecting their citizens from systematic human rights abuses. In this new conception, the international community possessed a duty to intervene and protect groups and individuals from abuses. While this ideal of human rights protection is generally accepted, as evidenced by the overwhelming adoption of the Responsibility to Protect Doctrine in the UN General Assembly in 2005, its application in institutions such as the International Criminal Court has met resistance from a variety of actors around the globe, including the United States.

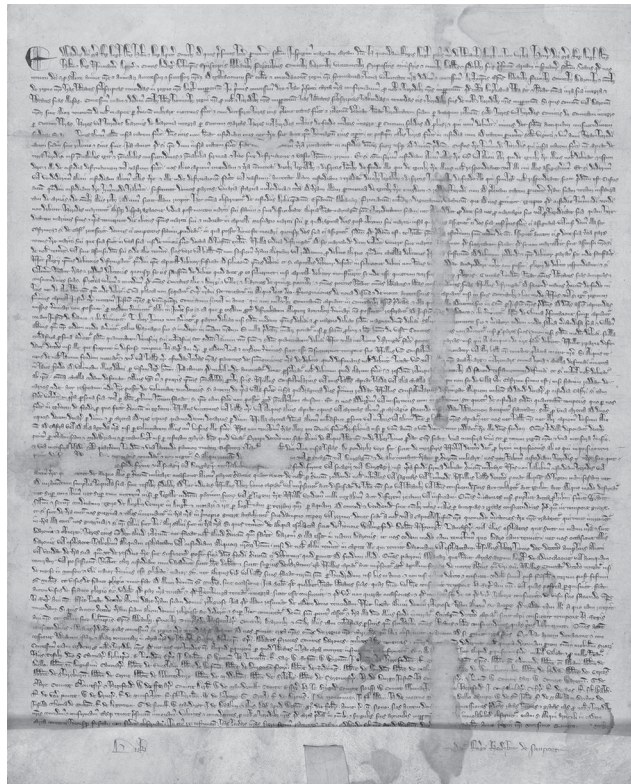
This entry lays out the history of human rights in international law, its uneven adoption in U.S. foreign policy during and after the Cold War, and the military's evolution of responsibility in protecting human rights abroad.

Background

The current tenets of human rights first emerged from natural rights thinkers such as Hugo Grotius, John Locke, and Thomas Paine and were embodied in documents such as the Magna Carta (1215), the English Bill of Rights (1689), and the French Declaration on the Rights of Man and Citizen (1789). These slowly grew to become internationally accepted principles and were codified in international law in the aftermath of World War II. Symbolized by the world community forming the United Nations, nation-states explicitly recognized fundamental human rights and took responsibility for protecting them through international agreements and laws.

The first of these documents to enshrine these rights was the Universal Declaration of Human Rights (1948). While not a treaty or legally binding, it was the first document to lay out the broad spectrum of human rights in a comprehensive manner. Now many provisions are considered customary international law or have been incorporated into binding international human rights treaties such as the International Covenant on Civil and Political Rights; the International Covenant on Economic, Social and Cultural Rights; the Convention on the Prevention and Punishment of the Crime of Genocide; and the Convention Against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment. While these documents reflect the evolving and expanding nature of rights, their definitions and enforceability, both domestically and internationally, are continually evolving.

The creation of the United Nations after the end of World War II proved to be an exceptional moment in the history of human rights. For decades afterward, however, human rights lacked the sustained attention of the international community to push toward their implementation. During the Cold War, international action to protect these rights was



English monarchs, including Henry III, confirmed the Magna Carta several times after 1225; each subsequent issue followed the form of the “final” version. With each confirmation, copies of the document were made and sent to the counties so that everyone would know their rights and obligations. Of these original issues of the Magna Carta, 17 survive—4 from the reign of John, 8 from that of Henry III, and 5 from Edward I, including the version now on display at the National Archives.

Source: Courtesy of David M. Rubenstein, National Archives.

largely subordinated to Cold War concerns. The signing of the Helsinki Final Act in 1975, where 35 nations established 10 basic principles for relations among participating states including “respect for human rights and fundamental freedoms,” stands out as a unique achievement during this period. The 1978 creation of Helsinki Watch, a nongovernmental organization committed to monitoring Soviet bloc countries’ adherence to the human rights principles of the agreement, indicates that even in the midst of Cold War polarity, human rights claims gained traction and began to play a serious role in international relations. The success of the accords, however, proved the exception, as many other attempts to enforce human rights met resistance as a thinly veiled attempt to further one of the polarized Cold War aims.

Human Rights in U.S. Foreign Policy

The strictures of the Cold War extended to the United States—human rights were largely subordinated to anxiety over communism. For almost three decades after the adoption of the Universal Declaration of Human Rights, human rights took a backseat to these other geopolitical concerns.

Human rights reemerged as an issue of international attention during Jimmy Carter’s presidency when he ran on a platform of returning morality to international affairs. Then, in his inauguration in January 1977, he declared that “human rights must be absolute.” Domestic and international human rights groups proliferated simultaneously, both as a response to this presidential attention and as a reaction to the transnational advocacy networks that emerged to protest the abuses in the Southern Cone. In 1977, Amnesty International also received the Nobel Peace Prize. All these events appeared to indicate that human rights were taking their place as an accepted norm on the international scene. Yet the Carter administration struggled with the enforceability of this ideal in the application of foreign policy, especially as it continually conflicted with bipolar Cold War objectives. Therefore, as Carter confronted a flailing economy, the Soviet invasion of Afghanistan, and the Iranian hostage crisis, his presidency faltered, and human rights receded as the central, organizing

principle in his foreign policy. By the time Ronald Reagan ascended to the presidency, he and his ambassador to the United Nations, Jeane Kirkpatrick, promoted a much diffused human rights policy outlined in an article titled "Dictatorship and Double Standards." In this article, they laid out their case for tolerance toward regimes that were pro-American, authoritarian regimes with poor human rights records, and advocated using tough rhetoric only against totalitarian states with a communist bent.

It was not until the fall of the Berlin Wall that human rights reemerged with salience on the international scene. Without the Cold War subjecting human rights attempts to the narrow interpretation of supporting or undercutting communism, human rights organizations flourished, and these principles surfaced again as a concern in the presidential agenda. President Bill Clinton pursued a policy of enlargement and engagement where security at home could best be secured by spreading human rights and democracy abroad. Clinton applied this theory selectively with mixed success.

This difficulty is evidenced by examining his attempts to involve the United States in peacekeeping operations. While the United Nations had also largely been constrained by the pressures of the Cold War, the 1990s witnessed an emergence of peacekeeping as a method for the United Nations to protect human rights in nations that suffered from grave societal violence. One of the first missions the United States became involved in was in Somalia, where, in response to conditions of the world's worst poverty, famine, and lawlessness, the United States led a peacekeeping operation called the UN Operation in Somalia. From 1992 to 1993, the U.S. military sought to establish rule of law and a secure environment for humanitarian relief operations.

Unfortunately, after 19 U.S. soldiers were killed in Mogadishu in 1993, which severely dampened U.S. enthusiasm for intervening abroad to ensure human rights, the United States withdrew its forces from the country. In theory, human rights seemed an ideal worth protecting, but not when U.S. interests were not directly being threatened and where



Somalis off-load rice and other relief supplies from a Saudi Arabian freighter at the seaport. The Saudis are providing relief supplies to the Somalis under the auspices of UN Operation in Somalia II.

Source: PV2 Andrew W. McGalliard, U.S. Army.

U.S. servicemen could be put in harm's way. This sentiment was palpable in 1994 when the Clinton administration failed to intervene in the genocide in Rwanda, and 800,000 people were killed in only 100 days. While Clinton ultimately apologized for this failure, his inaction proved the continual limitations in enforcing human rights.

In what is largely considered one of the mediated successes of international peacekeeping, Clinton chose to intervene in the Balkans where ethnic rivalries exploded in violence after the Iron Curtain fell. Here, the United States sought to intervene to stop the bloodshed through a North Atlantic Treaty Organization force with UN backing. While this U.S.-led endeavor did eventually stop Slobodan Milosevic's abuses, the lingering ethnic violence and difficulty the international community confronted in establishing stable states in the region demonstrate the complex task of human rights protection. Even when forceful eruptions of violence are stemmed, the societal conditions that created these mass atrocities have proved more difficult to address.

These debates have continued in the 21st century. As Al Gore and George W. Bush vied for the presidency in the 2000 election, they each grappled with whether the United States had a responsibility to play an active role in the enforcement of human rights abroad. While George W. Bush originally denounced active intervention abroad, once in office, his administration rhetorically adhered to the idea of promoting human rights and democracy as a key part of their fight against terror and their objectives in Iraq and Afghanistan. This human rights posture proved difficult to defend as scandals like Abu Ghraib (where U.S. guards abused Iraqi prisoners) and Haditha (the Iraqi town where U.S. soldiers killed civilians) surfaced.

Human rights debates also continued during the Bush administration around ideas of international justice. In 2002, the international community ratified the Rome Statute, which established the International Criminal Court, an international body tasked with prosecuting individuals who perpetrated the worst crimes against humanity. This court reflected a growing transnational movement of human rights advocates that sought to institutionalize the protection of international human rights norms. The United States failed to ratify the treaty

and, during the Bush administration, remained largely disengaged from the proceedings of the court. The Obama administration has also failed to ratify the treaty but appears more cooperative in working with the court to pursue its aims. In addition, the Obama administration has convened a review process to reevaluate U.S. policy toward the International Criminal Court.

President Barack Obama brought a new energy and perspective to the U.S. involvement in international human rights. During his campaign, Obama promised to make human rights and morality organizing principles of his foreign policy. At least in rhetoric, his success was lauded early in his administration as he won the Nobel Peace Prize in 2009. His actual achievement of these ideals, however, remains mixed amid his struggles to help the country recover from economic disaster.

Role of the Military in Promoting Human Rights

Since the 1950s, the U.S. Armed Forces have received training on the laws of war, which include how to conduct operations within acceptable parameters of these new human rights treaties. The U.S. military is trained to understand and incorporate principles of the Geneva Conventions.

Since the end of the Cold War, human rights training gained an even greater focus in the military, which called on personnel to undergo awareness training, investigate and report alleged abuses, and influence host countries to obey internationally accepted norms. The Department of Defense and the State Department understand the benefits of the U.S. military promoting human rights abroad, mainly as a means to encourage democratic growth and to contribute to counterterrorism. An emerging human rights consciousness also constrains military behavior in the treatment of prisoners and the conduct of operations in civilian areas, essential developments in an era of counterinsurgency. Human rights, therefore, continues to operate in military training and as a central principle for the U.S. military in organizing their mission objectives.

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See also Abu Ghraib; Genocide; International Criminal Court; Laws of War; Peacekeeping; United Nations

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HUMANITARIAN INTERVENTION, FOREIGN

At the close of the Cold War, the United States and the Global North found themselves engaged in humanitarian intervention missions across the world. Joined together under the banners of the United Nations (UN) and the North Atlantic Treaty Organization (NATO), Western governments intervened in failed states plagued by political instability, ethnic tension, and famine. Despite intentions to stabilize worsening conditions, politicians and military forces struggled to find a strategy in the balance between doing too little and going too far. This entry discusses the post-Cold War evolution of humanitarian intervention, including the principles, motivations, and lessons of international humanitarian interventions.

The Foundation of Humanitarian Intervention

After the devastating experience of World War II, the international community joined together to recognize universal human rights unlike ever before. The newly formed United Nations and a multitude of human rights conventions, including the Universal Declaration of Human Rights (1948), signaled a giant leap forward. Many of these treaties on human rights were tempered by the ugly reality that nearly every state involved had embarrassing contradictory domestic policies from America's Jim Crow segregation to the Soviet's Red Terror. Nevertheless, the international community joined together to form the foundation, albeit imperfect, for a rules-based international system.

The promise of state sovereignty and protection from forceful intrusion was enshrined in the UN charter meant to establish a basis for world peace. The protections outlined in Article 2(4) of the UN charter could be overridden for reasons of self-defense or with a unanimous vote of approval by the UN Security Council (UNSC). Any such measure could be vetoed by one of the five permanent UNSC members: the United States, the United Kingdom, France, Russia, and China. Another exception is the 1948 Genocide Convention, which sought to protect against another genocide similar to the Holocaust, also provided an avenue for humanitarian intervention. Unfortunately, since the adoption of the Genocide Convention, roughly 20 million people have died in mass atrocities in 29 countries.

As the international community discovered after the Cold War, geopolitics corrupted the hope for a consensual, rules-based international system. In 1999, UN secretary general Kofi Annan questioned the failures of the system wherein a UNSC veto could prevent a justified intervention in genocide or, as history proved, another state or group of states could push ahead with an intervention without UNSC consent. This embodied the conflict between idealist and realist visions of international politics, one in support of a global rules-based system and the other only certain of the preeminence of crude geopolitical calculation. The record of post-Cold War humanitarian interventions demonstrated the persistent challenge to legitimize a rules-based international system in an environment where might makes right. Furthermore, geopolitical calculations of relative strength and risk of loss evidenced many states' selective interpretation of universal human rights.

Contemporary political debate often portrays humanitarian intervention as a recent phenomenon, but in fact, humanitarian intervention dates back hundreds of years. The 19th century in particular was marked by numerous interventions by Britain, France, and Russia in atrocities in Poland, Bulgaria, Syria, and Greece. These three powers famously aided Greece in its fight for independence from the Ottoman Empire. Although they risked defeat and their own national interest for humanitarian causes, they also stood to gain geopolitical advantage through expanded influence. Meanwhile American presidents shied away from foreign intrigues as John Quincy Adams famously warned that foreign interventions, even those that begin with the best of intentions, would lead America astray. The numerous humanitarian interventions after the fall of the Soviet Union in 1991 led many critics to reassess the prudence of this age-old observation.

Into the Breach: Post-Cold War Humanitarian Intervention

No longer confined by the Cold War, the United States emerged as the preeminent force in armed humanitarian interventions throughout the 1990s. Following Operation Desert Storm, in 1991, the United States, England, and France initiated no-fly zones to protect northern Kurds and southern Shia Muslims in Iraq from future attacks by Saddam Hussein. The no-fly zones remained until 2002 despite a decade of criticism for their use as leverage in support of weapon inspections rather than their official intent to protect civilians. The international community also grew increasingly frustrated as the no-fly zones lacked an official UNSC mandate, which made them technically illegal despite U.S. insistence otherwise.

Only 1 year later, the outcome of U.S. escalation of a UN intervention in Somalia in December 1992 threatened the future of humanitarian intervention. The then U.S. president George H. W. Bush sent U.S. military forces to reinforce an international effort to end a devastating famine. Security concerns threatened the mission, but U.S. forces, including civil affairs units, helped restore a secure environment and assist numerous nongovernmental organizations involved in the relief effort. Unfortunately, after the manhunt for Somali warlord General Mohammed Farah Aidid culminated in the “Black

Hawk Down” incident in 1993, public opinion and political willpower soon turned against the intervention. The political wrangling that ensued exposed the dangerously open-ended U.S. mission as well as conflicts between UN partners and the United States over mission leadership and strategy. The failed mission and resultant lingering embarrassment left U.S. politicians hesitant to intervene in similar situations for years.

In spite of Somalia, the United States led a multilateral, UNSC-mandated mission to reinstate Haitian president Jean-Bertrand Aristide in September 1994. Following prolonged political wrangling and one false start, the threat of U.S. military invasion of Haiti forced the military coup leadership to peacefully cede control to Aristide. Troops remained only long enough to ease the transition effort and establish a longer term UN peacekeeping mission.

Earlier that year, in April, U.S. leaders neglected ethnic hostility in Rwanda that turned to full-scale genocide. Having neglected warning signs including emphatic warnings from a small UN peacekeeping contingent, the international community did little to prevent the death of more than 800,000 Rwandans and nearly 75% of the Tutsi population. Fearful of another Somalia, the United States remained uninvolved and slowed discussion of intervention at the United Nations until July, after Tutsi Rwandan Patriotic Front rebels retook the capital from the incumbent Hutu-led government. Unlike Somalia, regrets of inaction in Rwanda overshadowed future crises, and many U.S. diplomats and politicians who watched the genocide unravel vowed to never again fail to act against genocide.

As early as 1992, Western nations cautiously observed a war in Bosnia as political forces stoked ethnic strife between Bosnian Serbs and Muslims. Limited measures including a UN-mandated no-fly zone in 1993 proved unable to stem the violence that climaxed in 1995 as Serbs massacred 7,000 Muslims in the town of Srebrenica. The massacre spurred the UNSC to approve an aggressive NATO air campaign followed by 60,000 NATO soldiers far more threatening than the previous UN peacekeeping force. The overwhelming force drove the Serbs into U.S.-led negotiations that established the Dayton Peace Accords that ended the war in December 1995. Although the intervention and overwhelming force successfully ended the violence, the massacre

at Srebrenica reminded many interventionists to act quickly and forcefully in the future in order to avert preventable catastrophes.

When tensions flared in Yugoslavia as Serbian forces invaded Kosovo in 1999, U.S. president Bill Clinton quickly led a NATO bombing campaign to preempt a human rights crisis. Although the strikes were successful and pushed the Serbian military out of Kosovo, the measures set an uneasy precedent. Eager to strike, the U.S. administration moved unilaterally without the consent of the UNSC. The resultant Clinton Doctrine used to explain the move suggested that in the future America would intervene in what it deemed humanitarian crises without the approval of the UNSC as long as American forces did not stand to suffer serious casualties. Despite success, the mission exposed the dangerous threat that unsanctioned unilateral action, not to mention geopolitical intrigue masquerading as humanitarianism, presented to the future of the UNSC and rules-based international system.

Humanitarian Intervention in the 21st Century

After a tumultuous decade of global instability, the Afghanistan and Iraq Wars dramatically reframed humanitarian intervention. Primarily billed as defensive reprisals against the al Qaeda threat, Iraq in particular increasingly relied on a humanitarian cant to justify continued stabilization and counterinsurgency operations. The tremendous cost of both wars emphasized the sacrifices required to lead full-scale regime change and reconstruction efforts with only a small coalition. Furthermore, the institutionalization of stability operations, outlined in the 2008 U.S. Army Field Manual 3-07, confirmed the increasing militarization of humanitarian aid work that threatened the perceived neutrality of aid workers.

Human rights abuses excused in the name of the Global War on Terrorism also raised fundamental questions about the legality and hypocrisy of U.S. efforts. The proliferation of torture, including the Iraq Abu Ghraib incident, black site renditions, and indefinite imprisonment of terror suspects at the U.S. naval base at Guantanamo Bay, Cuba, shook humanitarianism to the core. These offenses demonstrated the imperfection of the international system wherein powerful states escaped repercussions and voluntarily exempted themselves from international treaties they agreed to observe. Moreover,

treaty reservations and the complete lack of domestic enforcement of international law throughout the West warned of an uncertain future for human rights.

Despite setbacks and controversy over human rights and foreign intervention, the humanitarianism movement inched forward in 2005 with unanimous support in the UN General Assembly for the responsibility to protect (R2P) doctrine. R2P reframed the 1990s right to intervene in terms of a state's responsibility to protect citizens from genocide, war crimes, ethnic cleansing, and crimes against humanity. The R2P framework championed diplomatic and economic measures to prevent or mitigate conflict, but if necessary, foreign states could utilize military force as a last resort to protect civilian populations from violence. While R2P meant to reframe the past's right to intervene, the debate over the efficacy of intervention remained as contentious as ever.

The 2000s were also marked by numerous natural disasters where the international community rushed to the aid of the distressed in noncombat environments. Similar to the past, military forces spearheaded aid efforts with their unmatched logistical capabilities to transport supplies in hard-to-reach areas. Critical civil affairs detachments, particularly from the United States, assisted in a variety of logistical capacities—transporting supplies and nongovernmental organization (NGO) personnel, restoring crucial public services, and preserving law and order. Although the often overwhelming presence of military force created tension for some NGOs, military forces have shifted policy to extract themselves as soon as they transfer the mission control to peacekeepers or domestic governments. Conversely, NGOs that have been crucial in advancing human rights since the foundation of the United Nation had also grown exceptionally adept at delivering assistance in difficult environments. Disaster relief efforts in Indonesia, Myanmar, Haiti, and Pakistan also evidenced an erosion of borders as nations welcomed assistance from nations and organizations across the globe. Some controversy sprang from Myanmar's initial rejection of aid in 2008 after Cyclone Nargis prior to UN negotiations that opened the country to NGOs. Even though R2P did not include provisions for disaster relief, the French foreign minister Bernard Kouchner called for the United Nations to invoke R2P to assist disaster victims in Myanmar. Overall, the

openness to disaster relief indicated that antipathy to intervention surrounding the Iraq War had not spread to natural disaster relief.

With the United States fully engaged in Iraq and Afghanistan, other leading states in the international community supervised multiple humanitarian intervention missions throughout the decade. In 2008, the international community invoked R2P for its first use in a UN campaign that calmed escalating violence surrounding elections in Kenya. Elsewhere in Africa, civil wars were ended through decisive application of force by England in Sierra Leone and France in Côte d'Ivoire. Australia also deployed force in a UN intervention in East Timor after the region seceded following years of conflict with U.S. ally Indonesia.

In Sudan, the crisis in the Darfur region that began in 2003 demonstrated that even after a decade of increasing intervention, international action was not assured. As humanitarian aid and faith-based non-profits galvanized popular concern over the violence, African Union and UN peacemaking and peacekeeping efforts fell short of decisive action. The absence of conclusive action demonstrated that opposition from the Sudanese government and lack of political will-power among intervening parties could easily drown public outcry over genocidal violence. The violence in Darfur also symbolized the growing tendency of liberal humanitarians to side with conservatives on the application of military force to resolve humanitarian crises. As the outcry cooled in 2010, the experience reemphasized that politicians ultimately decided whether to intervene and where to do so, often paying the closest attention to geopolitical advantage.

Intervention in Libya and Beyond

In the wake of the Arab Spring, the international community joined behind the United States in the 2011 Libyan intervention. As Russia and China abstained, the United States moved under Operation Odyssey Dawn to establish a UNSC-approved no-fly zone and preempt a mass atrocity by Muammar Qaddafi. After a heavy U.S.-led bombardment, operations transferred to a NATO coalition led by Britain and France. Critiques of the mission's cooption of R2P as a tool of regime change occurred when NATO air strikes unofficially pursued Qaddafi. Contention in the United States also arose to challenge the constitutionality of intervention and President Barack Obama's leading from behind.

Ultimately, the transfer of control away from U.S. forces successfully removed American military might from the spotlight and empowered the multilateral force to continue the mission.

The future of humanitarian intervention after Libya remains just as uncertain and unpredictable as it did at the close of the Cold War in 1991. Anxious for the next chapter in the evolution of R2P, observers of international relations must wait to see if the precedent in Libya opens the door to similar regime change interventions elsewhere. Critics of the Kosovo intervention will undoubtedly also scour headlines in search of the Clinton Doctrine's manifestation in interventions that lack unanimous UNSC approval. Increasing financial constraints in an age of austerity have already influenced future defense spending cuts, which may also affect the calculation to intervene in global crises. If the history of humanitarian intervention serves as any indicator, the only certainty will be the continued debate over the efficacy of intervention and future of universal human rights.

Alex S. Kasper

See also Bosnia Intervention; Civil Affairs; Haiti, U.S. Intervention in; Human Rights; Iraq War (2003); Kosovo Intervention; Libya; Peacekeeping; Realism in International Relations; Rwandan Genocide; Somalia Intervention; United Nations; War in Afghanistan

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HUNTINGTON, SAMUEL

Samuel Phillips Huntington (1927–2008), distinguished professor, political scientist, foreign policy analyst, and advisor, spent his career examining the relationship between the informal and formal structures of political institutions and developing theories for understanding issues confronting U.S. national interests. Periodically active in politics, Huntington was a speechwriter for Adlai Stevenson in 1956 and an advisor for Hubert Humphrey's unsuccessful presidential campaign in 1968. From 1977 to 1978, he was a consultant for the National Security Council during the Carter administration and served as a strategic advisor to President Ronald Reagan in the 1980s. Huntington is best known for the controversial arguments put forth in an article titled "The Clash of Civilizations?" wherein he suggested that post-Cold War conflicts would predictably escalate along specific "cultural fault lines." Of the eight civilizations listed in his global paradigm, the most volatile borders stood between the West and the Islamic civilizations. After its initial publication, Huntington remarked that this theory had stirred more debate than anything else he had written. Yet his 60-year academic career was never far removed from the controversies of his day. As a political theorist, he was apt to provide a conceptual framework for understanding the origins of political crises and revolutions. For the purposes of this entry, his scholarly achievements will be categorized into four major areas of interest: (1) civil-military relations, (2) political development, (3) post-Cold War paradigms, and (4) challenges confronting American national identity.

Civil-Military Relations

Huntington's first major work, *The Soldier and the State* (1957), was precipitated by the constitutional crisis and public disagreement between President Harry S. Truman and General Douglas MacArthur over the direction of the Korean War (1951–1953). President Truman's firing of General MacArthur in 1951 raised important questions about the appropriate limits of civilian control and military expertise during armed conflict. Huntington had himself served in the U.S. Army during a period of immense institutional reform following the passage of the

National Security Act in 1947. *The Soldier and the State* is at once a history of American and European civil-military relations and a framework for understanding problems associated with civilian control of the military in the context of the delicate political environment produced by the advent of the Cold War (1949–1991) and the introduction of the atomic bomb in the aftermath of the Second World War. Huntington identified long- and short-term causes for the constitutional crisis presented by General MacArthur's appeal to Congress and the American public when President Truman declined to abide by his recommendation to escalate the Korean conflict. Historically, and up to the period of the late 19th century, military officers and political leaders shared a common social and cultural milieu. When the U.S. Constitution was drafted, the overriding concern for its 18th-century framers was limiting the power of the central government and the chief executive who, historically, had been most inclined to use war as a pretext to tyranny. Article 1 Section 8 of the Constitution gave Congress the power to declare war, and Article 2 Section 2 provided the president with the power to execute the war as commander in chief. This broad political control of the military in time of war assumed that the values and experience of political leaders and military officers were fundamentally the same, but this situation had changed by the end of the 19th century. Following the Prussian War theorist Carl von Clausewitz, Huntington understood the modern military to possess its own grammar and its own set of professional values apart from those of the ruling elite. The National Security Act of 1947 and 1949 had, in Huntington's view, realigned and corrected the intrusive habits of military commanders in political affairs that characterized the conduct of the Second World War to better reflect the "Objective Civilian Control" of the military. The conduct of the Second World War had required a multinational war effort, which ceded many of the ordinary civilian controls to the professional expertise of military commanders under the general political objective that called for the unconditional surrender of Germany and Japan. This "Subjective Control" of the war invited military commanders to comment on and participate in those functions normally reserved to their civilian leaders. In Huntington's view, this created a culture within the military officer corps typified by General MacArthur's public criticism of President Truman and incompatible with the delicate

diplomacy required by the Cold War. Huntington observed and recommended the progression toward *professionalization* where distinctions of function are employed to channel and minimize military involvement in policy making through the Joint Chiefs and the Department of Defense, thereby eliminating the need for direct presidential censure.

Huntington's scholarship inaugurated the academic study of civil-military relations, and his ideas remain especially prescient since the Korean War, the first of several American wars that were never formally declared by Congress. Since that time, the locus of authority in defining political objectives has been a closely guarded prerogative of the president and his cabinet. As recently as 2009, 1 year after Huntington's death, General Stanley McChrystal was named commander of the North Atlantic Treaty Organization mission in Afghanistan due in part to his willingness to state frankly his professional military opinion to his civilian superiors. General McChrystal's resignation in 2010 for comments published in *Rolling Stone* critical of his civilian commanders reflects ongoing tensions between military expertise and civilian-controlled policy objectives. The framework outlined by Huntington admits that the spheres of professional military expertise and the expectations of civilian leaders would occasionally come into conflict. But as McChrystal noted in his letter of resignation to President Barack Obama in characteristically Huntingtonian terms, his public criticisms had violated the traditions of military professionalism but not necessarily the limits of military expertise. These military "values" (as opposed to laws) cited by McChrystal, and recommended by Huntington half a century earlier, sought to inculcate a culture of professionalism that at once encouraged candid guidance in military affairs and respectful deference to civilian authorities.

Political Order and Development

Huntington's most systematic study of the relationship between political institutions and society was undertaken in his 1968 book, *Political Order in Changing Societies*. In this work, Huntington examined the patterns of economic modernization and political reform over the past 2 centuries to understand the challenges faced by emerging economies in the context of the Cold War. The transition from traditional to modern societies historically required

a significant redistribution of political power away from local or feudal sources, toward a centralized and bureaucratic polity. Modernization, the transformation of a traditional and oftentimes agrarian society into an industrialized and urbanizing society, destabilizes social order if pursued too quickly. Citing several European examples, Huntington argued that political order was in large part dependent on maintaining legitimate political institutions in the face of significant social changes. The degree of government had to be strengthened before effective changes in the kind of government could be effectively implemented, a thesis that challenged prevalent notions about the partnership between economic modernization and the expansion of democracy. The backdrop of the Cold War cannot be overstated here, as it was generally understood that maintaining political legitimacy and stability was vital to stemming the worldwide spread of communism. His thesis was further developed in *No Easy Choice* (1976), a work that introduced political participation as an independent variable in the modernization process. Accelerated modernization, he warned, introduces elements of political instability that often outpace a government's ability or willingness to reform. After a "third wave" of democratization in Latin America yielded a disappointing turn back to authoritarianism, Huntington amended his thesis again in *Understanding Political Development* (1987) to account for the apparent inverse relationship between economic growth and social equality during the initial phases of industrial and economic development. The modernization of Latin America had yielded unexpected political developments: rapid economic development, initial wealth inequality, followed by a surprising resurgence of authoritarian governments that sought to curtail the same wealth disparities that brought new political classes into power. Rather than associating political instability with economic underdevelopment and poverty, Huntington argued that the process of rapid modernization itself had destabilized society by delegitimizing political institutions, causing discord followed by political repression. These initial phases of modernization were well documented. What was not foregone, however, was how differently nations would adapt to the social consequences of modernization. The success or failure of a nation to politically metabolize economic development depended in large part on its culture, defined as shared values.

By the late 1980s, Huntington joined other scholars who included “culture” as the most significant variable in predicting the shape of political developments in modernizing economies. This insight marked a shift in Huntington’s scholarly interests thereafter.

Post–Cold War Paradigms

Huntington’s 1993 article, “The Clash of Civilizations?” borrowed its title from Bernard Lewis’s article, “The Roots of Muslim Rage.” Lewis had argued that the next global threat to the United States would emerge from the “Islamic world,” where cultural hostilities had been nurtured by the perceived failure of Arab nations to keep pace with Western development. Huntington seems to have accepted the presumptions and the theoretical utility of this claim, even as he viewed it as an undesirable condition. In Huntington’s paradigm for the post–Cold War world, the “Islamic civilization” was one of eight cultural groupings that also included Western, Confucian (or Sino), Japanese, Hindu, Slavic-Orthodox, Latin American, and African. In each of these, religion and language assume the responsibility of cementing social bonds and shared national interests. In Huntington’s view, the nation-state would remain diplomatically significant but formerly “Third World” national interests would come to be influenced by their civilizational alignment displacing their Cold War allegiances. Civilizational divisions, concealed by the political spheres of the Cold War, began to resurface in the early 1990s. This paradigm provides the basis for understanding the instability that followed in many parts of the world after the collapse of the Soviet Union. These include shifting allegiances in Central Asia, the Balkans, central and southern Africa, and nations that “bestride cultural fault lines.” Huntington insisted that this paradigm provided the best explanatory model for understanding and predicting post–Cold War conflicts. While the Islamic world represents only one such group, he, like Lewis, claims it has particularly “bloody borders” with the West. To his critics’ objections, he responds that his view offers a realistic model that explained existing perceptions for both Muslims and Westerners. The “clash” theory remains salient to this day, despite many attempts to discredit its assumptions of shared values between widely diver-

gent nations. Huntington defended the utility of his civilizational divisions on the pages of *Foreign Affairs* and in later publications throughout the 1990s, but the 9/11 attacks did more to propel his theory into the public consciousness than any other event. Less controversial aspects of this thesis include predictions of growing animosity between the United States and China and the rise of religious faith as a counterweight to globalization.

American Identity

Huntington’s turn to culture as an explanatory variable in political development continued to animate his scholarly interests through the last decades of his life. When applied to American political institutions, the preeminence of religion is more difficult to discuss, given its legal disestablishment from government. Nevertheless, American political development, he observed, had been characterized by the periodic arousal of “creedal passions,” exemplified most poignantly during the Revolutionary War, the Jacksonian reforms of the 1820–1840s, the Progressive Era from 1890 to 1914, New Deal legislation in the 1930s, and the civil rights movement of the 1960s. These periods of “creedal” reform represent concerted attempts to close the gap between American *institutions*, such as voting, education, or labor, and the American *ideals* of



Samuel Huntington, during a panel discussion titled “When Cultures Conflict” at the 2004 World Economic Forum in Davos, Switzerland.

Source: Photo by Peter Lauth (www.swiss-image.ch). Copyright World Economic Forum (www.weforum.org).

liberty, opportunity, and equality. Huntington argued in *American Politics* (1981) that in each of these periods, changes were ushered in by religious awakenings animated by the implicit moral perfectionism of Anglo-Protestant culture. In some cases, the awakening stretched the defining characteristics of American identity to include “other” groups such as non-property-owning residents, women, and Black Americans.

The integration of Hispanics, however, represented a departure from earlier patterns for a variety of reasons noted in an article and a second book-length work on the subject titled *Who Are We?* (2004). Changes in U.S. immigration policy since 1965 had led to an influx of Latin American immigrants to the United States, most prominently witnessed in an influx of illegal immigrants from Mexico. Unlike other immigrant groups, Mexicans came in disproportionately large numbers, have a historical claim to U.S. territory, and refused to assimilate according to the pattern of other immigrants to the United States. The refusal of Hispanics to adopt American values, he argued, threatens the credibility of American legal and political institutions. As these values become increasingly diluted by the introduction of an Hispanic culture unwilling to adopt these values, they lose their power to animate Americans to reform their society into a more perfect state of freedom, thus challenging the potency of American patriotism. Huntington (“American Ideals,” 1982, p. 9) asks, “Would an America without its Protestant core still be America?” Citing the correlation between religious awakenings and “creedal passion periods,” Huntington concludes that the loss of the American creed would necessarily threaten national unity and the efficacy of its political institutions unless the tide of Hispanic immigrants is deliberately slowed. His views were met with accusations of nativism but should be understood in relation to earlier works that privileged the importance of cultural values as underpinning effective political institutions. Other critics challenged his premise, citing numerous examples of Hispanic assimilation, including rates of English literacy, the loss of Spanish literacy in successive generations, and the frequency of intermarriage.

Conclusion

If a single thread can be shown to run through Huntington’s scholarly pursuits, it is his observation

that informal social structures and values form the foundation for the success of legal and political institutions. He prioritized political legitimacy as a necessary and prerequisite condition for effective government. His commitment to democracy was second to, and entirely contingent on, the stability and credibility of existing political institutions. Increasingly, he came to insist that these institutions demanded the mediation of shared cultural values and credible political institutions capable of adapting to changing social conditions—an insight noted in his first book, *The Soldier and the State* (1957), and in his last, *Who Are We?* (2004). This thread unavoidably ignores many of his scholarly interests, characterized by their hard-nosed commitment to political realism and the utility of general theories for strategic planning and public policy. The questions raised and policies recommended over the course of his academic career invoked the ire of many in the academic community for their impact on U.S. strategic planning from the Vietnam War to the Global War on Terrorism. Huntington was twice rejected from the National Academy of Sciences for his early support of American intervention in Vietnam and has since suffered personal and professional rebukes for his “hawkish” attitudes toward East Asia and the Middle East. His own view, however, often stood in contrast to the interventionists who cited his “political realism,” and who often sought to steer U.S. foreign policy in directions Huntington himself opposed. While working for the State Department during the Vietnam War, he was critical of U.S. policy for its reliance on military solutions to complex political and religious problems. Similarly, after a spirited defense of his clash thesis, he opposed American intervention in Iraq in 2003 and publicly supported the antiwar presidential candidate Senator John Kerry in 2004. His commitment to the utility of grand ideas to explain geopolitical realities may have invited controversy, but this does not detract from the credit he deserves as the instigator of some of the most significant foreign policy debates over the past half century.

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See also Civil-Military Relations; Clausewitz, Carl von; Culture, Military; Global War on Terrorism; Mexico; National Security Act; 9/11 (2001); Political Science and International Relations; Politics, Military Participation in; Professionalism; Public Opinion on War and the Military; Religion and War

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HURRICANE KATRINA

See Natural Disaster, Military Response to



INDIA

In 1947, Pakistan and India as independent nations came into existence. After independence, India followed a sort of state socialism. From the 1990s, the globalization policy of the Narasimha Rao government and successor regimes has not been able to totally convert the state-directed mixed economy into a full-fledged market economy. India's population (1.2 billion) is next only to China's. India is industrializing rapidly; still, 70% of the population remains employed in the agricultural sector. In 2012, the projected growth rate was 7%. This entry describes the foreign policy of India and discusses India's military forces, alliances, and territorial disputes and wars with Pakistan.

Foreign Policy

Due to Jawaharlal Nehru's (India's first prime minister, 1947–1962) policy of “nonalignment,” India refused to align itself with any extraregional powers. However, modern research is pointing to the fact that Nehru, when required, was not above using the threat of force. One finds an admixture of liberal values and a realist outlook in Nehru's foreign policy. At times, he favored coercive rather than controlling strategies. His innate circumspection in the exercise of “raw” power led him toward an incremental approach in managing crises. The break in India's grand strategy occurred in 1971, when Nehru's daughter, Prime Minister Indira

Gandhi, signed the Treaty of Peace, Friendship, and Cooperation with the USSR. This resulted in the Third India-Pakistan War in late 1971 (see the section Conventional Wars). The Indira doctrine was enunciated in 1983. It clarified that India had a right to intervene in the internal affairs of the neighboring countries if disorder threatened to spill over from the confines of the affected country. India claimed that it would not tolerate any intervention by an outside power. If any external help was required for meeting any internal crisis, the affected state must look to India for aid. In 1987, Prime Minister Rajiv Gandhi (Indira's son) intervened in Sri Lanka because the ruling Congress Party could not overlook the public opinion in Tamil Nadu due to killing of the Tamils by the Sinhalese. Second, Sri Lanka's attempt to acquire the support of foreign countries for modernizing its armed forces and the possibility of the port of Trincomalee being made available to the United States accelerated India's decision to send the Indian Peace Keeping Force. In total, three infantry divisions and other combat arms elements fought in Sri Lanka against the LTTE (Liberation Tigers of Tamil Eelam). However, the succeeding V. P. Singh government withdrew the force. The collapse of the USSR and the rising power of China forced India to seek a rapprochement with the United States. The George W. Bush and Obama administrations and the two succeeding Congress governments under Prime Minister Manmohan Singh accelerated the emergence of a strategic alliance between the world's two largest democracies in 2009.

Armed Forces

The British introduced the regimental format, and the Indian and Pakistan armies retain it. The Indian army is a long-service volunteer force numbering about 1.1 million and represents the third largest in the world. In the India-Pakistan wars, the Indian army carried the main burden (refer to the section Conventional Wars). Its chief duty is to guard the 15,000-km land border. In Afro-Asia, the Indian Air Force (IAF) is next only to China's. Besides the Russian Sukhoi-30, the IAF at present is looking for fighter-bombers from West Europe and the United States. India is on the way to acquiring Dassault Rafale aircraft from France. For guarding the 7,600-km coastline, the Indian navy maintains one aircraft carrier and is in the process of acquiring *Admiral Gorshkov*, an aircraft carrier from Russia. Furthermore, New Delhi is planning to commission a nuclear submarine.

Conventional Wars

Pakistan's ambition to incorporate Kashmir started the First India-Pakistan War. On October 22, 1947, Pakistan sent troops to capture Kashmir. On October 27, 1947, India decided to intervene militarily in Kashmir. On December 31, 1948, during the cease-fire, the Indian army held two thirds of Kashmir.

In October 1950, the People's Liberation Army entered Tibet and threatened the 5,000-kilometer-long Indo-Tibetan border. Furthermore, China refused to recognize the McMahon Line (the border between India and China). During the late 1950s, China violated India's territory in Ladakh while building a highway through Aksai Chin. On October 19, 1962, China launched a limited offensive against India in Ladakh and in Arunachal Pradesh. After destroying one Indian army brigade, Beijing unilaterally declared a cease-fire on November 21.

There is a debate about the dates of the beginning of the Second India-Pakistan War. While some Indian analysts claim that the war began with the Rann of Kutch incursion (April 24, 1965) by Pakistan, other scholars argue that the war started with the launching of Operation Gibraltar (August 1965). This debate notwithstanding, on September 5–6, 1965, Pakistani dictator Field Marshal Ayub Khan launched a strike on India using military equipment provided by the United States. This Pakistani

attack initiated the general onset of hostilities. In response, India retaliated at Punjab. The greatest tank battle between India and Pakistan occurred at Khem Karan, where the Indian Centurions trounced the Pakistani Pattons. In the air, Indian Vampires proved superior to American Saber jets flown by Pakistani pilots. Nevertheless, it could not be denied at the tactical level that in many cases the handling of military assets by the Indian military officers fell far short of the required standard. For instance, the IAF lost more aircraft than the Pakistan Air Force. The Indian army berated the IAF for failing to provide timely close air support. And in the Western Command, several Indian infantry battalions ran away when faced with the superior firepower of Pakistani ground units. India's Ichogill Canal offensive was a total failure. However, India was able to hold its own by its sheer size and numerical superiority. Through Soviet mediation, the cease-fire came into existence on September 23, 1965.

In 1971, India took advantage of the rebellion in East Pakistan against West Pakistani domination to start the Third India-Pakistan War (for India's aggressive foreign policy under Indira Gandhi, see the section Foreign Policy). The IAF gained air superiority over East Pakistan, and the aircraft carrier of the Indian navy gained sea control in the Bay of Bengal. The Indian army marched to Dacca, and the 45,000-strong Pakistani army under General A. A. "Tiger" Niazi in East Pakistan surrendered. East Pakistan became an independent country known as Bangladesh.

Civil-Military Relations

The Indian military establishment remains subordinate to the elected politicians. After independence, the salaries and status of military officers were reduced vis-à-vis civilian bureaucrats and police officials. Political interference regarding promotions in the higher ranks of the army during 1960–1962, under Defence Minister Krishna Menon, resulted in civil-military trouble. From then onward, politicians took care never to micromanage the army. Also, civilian bureaucrats of the finance ministry control military expenditure. Under Nehru, 2% of the gross national product was devoted to the military establishment. In the 1980s, under Rajiv Gandhi, defense expenditure amounted to 4% of the gross national product. However, succeeding governments

reduced defense expenditures to 2.5% of the gross national product.

Counterinsurgency

India maintains about 300,000 soldiers in Kashmir, both to check Pakistani-sponsored insurgents as well as to deter the Pakistanis from crossing the border. In northeast India, another 30,000 soldiers are deployed against the Nagas. To balance the army, the home ministry controls the paramilitary forces, which number 1.2 million.

Nuclear Policy

In reaction to the 1971 defeat, Pakistan in 1972 decided to acquire nuclear weapons to balance India's conventional superiority. Aid from China and North Korea enabled Pakistan to manufacture nukes. The hardening of the U.S. stand on the Non-Proliferation Treaty forced India to declare itself a nuclear power. The nuclear parity encouraged Pakistan in May 1999 to launch a limited conventional strike with two brigades in Kargil. The Kargil war came to an end with mediation by the Clinton administration. To bolster its nuclear defense, India is negotiating with Russia to buy a mobile anti-ballistic missile system.

Kaushik Roy

See also Asymmetric Warfare; China, People's Republic of; Pakistan

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INDIAN WARS

From the founding of the Early Republic until the 1880s, the U.S. Army was involved in a series of conflicts with Native American tribes throughout the country. Armed conflict between Native Americans and White settlers in the present-day United States emerged as soon English settlers arrived on the continent in the late 1500s and continued until the last Indian tribes were subdued and forced onto reservations in the 1880s.

White expansion fueled most of the Indian Wars. The forced expulsion of most southeastern Indians to territories west of the Mississippi represented a crucial turning point in Indian-White relations. These actions took place under the Indian Removal Act of 1830s and resulted in the creation of an "Indian Territory" primarily in present-day Oklahoma. Until the Civil War, much of the Western Plains was deemed unsuitable for settlement, but this would change as a result of the Homestead Act of 1862, which provided free land to settlers willing to establish working farms; the discovery of gold and other precious minerals suitable for mining in places such as the Black Hills of South Dakota; and the completion of a transcontinental railroad in 1867, which sparked a flood of White westward migration. Native American resistance to this encroachment resulted in bloody conflicts with the U.S. Army as it sought to implement a policy that called for all Indians to live on reservations.

Pre-1865 Indian Wars

From the earliest period of European contact, interactions with Native Americans almost inevitably led to armed conflict, and Whites often forcibly dispossessed Indians from their lands. Technological advantages, most notably firearms, did give an advantage to English and other European colonialists in subduing Native American tribes that populated what became the 13 colonies of British North America. Diseases like smallpox also played a pivotal role in reducing Native American populations, in many cases even before the onset of permanent European settlement. Colonial Pennsylvania, founded by William Penn, stands as an exception to this pattern, initially relying on peaceful purchase of land from the tribes.

Initially, European and Native American conceptions of war differed markedly. European colonialists came from societies that waged wars marked by brutality, especially the religiously inspired conflicts between Roman Catholics and Protestants in the 1500s and 1600s. Native American tribes generally placed limits on the violence used in war and seldom sought to destroy their opponents. For Native Americans, participation in war often served as a rite of passage and an opportunity to display courage. Captives taken in war could be tortured and killed, but they were often spared and adopted into the tribe that captured them. Most Native American tribes had much more egalitarian forms of political organization that limited the power of chiefs and did not have European conceptions of private property.

Ironically, the initial colonial English settlements in Virginia and New England could not have survived without Native American assistance. Trading opportunities offered many tribes the opportunity to acquire European technology, most notably firearms and iron products. However, conflict arose from the almost insatiable quest of the English settlers for more land. In the case of Virginia, the Powhatan Confederacy under the leadership of Opechancanough sought to halt English settlement by launching two major wars in 1622 and 1644. In the first, the Tidewater War, Opechancanough succeeded in killing approximately 25% of the colonial population in the opening hours of the conflict. The Virginia colony survived this 10-year war in part because the colonists enlisted the aid of an Indian ally, the Potomack Tribe. In 1664, the demographic tide of English migration combined with the killing of Opechancanough to end any possibility of ultimate Native American victory.

Total war in New England was initiated by the Puritan colony of Massachusetts during the Pequot Indian War. To destroy the Pequots and seize their land, the Puritans and their Indian allies launched a surprise attack on the Mystic Fort Pequot settlement in 1637. To the dismay of their allies, the Puritans totally annihilated the tribe, killing men, women, and children in the assault on the village, and sold the few survivors into slavery in the Caribbean.

The even more destructive King Phillip's War (1675–1676), also known as Metacom's War, emerged from tensions regarding colonists' expansion westward and ongoing attempts to assimilate Native Americans into colonial society. Sparked by

the apparent murder of a Harvard-educated and Christianized Indian, the war pitted a coalition of Native American tribes against New England's White settlers in an effort to end the colonies' westward expansion and regain autonomy. The Indians attacked more than half of New England's towns and killed almost a 10th of the colonial population. Ultimately, the colonists won a hard-fought victory following a brutal war of attrition. The war confirmed British colonists' hold on eastern Massachusetts and dramatically reduced the Native American population in the territory. Perhaps more important, the war solidified colonists' perceptions of Native Americans as savages unfit for assimilation into colonial society.

Tensions over Indian conduct often divided colonial society. In 1676, Bacon's Rebellion pitted the Virginia colonial elite against colonists on the frontier. Led by Nathaniel Bacon, a force of back-country farmers, indentured servants, and some slaves marched to Jamestown to overthrow the colonial government, in part because of the refusal of Royal Governor George Berkeley to authorize an attack on all Indians. The rebels burned Jamestown to the ground and killed large numbers of Indians on the frontier, but the rebel forces ultimately dissipated following Bacon's death from disease, probably dysentery. A similar conflict emerged in 1763 in Pennsylvania when those on the frontier, the "Paxton Boys," began killing peaceful Indians under the protection of the Proprietary Government in retribution for attacks by other Indians. The Paxton Boys even marched on the colonial capital of Philadelphia in 1764 before a settlement was negotiated by Benjamin Franklin.

Indian tribes geographically distant from the coast had greater agency and more control of their destiny until the 19th century. The imperial struggle between England and France for dominance of the North permitted Native American tribes to form alliances with one another and competing European rivals. Between 1754 and 1763, French forces allied themselves with various northeastern tribes in the French and Indian War, part of the larger European Seven Years' War. Several Great Lakes tribes joined in Pontiac's Rebellion (1763–1765), seeking to expel the British, who had taken over land that had been settled earlier by the French. Native Americans took control of eight forts. About 450 British regulars and colonial troops died before the conflict ended.

This rebellion led the British to diffuse future Indian-colonial conflict by enforcing the Royal Proclamation of 1763, which limited settlement in the western lands acquired from the French. This effort, which aggravated British colonists' desires to push westward for new territory, formed a key contributing cause to the American Revolution.

During the American Revolution, many Native Americans remained loyal to the British Crown. In 1777, the British military commander in Detroit encouraged Indian allies to attack American settlements in Kentucky. In response, George Rogers Clark took a small force and captured several British forts in the Illinois territory in 1778, but they lacked sufficient forces to take Detroit. Clark's expedition did not eliminate the continued Indian attacks, but it played a role in ensuring that the fledgling United States would be granted this territory in the peace settlement that ended the Revolutionary War.

The Revolutionary War divided the Iroquois Confederacy; four tribes remained loyal to the Crown, while two sided with the United States. Joseph Brant, leader of the pro-British Iroquois forces, forged a military alliance with the Tories in the New York and Pennsylvania frontier regions and destroyed a number of American settlements in Wyoming Valley. To end this threat, in 1779, George Washington dispatched an expedition under General William Sullivan that managed to win a victory over the Iroquois and their Tory allies at the Battle of Newton. Sullivan did not eliminate the threat altogether, but further Iroquois attacks did not have strategic significance.

Timing played a significant role in neutralizing the threat to the fledgling United States posed by southeastern tribes. In May 1776, the Cherokee launched a major attack, which was suppressed by militia forces from the Carolinas and Georgia. Britain lacked the forces to offer direct military assistance for several years. When the British did successfully conquer most of Georgia and South Carolina in 1780, Indians' support for the British had diminished.

Although Britain granted the newly independent United States vast tracts of land that stretched to the Mississippi River, the British continued to maintain alliances with a number of Indian tribes in the Old Northwest (present-day Ohio, Indiana, Illinois, Wisconsin, and Michigan). In 1791, George Washington deployed a major expedition under General Arthur St. Clair to assert American

sovereignty in the Old Northwest Territory, but the effort ended in defeat. In 1794, at the Battle of Fallen Timbers, General Anthony Wayne decisively defeated the British-allied Delaware and Shawnee.

The Treaty of Greenville, which ended this conflict, encouraged a massive migration of American settlers to the Old Northwest. The Shawnee Chief Tecumseh sought to halt these gains by forging a Pan-Indian confederation in the Old Northwest. This alliance suffered a major blow when William Henry Harrison won a crucial victory against the confederation by attacking the village of Tippecanoe. The struggle with Tecumseh's confederacy ultimately became entangled with the War of 1812 and ended in 1813 with the death of Tecumseh, Native American defeat, and U.S. control of the Great Lakes region. A charismatic leader inspired by religious visions, Tecumseh's influence spread to other regions even after his death, and subsequent Creek resistance would in turn influence the Seminole cause of later years.

During the War of 1812, General Andrew Jackson dealt a powerful blow to the Creek Indians at the Battle of Horseshoe Bend in 1814. In 1818, Jackson invaded West Florida and crushed Seminole forces west of the Suwannee River. As president, Jackson played a central role in redefining American Indian policy. In 1830, a divided Congress passed the Indian Removal Act, authorizing the funds necessary for President Jackson to negotiate treaties of removal with all tribes living east of the Mississippi River. The Jacksonian-era removal policy sought to establish an Indian Country in territories west of the Mississippi River and undertook massive forced migration of southeastern Native American populations in what became known as the "Trail of Tears." These Native Americans experienced enormous suffering, disease, and loss of life in the process, particularly the Cherokee.

The most significant resistance to Indian removal took shape in the form of the Second Seminole War. In what proved to be a long, bloody conflict in the Florida swamps, the U.S. Army eventually developed new tactics to handle guerrilla warfare and inhospitable terrain. In the end, the U.S. Army and the federal government abandoned efforts to completely expel all Seminoles from Florida. A Third Seminole War (1855–1857) almost completely destroyed the remaining population in Florida, but even after this conflict, the federal government remained unable to expel all Seminoles to Indian Territory.

In the Southwest, during the 1830s and 1840s, army cavalry units along the Santa Fe Trail fought tribes such as the Comanche and Apache in a context complicated by increasing tensions with Mexico. After the annexation of Texas and the conclusion of the Mexican-American War, the army was faced with immense new swaths of territory to patrol, coinciding with the escalation of Indian resistance in most territories west of the Mississippi. Like the Sioux in the Plains region, in the Southwest, the Navajo and Apache put forth consistent resistance in the years leading up to the Civil War. In the Pacific Northwest, most Indian populations were decimated and placed on reservations in Washington by the U.S. Army following a series of wars in the 1850s.

Militia forces tended to deal with Native Americans more brutally than the U.S. Army. One of the worst massacres committed by militiamen occurred at Sand Creek in 1864 when a Cheyenne village was ruthlessly attacked by Colorado militiamen. Under the leadership of Colonel John Chivington, militia forces killed more than 200 Cheyenne in cold blood, primarily women and children. This incident sparked a major uprising among the Cheyenne and other Plains Indians.

Post-1865 Indian Wars

Conflict with Native Americans expanded dramatically after the Civil War due to a number of changes within the United States. Increasing White settlement west of the Mississippi challenged the prewar definition of that area as “Indian Country.” The postwar completion of a transcontinental railroad enabled major migration to those areas, a venture that before the war had been largely limited to traders, Mormons, and migrants on westward trails like the Oregon and Santa Fe. Indian policy shifted in response, with the ultimate goal of placing all Native Americans on reservations. Army campaigns in this era often centered on forcing Indians onto designated reservations or forcing their return to them. Some Indians fiercely resisted these attempts. For instance, Chief Joseph led the Nez Percé on an ultimately unsuccessful 1,500-mile trek through parts of Idaho, Wyoming, and Montana in an effort to reach Canada.

The 1862 Homestead Act had generated an explosion of migration west of the Mississippi. Even Indian Territory (present-day Oklahoma) was

opened to settlement in 1890. Massive numbers of settlers poured into the Great Plains, which had already experienced White encroachment during the gold rushes in the 1850s. The completion of the transcontinental railroad in 1869 furthered migration and tied this region to national and global markets. Global demand for bison pelts led to the virtual extinction of these animals in this era, depriving the Sioux and other Plains Indians of a vital resource.

In the West and Southwest, Generals George Armstrong Custer and Philip Sheridan utilized many of the same strategies as had Sherman and other Union leaders against the Cheyenne, Arapaho, and Comanche peoples. As with Sherman and the Sioux, winter campaigns in Texas and Oklahoma were waged to decimate friendly and unfriendly tribes alike. By aiming to eliminate the Indians’ access to vital resources during the winter, the army was able to systematically defeat, exterminate, or place tribes on reservations. The decimation of buffalo herds and the winter campaign of the 1874–1875 Red River War proved crucial in subduing the Cheyenne.

The Sioux and their allies fought tenaciously for their land. Led by Red Cloud, in 1866 the Sioux and their allies launched a series of attacks on isolated outposts on the Bozeman Trail leading to present-day Montana. The annihilation of Captain William Fetterman and his small 80-soldier unit—the so-called Fetterman Massacre—formed Red Cloud’s greatest victory, enraging General William T. Sherman, who subsequently advocated a harsh military campaign against the Sioux. In 1868, Sherman led a winter campaign against the Sioux, attacking them when they were most vulnerable. Red Cloud and his people experienced a brief period of triumph, and under the 1868 Treaty of Fort Laramie, U.S. Army forces abandoned the Bozeman Trail, and the Sioux were granted portions of Montana and the Black Hills in Dakota in perpetuity. This victory proved short-lived, however, as the discovery of gold in the Black Hills led to the outbreak of the Great Sioux War of 1876–1877. The Sioux and their Indian allies resisted U.S. Army efforts to place them on reservations and force them to abandon the Black Hills. The army responded by mounting an expedition to force these Native Americans onto reservations.

This effort culminated in the Battle of the Little Bighorn, one of the worst disasters for the U.S. Army in the post-1865 campaigns against the Indians. Most western campaigns of this era were skirmishes

involving small groups of Indian warriors and soldiers. The Battle of the Little Bighorn is remarkable for the size of the force assembled by Sitting Bull and Crazy Horse: more than 2,000 warriors. General George A. Custer, one of the most controversial generals of his era, attacked the Sioux and Cheyenne encamped near the Little Bighorn River, dividing his command into three units. Custer's cavalry companies were annihilated by warriors under the leadership of Crazy Horse. Custer's remaining units, commanded by Major Marcus Reno and Captain Frederic Benteen, suffered heavy casualties. This Indian success would be short-lived. Following another winter campaign, Sioux resistance was crushed as Sitting Bull fled into exile in Canada and Crazy Horse surrendered.

The final bastion of Indian resistance was in the Southwest. The more sedentary Navajo acquiesced to federal authority. The Apaches, however, resisted U.S. power until 1886, aided by guerrilla tactics, for which the army had no cohesive strategic preparation. Fighting in some of the most inhospitable terrain on the North American continent, the U.S. Army was forced to deploy thousands of troops to subdue the Apaches.

As the 1870s drew to a close, the Nez Percé and other Western Indian nations gradually fell to the annihilation strategy of the U.S. Army; further Army-Indian conflicts took place on a significantly smaller scale. Apache resistance finally died out as well, and with it the end of organized Native American opposition to U.S. rule.

The defeat of Native American forces led to the messianic Ghost Dance movement in a number of Plains Indian reservations. Fears of another uprising subsequently led the army to dispatch a force under Major General Nelson A. Miles to the Sioux Reservations in the Dakotas. At the highly controversial Battle of Wounded Knee, army personnel were accused of massacring scores of Indians, including women and children. The Battle of Wounded Knee marked the last significant army engagement with Native Americans. Although army units would remain posted in the Far West into the early 20th century, their role policing the frontier would end.

Historical Lessons

Robert M. Utley represents perhaps the most authoritative scholar of Native American history, with numerous publications on the subject. Utley

points out that while the army usually experienced success in operations against Indians, the growth of the White population played a key role in undermining Native American power and influence. Economic and technological factors, such as the westward expansion of trade, mining, railroads, and agriculture, all played a role in aiding army operations against Native American tribes. As tribes lost land and agency, resistance became more difficult, and the establishment of a system of Indian reservations greatly diminished the autonomy of the once proud tribes.

During the 19th century, West Point offered no formal coursework addressing how to wage war against Native Americans. While constabulatory duties against Native Americans remained the principal mission of the U.S. Army until the 1890s, military education focused on preparing for a major land war against a European power. Army attitudes toward Native Americans were complex, with many wholeheartedly embracing ruthless conquest. At the same time, there remained a significant number of officers who, while following orders, expressed dismay at official policies they perceived to be unjust, especially with regard to the Trail of Tears. (For more information regarding the complexity of army attitudes toward Native Americans, see Leonard, 1974.)

Scholars also focus on an army Indian-fighting doctrine—or the lack thereof. The United States developed no formal doctrine for waging war against indigenous peoples, and yet it demonstrated itself able to achieve ultimate victory with a peacetime army that could only station a few thousand troops on the vast frontier. In the *American Way of War* (1973), Russell Weigley argues that the army's ability to wage winter campaigns played a crucial role in subduing tribes. He also highlights the completion of the transcontinental railroad and the virtual extermination of the bison as key factors enabling the army to force tribes onto reservations. In his influential 1983 article "Insurrectos: The U.S. Army Experience With Insurgency," John M. Gates connects the war against Native Americans to the war against Filipino nationals during the Philippine Insurrection of the early 20th century. Andrew J. Britle also emphasizes the army's long experience engaging in irregular warfare, often successfully, without a formal doctrine in *U.S. Army Counterinsurgency and Contingency Operations Doctrine, 1860–1941* (2001).

Although negative portrayals of Native Americans form one of the oldest genres of American history, there also exists a powerful trend emphasizing the injustices against Indians. For a classic account, see Helen Hunt Jackson's *A Century of Dishonor* (1881) and more recent works by Dee Brown (*Bury My Heart at Wounded Knee*, 1970) and Francis Jennings (*The Invasion of America: Colonialism, and the Cant of Conquest*, 1975). Efforts to highlight Indian agency represent a major theme of scholarship since the 1990s. For instance, throughout the colonial era and into the early 19th century, Native Americans could seek to ally with European powers. Richard White's work, most notably *The Middle Ground: Indians, Empires and the Republics in the Great Lakes Region, 1650–1815* (1991), has focused on this subject.

Conclusion

U.S. policies toward Native Americans shifted throughout the 19th century as the nation expanded. East of the Mississippi, the power and capabilities of many tribes were diminished either before the Revolutionary War or shortly thereafter. As a result, these tribes were unable to compete against the U.S. Army as fiercely as the nations in the west. The delay in the expansion of White settlement west of the Mississippi afforded Native Americans there more time to combat the U.S. presence, though their agency declined markedly after the end of the Civil War. The army's development of total-war strategies during the Civil War, official U.S. encouragement of White westward settlement, and technological and industrial progress after 1865 would prove to be a deadly combination for Native American nations.

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See also American Revolution; Army, U.S.; Civil War, American; Colonial Wars (1607–1774); Guerrilla Warfare; Native Americans; Philippines Insurrection

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INDIRECT FIRE

Indirect fire, simply described, refers to a method of weapon employment that does not rely on a direct visual observation of the target to engage it. Primarily contrasted with direct fire, which requires a visual line-of-sight to the target, indirect fire often engages targets obstructed by significant terrain features and foliage or targets beyond the horizon. As such, indirect fire relies on both a shooter and an observer/sensor. The observer identifies the target, and the shooter fires the weapon system in response. A technical system largely developed during the era of World War I, when communications technologies caught up with weapons capability, indirect fires, primarily from land-based artillery systems such as howitzers, mortars, and rocket launchers, are one of the means of attacking enemy forces in both offensive and defensive combat environments. This entry describes the indirect fire process and the use of indirect fire today, with a focus on its use in counterinsurgency operations.

Traditionally, since World War I, indirect fire systems have focused on improvements in the so-called five requirements for accurate predicted fire. These requirements—(1) accurate target location, (2) accurate firing unit location, (3) accurate ammunition and weapon information, (4) accurate meteorological information, and (5) accurate computational procedures—determine the precision with which targets are effectively engaged in geographical space (see U.S. Army Field Manual 6-40). In short, the more accurately these requirements are calculated prior to firing, the more precise and effective the fire will be on the target. The calculation of these requirements has traditionally been the purview of another aspect of the indirect fire system, the fire direction center. This center uses computations such as physics-based algorithms, combined with atmospheric and geographic data, to calculate a trajectory of the projectile from weapon to target. In cannon artillery, this trajectory takes into account interior, exterior, and terminal ballistics to accurately predict

before firing where the projectile will land. In summary, the indirect fire process typically consists of three parts: (1) the observer/sensor (the eyes), (2) the fire direction center or other computation means (the brain), and (3) the weapon delivery system (the brawn). When applied collectively using the five requirements for accurate predicted fire, the indirect fire process effectively engages enemy targets.

Along with precision, responsiveness, or the speed with which weapons systems engage enemy targets, has been a key to combat effectiveness. In contrast to the science and mathematics applications and computations involved in the calculation of ballistic trajectories, the experienced observer often achieves responsiveness by artfully estimating the time necessary to process the request for fire in order to deliver its effects at the right place at the right time, also known as time on target.

Technological developments in indirect fire have tended to focus on increasing its precision, responsiveness, range, and/or lethality. In the post-Cold War era, developments in artillery systems have included north-seeking gyros, Global Positioning System satellite receivers, and inertial navigation systems that when combined with automatic (on-board) fire control systems have provided individual artillery pieces with the capability to self-locate and self-calculate individual firing trajectories. Examples of these capabilities are the M109A6 Paladin Howitzer and M270 Multiple Launch Rocket System in the current U.S. Army inventory. These technologies have increased precision/accuracy and responsiveness.

In modern military organizations, officers who often are embedded within the staff of direct combat—often infantry or armor—formations are routinely required to plan indirect fires in support of operations. This staff, usually referred to as the fire support staff, is key to optimizing the combat lethality of its parent formations by accurately integrating all the possible effects achieved by the available indirect fire systems. This process has been typically referred to as “fire planning” and is conducted from the platoon through the highest levels of military organizations. In the implantation of indirect fires in combat, this staff also actively manages the indirect fire systems available and supervises their employment and synchronization.

Indirect fire systems have sometimes found it difficult to support operations in the counterinsurgency

environment. Most delivery systems were designed to fight on the conventional battlefield and focus their tactics and munitions on producing massed effects on an area target. Munitions such as dual-purpose improved conventional munitions and cluster bombs include scatterable submunitions that cover wide areas and are highly suitable to conventional battle, proving their effectiveness in Operation Desert Storm and the initial invasion stages of Operation Iraqi Freedom I. Those techniques and munitions do not transition well to counterinsurgency warfare due to the nature of area effects and the resulting collateral damage. Indirect fire management at the highest levels is now involved in elaborate planning and supervision structures designed to limit damage to a precise target location to prevent collateral damage to cultural artifacts or innocent persons. Indirect fire technologies have been leveraged and developed to support a precision strike capability. Formerly primarily the domain of air-delivered platforms, precision-guided munitions (often based on Global Positioning System or laser guidance) are regularly employed in the counterinsurgency effort in Afghanistan and, earlier, in Iraq from ground-based delivery platforms such as traditional cannon, rocket, and missile systems. These ground-based systems are more readily available and provide all-weather responsiveness, increasing the coverage area and flexibility for the use of indirect fires. These new munitions have significantly altered the traditional means of computing a ballistic trajectory and now highlight the increased importance of accurate target location for precision effects.

In recent U.S. Army combat operations, indirect fire has been attempted through modifications of its traditional missions. First, indirect fire systems have continued to perform “counterfire.” Counterfire is defined as a rapid indirect fire response to incoming enemy indirect fires. The U.S. Army is aided in this application through fire-finder radar technologies that have the capability to accurately locate the point of origin of enemy indirect fire systems. This acquisition capability allows for a rapid and accurate indirect response to enemy mortar or rocket attacks on friendly installations or positions. Counterfire has been used to limited effect in the conflicts in Afghanistan and Iraq, with some notable exceptions. These exceptions have involved the use of redundant acquisition technologies and often include real-time video with range-finding

capabilities. Insurgent forces have modified traditional tactics to evade U.S. counterfire capabilities. Specifically, they have used lightweight mortars in off-the-cuff or hip firing techniques that sacrifice accuracy for rapid displacement. Second, indirect fire has been applied in nonlethal variants such as illumination rounds to act as deterrents to insurgent activity. Although these appeared to have had some effect early in the Iraq theater, nonlethal application of indirect fires has significantly decreased due to its growing ineffectiveness and concerns with collateral damage.

Coinciding with the significant challenges posed to conventional forces that emerged from the insurgencies in Iraq and Afghanistan, those responsible for employing indirect fires have correspondingly shifted their principal focus away from massed effects to increased capability in coverage, responsiveness, and pinpoint accuracy. In the Cold War environment, indirect fire systems were primarily concerned with the employment of massed effects throughout the depth of the battlefield, from tactical close support through operational interdiction to strategic bombing. In the post-Cold War environment, specifically in the Iraq and Afghanistan theaters of operations, indirect fire systems are being employed almost exclusively in close support against very precisely located targets on call from friendly troops already in contact with the enemy. These indirect fires, as with direct fire, are subject to the rules of engagement for each theater and require the positive identification of targets and specification of their hostile actions or intent.

Indirect fire has been employed as a system from World War I to Global War on Terrorism operations. It has proven its effectiveness in conventional conflicts and is continuing to prove valuable in the counterinsurgency environment. The current path of indirect systems projects their use well into the foreseeable future.

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See also Artillery; Aviation, Army

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INFANTRY

The infantry branch of the military consists of infantrymen, or foot soldiers, who carry one of two types of weapons—projectile or shock. The infantry constitutes the main land combat force of most armies. In that capacity, the infantry provides the core fighting strength of a country's army. Furthermore, the infantry plays a vital role in peacetime as well as during times of armed conflict. As might be expected, as the nature of warfare has changed in the late 20th and early 21st centuries, so has the role of the infantry, which faces new challenges in countries like Iraq and Afghanistan, where religious fundamentalism and modernity have clashed and where soldiers more often than not are tasked with implementing counterinsurgency operations against an elusive insurgent enemy. While soldiers find themselves confronting nonstate forces, they have new tools and technologies to use; whether they are engaged in conflict resolution or peacekeeping missions, infantry forces can rely on other military branches, such as the air force, to provide support, particularly when they are engaged in AirLand operations. Despite all the advances in technology and weapons systems in the 21st century, nations still need infantries to fight battles, conquer land, and win wars as well as the peace. This entry discusses the history and the role of the infantry in operations around the world.

History

The use of infantry units is a reflection of organized warfare, which has existed since the dawn of civilization, when men have worked together to achieve a common goal, which, in some cases, was acquiring land controlled by another group. Organized warfare has, however, evolved over time and has been influenced by the development of more sophisticated

operations, tactics, and weapons, all of which were affected by industrialization. Changes in weaponry facilitated the development of battlefield tactics at the very time when infantries became the largest and, some might argue, most important components of armies. During the First World War, for example, the British army at its peak numbered approximately 4,000,000 men. Infantries were more organized, trained, and cohesive. Prior to a battle, such as the Battle of the Somme (July–November 1916), 1 million or more artillery shells could be fired, and then thousands of infantry soldiers would emerge from the trenches and attack across “no-man’s-land.” Casualty figures frequently reached several hundred thousand. As infantry weapons became more lethal and the size of armies committed to battle increased, the impacts of conflicts grew. Casualty figures from the American Civil War would have been unimaginable just decades earlier, but they were nothing compared with those of the First World War.

During World War I, the war that marked the birth of modern war, machine guns, aircraft, and artillery caused a change in the way the infantry engaged in battle. As armies struggled to adapt to new weapons, trench warfare dominated the battlefield, and life for the infantrymen in the trenches brought mud, lice, rats, discomfort. The introduction of poison gas to the battlefield added a whole new level of horror for the foot soldiers. Fledgling aircraft roamed the skies as pilots gathered intelligence about the enemy and occasionally engaged in dogfights with enemy pilots. Because of improvements in artillery pieces and the introduction of smokeless powder, artillery could be situated behind the front lines. Artillery barrages followed by infantry charges into no-man’s-land resulted in massive casualties and the loss of a generation of men.

As a result of technological advances during the interwar period, infantrymen were more mobile during World War II. Because of increased mobility, small-unit tactics became increasingly significant, and armies successfully adopted and adapted them. In addition, improvements in tanks, aircraft, artillery, and weapons dictated the tactics employed by infantrymen in battle, whether they were struggling ashore, engaged in street fighting, or fighting in the jungles of the Pacific. Before the war ended, all of the major combatants had developed combined-arms tactics, which enabled their infantrymen to work in concert with tank forces and air forces to achieve

success on the battlefield. Despite increased mobility, however, infantrymen—truly foot soldiers—still walked great distances.

Because of technological innovations, like infantry fighting vehicles, the nature of warfare has continued to evolve since World War II, and the infantry has become increasingly wedded to combined-arms operations. Improved weapons and the introduction of other advanced technologies, such as the stealth bomber and the drone, have allowed the armies of major countries to reduce the number of infantrymen in uniform while at the same time requiring them to engage in new types of activities. The infantry is frequently called on to participate in peacekeeping operations, which is not the traditional role of foot soldiers. In addition, as armies combat non-traditional enemies, such as al Qaeda, the demand for the deployment of light infantry has grown. In the 21st century, new demands, which have required the development of new technologies and new tactics, have been placed on the infantry.

Post–Cold War Conflict

Several conflicts that occurred during the last decade of the Cold War set the tone for post–Cold War conflicts. In each, infantries played significant roles. In the first, which concerned the contested ownership of the Falkland Islands, the British defeat of a much larger Argentine force emphasized the concept of limited war and the efficiency of small, highly professional armies, all-arms coordination, and technological advantages. American forces challenged the legacy of Vietnam with Operation Urgent Fury, the rescue of American medical students on the island nation of Grenada. The success on Grenada combined with the end of the Cold War and the introduction of new technologies to redefine the American way of war, which would be demonstrated in Kuwait in 1990 (see below). During the last decade of the Cold War, Soviet troops faced challenges on the ground in Afghanistan, a limited conflict that persists, although with new participants. The Soviet–Afghan War, an asymmetrical conflict that fostered clashes between different ethnic and religious groups, however, set the tone for the more recent post–Cold War conflicts in the region. Not all of the post–Cold War clashes have been untraditional ones, although the tactics employed have been somewhat

revolutionary. Following the Iraqi invasion of Kuwait in August 1990, for example, U.S. and coalition forces were able to test a new tactic—AirLand Battle—for the first time. AirLand Battle proposed the integration of air, ground, sea, space, and cyberspace strikes on a battlefield that extended from the ground to the edge of the atmosphere. The air campaign commenced on January 17, 1991. The ground assault, which began on February 24, ended with a cease-fire 4 days later. The end of the Persian Gulf War, some speculated, signaled the end of infantry warfare; however, challenges to that speculation have come from several different arenas.

The post-Cold War era brought new challenges for infantry forces as they engaged in a new range of activities that included peacemaking, peacekeeping, and dealing with threats from terrorist organizations such as al Qaeda—in other words, from nontraditional enemies. Traditionally, UN forces have participated in peacekeeping operations since 1948, when the first troops were deployed to Palestine, although the number of missions was quite limited by the Cold War. The end of the Cold War brought a drastic increase in UN peacekeeping missions. In 1994 alone, the UN deployed 85,000 personnel from 70 different nations on 17 operations. Under Secretary General Boutros Boutros-Ghali, the UN peacekeeping mission expanded to include peacemaking, which involved intervention, when deemed necessary, in internal ethnic and civil wars to restore peace. The result was that infantry troops were called on to conduct operations the scope of which was beyond their training and expertise.

In September 1992, because famine combined with war had presented a humanitarian nightmare, the UN authorized action, and a small UN force arrived in Somalia. This UN operation provided a test for peacemaking advocates. The UN forces received a difficult task. They had to distribute food, while at the same time they had to engage in policing activities. By December, however, because the UN forces failed to secure delivery routes that would allow them to deliver food to the starving masses, the United Nations requested and received help from the United States. President George H. W. Bush deployed 25,000 combat troops to lead the security force in Somalia. The U.S. Army took part in Operation Restore Hope (December 1992 to May 1993). Although initially successful, concern that

anarchy would return once the peacekeeping mission ended resulted in a shift in focus to peacemaking, the disarmament of Somali militias, and an end to the war. The failure of Operation Restore Hope, which highlighted the difficulties in peacemaking, set the standard for future UN actions and illustrated the new, more difficult as well as dangerous role of infantrymen as humanitarian aid workers, not fighters.

The collapse of Yugoslavia and civil war in Bosnia also witnessed intervention by UN and North Atlantic Treaty Organization (NATO) forces. Unlike the situation in Somalia, however, UN forces strove to remain neutral. Ultimately, when a peace agreement, the Dayton Peace Accords, was reached, it became the responsibility of UN forces to monitor the agreement, which marked a return to traditional peacekeeping. Other successful UN peacekeeping missions began in Sierra Leone in 1999 and in Kosovo in 2000.

The al Qaeda attacks on September 11, 2001, thrust the Global War on Terrorism onto an international stage, brought the concept of suicide bombings to a new level, and led to the commencement of military operations by coalition forces first in Afghanistan (Operation Enduring Freedom, October 2001) and then in Iraq (Operation Iraqi Freedom, March 2003) and a shift from limited to integrated war. Success resulted from the integration of brute strength, technological superiority, and cooperation between disparate groups—special forces, army, navy, air force, and marines. The defeat of the Taliban and the fall of Saddam Hussein did not, however, return peace and stability to Afghanistan or Iraq, and the infantry's mission in those countries changed to peacekeeping, peacemaking, and countering insurgency.

In addition, because many of the operations conducted in Afghanistan and Iraq, particularly in the early stages of military engagement, involved coalition forces, the makeup of units engaged in a particular action generally consisted of varied combat groups from different armies. Their combined armed tactics reflected the makeup of the participating forces as well as the assigned mission. For example, NATO forces participated in Operation Snake Pit, or the Battle of Musa Qala, in Afghanistan in 2006–2007. The NATO Order of Battle for this operation included 1st Battalion, 508th Parachute Regiment (U.S. 82nd Airborne Division), UK 52nd



U.S. soldiers from 202nd Military Police Company, 504th Military Police Battalion, attached to 1st Brigade Combat Team, Task Force Raider, 4th Infantry Division, walk past a group of Afghan children while conducting a dismounted foot patrol in preparation for a ribbon-cutting ceremony in Kandahar province, Afghanistan, June 8, 2011. The ceremony signified the official opening of a new soccer field in Subdistrict 1 of Kandahar City. The new field was one of many projects headed by Task Force Raider and their Afghan National Security Forces partners in their joint-reconstruction efforts to improve quality of life, safety, and security for residents of Kandahar City.

Source: U.S. Army photo by Sergeant Breanne Pye (released).

Brigade, 40th Marine Commando, 2nd Brigade, 205th Corps (Afghan National Army), 1st, 2nd, and 3rd Infantry Kandak, and other groups. The Musa Qala district of Afghanistan is an opium-producing region and the birthplace of the Taliban. Elements of the NATO force, including the British 16th Air Assault Brigade, fought the Taliban for control of the area in the summer of 2006. By October, the Taliban had suffered defeat, and the British troops withdrew. Within 2 months, the local town council, or *shura*, that was responsible for security proved unequal to the task, and the Taliban infiltrated the region again. By February 2007, the Taliban openly assumed control of Musa Qala and summarily executed two

men accused of being NATO spies. Throughout the rest of the year, NATO ground and air forces waged combined operations against the Taliban in the area around Musa Qala. At times the fighting was heavy, and Afghan and NATO troops came under attack from Taliban fighters using machine guns and rocket-propelled grenades. It wasn't until mid-December 2007 that coalition forces regained complete control of Musa Qala. The postbattle assessment indicated several positives regarding the situation in Afghanistan. Although they relied on NATO advisors and NATO air support, the Afghan National Army inflicted heavy damage to the Taliban during the summer and fall of 2007.

In addition, they conducted a successful cordon-and-search operation.

Similar operations have occurred in Iraq beginning in the spring of 2003, when Combined Joint Special Operations Task Force–North (Task Force Viking) under the command of Colonel Charles Cleveland engaged in operations in northern Iraq. Over the course of 2 months, Task Force Viking initiated several engagements with the Iraqi army as it steadily approached through the area near Kirkuk. In late March, the Task Force launched an attack in the Sargat Valley and advanced from Gulp to Sargat and finally to Darmar. Initially, professional military forces engaged in action against each other, and Saddam Hussein's regime was ousted from power. Then in Iraq, as in Afghanistan, the nature of the situation changed as supporters of the old regime tried to regain control. In both countries, U.S. and other coalition forces are conducting peacekeeping and nation-building missions. Much of the work on the ground with the Iraqis and Afghanis is conducted by “boots on the ground”—the infantrymen. Infantry units have helped protect polling places during regional and national elections. They have provided security as both nations rebuild schools, hospitals, and other infrastructure. In addition to training Afghani and Iraqi military and police forces, the soldiers have tried to help stabilize the governments in the two countries, and they work toward controlling their own futures.

The introduction of nonstate actors has made the infantry's task much more difficult. The infantry's role, in many respects, has become much more complicated. Modern warfare has changed with time, but one thing remains constant. The soldiers on the ground—the infantry—are the ones who win or lose battles. Aircraft and tanks cannot take and hold land. That is a job for the infantry.

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See also Army, U.S.; Iraq War (2003); Tactics, Ground Forces; Training, Army Enlisted

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INSURGENCY

See Counterinsurgency; Guerrilla Warfare

INTELLIGENCE, GEOSPATIAL

Geospatial intelligence (GEOINT) is a form of intelligence gathering that includes all aspects of imagery and the analysis of that imagery to inform policy and action. Sometimes called “the eyes of a nation,” its definition is codified in U.S. Code 10 § 467 as the “exploration and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the earth. Geospatial intelligence consists of imagery, imagery intelligence, and geospatial information.” GEOINT is grounded firmly in observation of the earth's features and analysis of human activity based on those geographic locations at specific times.

There are three components of GEOINT: (1) imagery (of either a natural or manmade feature), (2) imagery intelligence (the information obtained through analysis of the imagery), and (3) geospatial information (identifying information of a natural or man-made feature). More crudely put, GEOINT is exploiting and analyzing information provided by images and data that describe physical features and activities that can be geographically referenced.

GEOINT is best conceptualized as a complement to other intelligence-gathering disciplines, rather

than as a wholly separate system of collecting intelligence. In relation to the other “INTs,” GEOINT relies on geospatial information and the knowledge gleaned from a combination of sources, including imagery intelligence, signals intelligence, and human intelligence. This knowledge is required to understand not just the *what* of human or natural activities but also the *why*. These other intelligence disciplines provide the context for what is observed and together constitute GEOINT.

Military Applications of Geospatial Intelligence

GEOINT is utilized by militaries to map terrain, follow enemy troop formations, gather intelligence on military staging, and generally inform policymakers of the activities of both friends and foes that can influence the formation and execution of foreign policy.

Since 1989, GEOINT has been used to uncover evidence of ethnic cleansing in Kosovo in the late 1990s, to support the military and government response to Hurricane Katrina in 2005, in support of cities hosting the Olympics, and to support humanitarian efforts after the 2010 earthquake in Haiti and the 2011 earthquake off the coast of Japan. These events highlight the dual necessities of GEOINT: both temporal and physical location. The evidence of atrocities in Kosovo came from comparing the same geographic locations over time, which revealed the presence of new mass graves. Without the temporal component in the analysis, the geographic imagery would have revealed only that gravesites of great size existed in these locations but not that they were newly created. Geographic images of postearthquake cities reveal damage to manmade objects, but it is only when coupled with the temporal placement of these images that changes to the actual geography can be understood, as was seen in Japan when the physical location of the country was shifted.

In nonhumanitarian military deployments, GEOINT is crucial for understanding the topography and geography of an environment. When, in the aftermath of September 11, 2001, U.S. forces moved into Afghanistan in the search for Osama bin Laden, GEOINT was critical in locating Taliban and al Qaeda encampments and forces, as well as in understanding the complex cave systems that were suspected of sheltering him.

Geospatial Intelligence in the United States

In the United States, the National Geospatial-Intelligence Agency is the government agency primarily responsible for compiling and disseminating GEOINT to other intelligence agencies and to policymakers. However, GEOINT is also utilized and compiled by various military units that are specifically tasked with producing this intelligence, including the Advanced Geospatial Intelligence Node of the United States Army Space and Missile Defense Command and the Marine Corps Production and Analysis Companies placed within Intelligence Battalions and Topographic Platoons.

There is also significant overlap in GEOINT between the National Geospatial-Intelligence Agency and the other members of the Intelligence Community—in particular, the National Reconnaissance Office, which manages the U.S. fleet of spy satellites. Each discipline of intelligence gathering relates to the others, forming an interplay that is necessary for understanding the complete picture. For GEOINT, this is seen across the Intelligence Community in the Geographic Information System: All members of the Intelligence Community contribute to this by geo-tagging their content, adding geographic context to all gathered intelligence. The result is that intelligence gathered from a tapped phone line is tagged by the location of the conversation and the location of the targets mentioned in the conversation. GEOINT is adept at providing the where and sometimes the how of a situation: where a nuclear missile might be located, for example, and when it was put there. Analysts can discern intention, however, by combining GEOINT with other intelligence collected by an asset on the ground or read by an intercepted e-mail.

The Evolution of Geospatial Intelligence and the War on Terror

Advances in GEOINT are tied to advances in geospatial technology. From the origins of photography and maps, reliant on in-person observations, cartography, and scouting, GEOINT has evolved to a highly advanced system of satellites and surveillance. As technology continues to develop into more sophisticated systems, GEOINT will similarly evolve, providing a clearer and more accurate picture. These technologies include myriad forms of earth mapping, from aeronautical images and data

to radio detecting and ranging, Global Positioning System usage, advanced cartography, digital recreations of physical masses, and photogrammetry. Computer imagery in particular allows for the ability to see details missed by the naked eye or by a satellite in orbit.

These technological improvements remove GEOINT from its human producers and analysts; it is no longer an issue of a man on horseback scouting foreign troop formations but of recalibrating satellites and redirecting them for closer surveillance of a target that is thousands of miles away—but this surveillance may be more revealing than observation by a person on the ground. That is not to say, however, that improving technology renders human participation in GEOINT irrelevant; the best images of Soviet missiles in Cuba are meaningless without the analysis to understand and inform the meaning and the implications of such images.

GEOINT now comprises a field of technology that utilizes the Global Positioning System, cartography, surveying, the Geographic Information System, photogrammetry, radio frequency identification tags, cellular devices, personal digital assistants, and video surveillance. All of these devices and systems assist in defining the location or features of a particular target, natural or constructed, within a specific timeframe.

There are two particular issues involved in the use of GEOINT moving forward. The first is the continued suitability of the established definition of geospatial technology. The second is international and domestic resistance to the perceived violations of privacy.

The development of newer and better technology to create intelligence from geospatial information shows the limits of the definition listed in the U.S. Code. As state capabilities for producing GEOINT increase, there is a debate over how accurate the current definition continues to be. A new definition has been proposed that would reclassify GEOINT more broadly in an effort to better capture its many facets. This new definition would identify GEOINT as a field of knowledge and process based on information that is placed within a context of both space and time that provides descriptions, explanations, or predictions of human activities that influence policy action. The process of GEOINT would include the ways in which information is collected, manipulated, and understood on a geospatial basis and then shared with decision makers. The nature of GEOINT has changed so much that it has left its

legal definition far behind; the field of GEOINT has far surpassed that narrow definition.

However, with the development and improvement of the very technologies that make a new definition necessary come increasing concerns about privacy and government infringement on the liberties of its citizens and of foreign governments and their citizens. Geospatial information and intelligence have many benefits, including the decreased risks to military and civilian personnel that come with being able to observe from afar; similarly, the use of drones to target specific persons or facilities means that “boots on the ground” or manned planes in the air are not required to conduct dangerous missions. The controversy surrounding these methods and the implications for civil liberties and rules of engagement will continue to be present in the conversation about GEOINT.

GEOINT is one more tool in the intelligence world to assist in policy making. As with its fellows in the “INT” world, GEOINT couples observable fact with analysis to understand what is happening in the present moment, what has happened, and what may happen in the future, all to better inform decision makers. The world of GEOINT is ever expanding, and such expansion requires engagement with the moral and legal questions of its methods, particularly in the Global War on Terrorism.

Drone warfare and its expanded use in the War on Terrorism represent a perfect example of the necessity for greater clarity with regard to GEOINT purposes and processes. Unmanned aerial vehicles (UAVs) are capable of surveilling targets and locations without putting troops in harm’s way. These UAVs, however, are capable of more than simply taking photographs and mapping territory; they are now capable of relaying information immediately. More important, UAVs can now be used to fire on those targets. Instead of merely serving as a tool for intelligence gathering, UAVs and drones can be used to carry out policies without placing humans in the air.

These aircraft thus show the immediate application of GEOINT. A UAV flying over a hostile area may relay intelligence specifying that at that moment a specific target is in sight, thus placing it in spatial and temporal context. Rather than waiting for the UAV to return to its base and sending out a team to address the threat, the UAV can be directed to eliminate the target at once, because of the intelligence that was collected via this UAV.

The potential for technology such as this is endless but dangerous, making it easier both to carry out violent acts and to accurately and immediately collect, analyze, and disseminate valuable intelligence.

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See also Global Positioning System; Natural Disaster, Military Response to; Targeting Systems; Unmanned Aerial Vehicles

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INTELLIGENCE, HUMAN

Human intelligence (HUMINT) represents the oldest and most elemental form of intelligence activity. Although technological advances in technical intelligence services such as signals and imagery have lowered the profile of HUMINT activities, in recent years the focus on terrorism and nonstate actors has again emphasized the importance of HUMINT. Specifically, military branches have made HUMINT a priority, as many criminal and/or terrorist groups have reduced their visibility and use of communications technologies open to signal intercepts.

Fundamentally, HUMINT consists of gathering information through infiltration,

interviews—collecting data from people and institutions—and extracting any information of tactical and/or strategic value. This entry discusses the types of HUMINT activities, the training and skills required for HUMINT operators, the steps in handling information, and recent operations.

Kinds of Activities

Commonly, HUMINT services are related to espionage, which consists of infiltrating operatives or making contact with individuals in foreign countries or within organizations with the intention of extracting information. HUMINT operations also encompass efforts of frontline troops to uncover the enemy’s activities—for instance, gun emplacements, troop movements, and the placement of roads and other infrastructure. Social and diplomatic activities are also fundamental aspects of HUMINT, as are prisoners’ interrogations and debriefings of friendly troops.

Human Intelligence: Historical Background

HUMINT activities stretch all the way back to the ancient world. The Chinese, Indians, Mediterranean societies, and Native Americans used basic human observation to forestall enemy actions and help friendly forces gain military, political, and economic advantage. Skills such as common sense, knowledge of languages, and psychological understanding of the enemy were vital to infiltration activities and successful covert operations. In the 20th century, the British, Germans, Soviets, and Americans extensively used HUMINT activities to obtain critical information during both World War II and the early years of the Cold War era. New technologies developed in the 1950s, however, reduced the influence of HUMINT inside intelligence services, as the ability to collect data through aerial and satellite reconnaissance led many to claim that HUMINT activities were obsolete. During the Vietnam War, HUMINT again gained ground in the intelligence services, with a particular focus on prisoner interrogation to determine enemy activities and data collection in front of and behind enemy lines. These activities were widely undertaken by long-range patrol scout teams made up of Special Forces or Green Beret units. However, in subsequent years, HUMINT was again superseded by technology-driven intelligence activities like electronic intelligence and signals intelligence.

From Collapse to Victory in the Use of HUMINT

U.S. intelligence services were broadly criticized for their poor performance with regard to the attacks of September 11, 2001. Many critics pointed out that U.S. intelligence services, including those of the military, focused too narrowly on indirect and technological intelligence-gathering services at the expense of human methods that had demonstrated their effectiveness in the past. Likewise, incomplete information about Iraq's possession of weapons of mass destruction and Saddam Hussein's ties with al Qaeda suggested American intelligence services' inadequate use of HUMINT. These mistakes generated the momentum to revive HUMINT activities, which have subsequently proven very useful in the Global War on Terrorism.

HUMINT Process

According to the U.S. Army Field Manual *Human Intelligence Collector Operations*, HUMINT operators should embrace a variety of intelligence-gathering methods. HUMINT agents and agencies must, however, act in accordance with applicable law and policy, including the Geneva Conventions and the U.S. Constitution. Additionally, the intelligence community generally embraces five common steps in the handling of information:

1. *Planning and preparation*: establishing the conditions to collect data, taking into account operational plans and issues relating to the type of source and location—for example, geographic conditions and cultural practices
2. *Approaching*: gaining cooperation and confidence from the source and taking care to maintain its safety and viability
3. *Questioning*: obtaining information by following a careful interrogation plan embracing only the most pertinent questions
4. *Termination*: ensuring that work with the sources will be finished without mistakes while preparing for other operations
5. *Reporting*: organizing and collating information for commanders and officials

Collector Skills

Due to its focus on interpersonal interaction, HUMINT is a human-centered activity in which

the individual represents the primary intelligence-gathering tool. Therefore, the HUMINT operator must possess intellectual and cultural knowledge that allows him or her to effectively operate on the ground and adapt to local conditions. Patience, tact, focus, discretion, and prudence are vital virtues for this job. The operator is the key member in the HUMINT process, and his or her preparation must represent an ongoing effort to refine his or her craft in wide-ranging disciplines like languages, acting classes, weapons, and radio systems, including those of the enemy, and emerging technology. Training for HUMINT operators includes 10 weeks of basic training, followed by 20 weeks of advanced training in information gathering, HUMINT analysis, interrogation techniques, and language skills, among others. Much of the training is done out of the classroom to put the collector in contact with the environment(s) he or she will encounter in a hostile or war zone.

Recent HUMINT Operations

Recently, HUMINT activities have proven central in the Global War on Terrorism, providing key information leading to the capture or killing of high-value target individuals in both Afghanistan and Iraq. Cooperation between civilian and military intelligence services led to the capture of Saddam Hussein in 2003 and the successful raid that killed Osama bin Laden in 2011. HUMINT has also been key in a number of other operations against al Qaeda and other terrorist organizations such as the Taliban in Afghanistan. American intelligence services continue to work to expand HUMINT operations and better integrate those efforts with other intelligence forms to improve the overall intelligence capabilities of the United States.

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See also Central Intelligence Agency; Defense Intelligence Agency; Intelligence, Geospatial; Intelligence Cycle; Intelligence Organizations, Military; National Security Agency

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INTELLIGENCE CYCLE

After raw unrefined data or information is gathered, it must be converted into intelligence and made available in a form useful to end users such as political and military leaders and policymakers. This process consists of several steps: requirements, planning/direction, collection, processing, production/analysis, and dissemination. This procedure is called the *intelligence cycle*. This entry discusses the steps of the intelligence cycle, what happens when intelligence fails, and advanced intelligence analysis.

First, *requirements* are specified information needs that *must* be known to ensure national security. In the case of the Central Intelligence Agency, the director of national intelligence receives guidance from the president, the national security advisor, and the homeland security advisor. The attorney general and the director of the Federal Bureau of Investigation also have input regarding the intelligence requirements necessary to counter national security and major criminal threats. The determining of requirements is often done in concert with or as part of the planning and direction step of the process.

Next, the *planning and direction* step is led by the executive assistant director for the National Security Branch of the Federal Bureau of Investigation and by senior leaders of the Central Intelligence Agency, the National Security Council, and the director of homeland security. This step is really the beginning and end of the intelligence cycle as management of the entire effort as well as benchmarking of results (and the generation of new requirements) is vested in the direction and guidance of public officials and bodies such as the National Security Council. Specific collection requirements are elucidated, and action plans are prepared.

Collection is the gathering of raw data and information needed to fulfill requirements. Information

can be collected overtly (openly) or covertly (secretly). Open-source reporting (monitoring of television and radio broadcasts, newspapers, books, political meetings, speeches, and Internet sources) is critical. More covert sources, such as interviews, technical (electronic, camera, satellite, and computer) surveillance, physical surveillance (spying), human source operations (liaisons, defectors, and informants), and searches all contribute to the raw data collection. Electronic surveillance requires numerous specialists to implement the collection methods, operate the equipment, and interpret the results. As an example, satellite photographs may require specialized weapons experts to interpret them properly. Military intelligence is also segregated into human intelligence and signal intelligence, depending on the source.

Processing and exploitation is the fourth step. There exists a spectrum of processing and exploitation methods. The intelligence collector might have processing capacity, or processing can be “downstream,” after the information is passed along to other individuals or agencies. Usually there will be heavy computing requirements and consequent economies of scale in processing. Additionally, there are requirements for intimate technical knowledge, as noted above. Some methods used in converting the vast amount of raw information into a form usable by analysts are decryption, language translation, data reduction, and the entering of raw data into databases to apply algorithms. In the current military environment, the intelligence cycle is expressed through the acronym TPED, which stands for tasking, processing, exploitation, and dissemination. Not really a process or a system, TPED is a sort of supply chain management for the intelligence community, especially the electronic imagery aspects of intelligence gathering. But TPED does point the way to further incorporation of processing and exploitation into a single coincidental step.

The *analysis and production* step involves the conversion of information into intelligence. The raw material is evaluated and analyzed for reliability and relevance, and intelligence products—papers, presentations, studies, analyses—are prepared.

In the last step, *dissemination*, “intelligence products” are prepared and distributed to policymakers and stakeholders. Assessments, association charts, financial records, case analyses, statistics recommendations, and conclusions are a small part of the products prepared.

Intelligence failure can take numerous forms. *Overestimation* occurs when a perceived threat is magnified and disproportionate resources are committed to it. *Underestimation* occurs when a leader or an agency is in denial about the extent of a threat, possibly because the means to counter the threat are not available. These can both be examples of *subordination to policy*, in which intelligence is disregarded because it does not fit what the policymakers want to hear. *Lack of communication* between agencies can affect interpretation and response (often cited as a factor in the 9/11 terrorist attacks). *Excessive restrictions on classified material* may cause the necessary information to be unavailable. *Received opinion* or *conventional wisdom* may allow incorrect assumptions to be perpetuated. *Mirror imaging* or drawing analogies between a novel situation and previous known situations may lead to incorrect assumptions by analysts and policymakers. *Overconfidence* and *complacency* may lead to an insufficient threat assessment, and *failure to connect the dots* may lead to an inaccurate interpretation of intelligence.

Advanced intelligence analysis usually includes the following:

- Psychological profiling, first believed to have been used in 1986 to analyze foreign leaders but actually in use long before, such as the famous psychiatric profile of Adolf Hitler compiled during World War II
- Estimative intelligence, involving estimates of the strength, capabilities, and “mood” of an enemy nation—somewhat subjective, sometimes dangerously so
- Warning intelligence or threat assessment, utilizing history and hindsight to produce indicators and warnings as early signs of potential threats
- Fusion intelligence, especially in the wake of the 9/11 attacks, which focuses on real-time data sharing and analytic cooperation
- Economic intelligence
- Scientific and technological intelligence, which includes weapons potential (e.g., nuclear capability) and aerospace and cyber capabilities (IntelligenceSearch.com)

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See also Central Intelligence Agency; Federal Bureau of Investigation; National Security Council

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INTELLIGENCE ORGANIZATIONS, MILITARY

Collecting, analyzing, and disseminating military intelligence is a vital task shared by a variety of government agencies. In addition to the civilian Central Intelligence Agency (CIA) and Department of Homeland Security, a number of government civilian and military organizations engage the intelligence field. In the United States, military intelligence organizations comprise eight discrete agencies, offices, and units. They are the Air Force Intelligence, Surveillance, and Reconnaissance Agency (AFISRA), the Army Intelligence and Security Command, the Defense Intelligence Agency (DIA), the Marine Corps Intelligence Activity (MCIA), the National Geospatial-Intelligence Agency (NGA), the National Reconnaissance Office (NRO), the National Security Agency (NSA), and the Office of Naval Intelligence (ONI). All of these organizations are considered part of the U.S. Intelligence Community (IC), and as such, each reports to the director of national intelligence. However, because they are also military organizations, each agency (and its employees, both civilian and military) also answers to the secretary of defense.

The History of Military Intelligence

George Washington established the first American human intelligence (HUMINT) networks in Boston, New York, and Philadelphia to provide information about British troop movements. The Civil War continued this ad hoc intelligence tradition, with both Union and Confederate governments lacking a formalized intelligence-gathering system. Nonetheless, code breaking, covert surveillance, and other tools of spycraft were utilized; Abraham Lincoln also established a HUMINT network. The Civil War also saw the advent of aerial reconnaissance, as the Union pioneered the use of observational balloons. Following the war, however, any advances in U.S. intelligence were allowed to atrophy by a nation tired of war that believed intelligence gathering to be unnecessary in peacetime.

World War I saw major progress made in the field of military intelligence when the commander of the Allied Expeditionary Force in France established an intelligence center for the collection, analysis, and dissemination of information relevant to the European theater of war. The Great War, with its technological advancements across all avenues of war making, also saw new levels of sophistication in aerial reconnaissance, HUMINT collection, and signals intelligence (SIGINT), or intelligence gathering by the use of signals. SIGINT was bolstered by the Army Signal Corps, which manned radio-listening posts and provided interception and direction-finding equipment. Once again, however, in the interwar period, the United States failed to maintain its military intelligence capabilities.

The Japanese attack on Pearl Harbor in 1941 represented one of the greatest failures of military intelligence, but it served to crystallize the need for a substantive military intelligence system, even in times of relative peace. The attack spurred the army and navy to improve their capabilities to process and disseminate intelligence, as well as set up joint intelligence centers at both the national and the theater level to better coordinate efforts. Clandestine operations, aerial reconnaissance, SIGINT interception, and geospatial intelligence (GEOINT) were all hallmarks of World War II, though the war's most important and lasting intelligence legacy came in pushing Congress and the public to recognize the need for a permanent, established intelligence apparatus.

The tensions of the Cold War cemented this recognition as the United States frequently turned to military intelligence to protect or enhance its

strategic and tactical position, from U-2 surveillance flights over Cuba during the Cuban Missile Crisis to wiretapping undertaken by the NSA and the exploitation of GEOINT to determine the placement and development of nuclear weapons.

Since the end of the Cold War, military intelligence and its corresponding organizations have found themselves facing new challenges. Changes in international power dynamics, such as the fall of the Soviet Union, the breakup of Yugoslavia, and the Arab Spring in the Middle East, have eroded the stability of the bipolar world. Rather than facing clear military threats posed by well-defined enemies, the United States has been faced with guerrilla tactics on a global scale, counterinsurgencies, and rogue regimes. Military intelligence organizations now must compete with nonstate actors and subversive, hostile elements within states that are otherwise allies. Crumbling relations with Pakistan in the wake of the assassination of Osama bin Laden are a clear example of this. While Pakistan remains a U.S. ally, the Pakistani government has done little to curb the influence of al Qaeda, even within its sovereign borders, providing aid and comfort to enemies of the United States.

The Organizations and Their Purposes

Military intelligence organizations in the United States are delineated by either method or military branch. Of the eight organizations, half are dedicated to gathering intelligence for a specific branch of the armed forces—one for each major branch. Three are dedicated to exploiting a particular form of intelligence gathering, and the last, the DIA, serves as a general catch-all organization. AFISRA, the air force's intelligence component, provides policy, oversight, and guidance to all intelligence organizations within the air force. As such, AFISRA trains and equips personnel to conduct and collect intelligence, surveillance, and reconnaissance. The Army Intelligence and Security Command formulates policy, plans, programs, and budgets and manages and oversees all intelligence activities for the Department of the Army. It is particularly responsible for the coordination of imagery intelligence, SIGINT, HUMINT, measurement and signature intelligence, and counterintelligence. The DIA is a Department of Defense agency designed to support combat operations. One of the major producers of intelligence and a lynchpin of the IC, the DIA provides intelligence to those who fight the wars, those who make defense

policy, and those who plan wars. This agency supports military planning and operations, as well as weapons system acquisition; its director is the principal adviser to the secretary of defense and to the chairman of the joint chiefs for matters of military intelligence. MCIA's purpose is to provide tactical and operational intelligence for use on the battlefield. Its staff utilizes HUMINT, SIGINT, GEOINT, and counterintelligence and is responsible for ensuring a coherent and uniform strategy for developing Marine Corps intelligence. NGA provides GEOINT, which places information within a specific geographic location and temporal context. Geospatial intelligence uses imagery to glean intelligence. NRO is staffed by Department of Defense and CIA personnel and is responsible for designing, building, and operating the country's array of reconnaissance satellites. If NGA is the eyes, then NSA is the ears of the United States, using SIGINT to protect the country and its secrets while simultaneously working to learn foreign secrets that may pose a threat to domestic or international security. Of the military intelligence agencies, The NGA has the greatest role in assisting in humanitarian crises. The ONI's primary function is maritime intelligence, and it assists in providing intelligence to joint warfighting forces. This agency specializes in scientific, technical, geopolitical, and military intelligence information.

Military Intelligence at Work

These military intelligence organizations must exist within both the IC and the military framework. While the military chain of command dictates much of how these interactions take place, the combination of military and civilian employees within an agency complicates clarity of jurisdiction. This confusion is heightened by two additional designations used by the IC: (1) the National Intelligence Program (NIP) and (2) the Military Intelligence Program. Under the 1947 National Security Act, the NIP is responsible for all activities of the intelligence community but does not include activities of military departments to acquire intelligence meant solely for tactical missions undertaken by the military. Using just these parameters, it would appear that INSCOM, ONI, AFISRA, and MCIA should fall under the Military Intelligence Program, while the NRO, NGA, NSA, and DIA would be designated part of the NIP. In point of fact, the NRO is part of the National

Foreign Intelligence Program, which falls under the NIP. However, in terms of military intelligence, all eight organizations overlap, and assigning them to one or the other is an ad hoc decision.

Military intelligence comes in three base forms, strategic, operational, and tactical, and the form of the intelligence dictates its use by the military intelligence organizations. On the surface, each of these agencies functions as any other intelligence agency does. Using certain tools, they attempt to obtain, analyze, and disseminate intelligence. These tools traditionally comprise five main components: imagery intelligence, SIGINT, HUMINT, measurement and signature intelligence, and counterintelligence. The specific tools used depend on the agency (the NSA relying primarily on SIGINT, NGA on GEOINT, etc.) and the goals of that agency (the ONI focusing on maritime intelligence). Military intelligence, however, is geared predominantly toward military decisions, both in terms of policy and in terms of action. Military intelligence, across all agencies, is meant to provide the best possible information for warfighters and the decision makers who send the troops.

In recent years, however, the line between military and so-called civilian intelligence has been deteriorating rapidly in the United States. While the intelligence organizations belonging to each military branch are well delineated, with specific purposes and specific clients, the NSA, NRO, NGA, and DIA overlap in these arenas. For example, the NRO directs the satellites whose pictures the NGA analyzes; the information gleaned from these images might be most relevant to a DIA operation on the ground. Reforms to the IC mean that these four agencies should be more able and willing to share intelligence between them, but the legislation enacted following 9/11 has yet to fully bear its intended fruit. Furthermore, the primary threats to U.S. security are no longer easily classified within the traditional military framework. Nonstate actors such as al Qaeda and other militant groups are changing the nature of warfare, requiring military intelligence to adapt.

The increasing paramilitarization of the CIA also threatens the military intelligence apparatus. With the CIA developing its own capabilities for carrying out military action without coordination or cooperation from military intelligence organizations, the distinction between civilian and military must either be redefined or actions curtailed, lest the two meld into one. These issues will continue to dominate

the military intelligence field and suggest a complex future for all military intelligence organizations.

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See also Defense, Department of; Defense, Secretary of; Defense Intelligence Agency; National Security Agency

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 The U.S. Intelligence Community Official: www.intelligence.gov

INTELLIGENCE OVERSIGHT, CONGRESSIONAL

Developed since the 1970s, congressional intelligence oversight has involved diverse efforts by Congress to ensure that the intelligence community operates effectively and in accordance with the Constitution, laws, and core values of the United States. It is a key challenge for a democracy to hold intelligence agencies accountable without compromising classified information. This entry examines its history, key objectives, general mechanism, and major problems.

Historical Background

In the mid-20th century, the need for robust regulation and oversight of the intelligence agencies became increasingly obvious. Already a significant part of the U.S. national security apparatus at the end of the Second World War, the intelligence community expanded rapidly in the 1950s and 1960s. At the same time, police states in the 1930s and 1940s (Nazi Germany in particular) and the U.S.

Army's domestic surveillance activities against civil rights campaigners and antiwar activists in the 1950s and 1960s, which were made public in 1966, underlined the potential tension between secret intelligence and civil liberty. Despite all this, Congress remained reluctant to investigate the activities of the intelligence community, leaving intelligence oversight largely in the hands of the executive branch.

This "era of trust" came to an end when a series of ill-advised operations by intelligence agencies was exposed first by the *New York Times* in 1974 and then through the congressional inquiries conducted by the Senate Select Committee to Study Governmental Operations With Respect to Intelligence Activities (chaired by Frank Church) and the House Select Committee on Intelligence (chaired by Otis Pike) alongside the President's Commission on CIA Activities Within the United States (led by Vice President Nelson Rockefeller). Those media reports and official investigations uncovered what many saw as improper covert actions in foreign countries (notably assassination plots and the overthrow of a democratically elected regime in Chile), illegal surveillance activities at home (including telegram interceptions, mail openings, and large-scale surveillance operations against groups and individuals who hardly posed any threat to national security), and other questionable projects (e.g., drug experiments and the illegal acquisition of chemical and biological materials). The initial *New York Times* revelations led to the Hughes-Ryan Amendment of late 1974, which required the president to sign a "finding" to authorize each covert action and to notify Congress of it. Following the Church and Pike committees' reports, Congress created the Senate Select Committees on Intelligence in 1976 and the House Permanent Select Committee on Intelligence in 1977.

With both sides recognizing the importance of congressional oversight, the newly formed committees and the intelligence community developed a close working relationship during the second half of the 1970s. The growing trust between the two parties allowed Congress not only to reduce the possibility of improper use of intelligence agencies but also to help the intelligence community improve its capabilities. The most important legacy of this era is four pieces of legislation passed between 1978 and 1980: the Foreign Intelligence Surveillance Act of 1978, designed to regulate surveillance

activities against U.S. citizens; the Intelligence and Intelligence-Related Activities Authorization Act for Fiscal Year 1979, which set forth the annual appropriation process for intelligence-related activities, so that Congress could use its control over the budget to perform its oversight duty; the Classified Information Procedures Act of 1980, which introduced a mechanism through which classified materials can be used in a criminal proceeding without compromising sensitive information; and the Intelligence Oversight Act of 1980, which requires, with some exceptions, the executive branch to keep Congress “fully and currently informed” about all major activities of the intelligence community. With enough flexibility and political realism, that legislation provided a foundation for intelligence oversight during the following decades.

While many aspects of the committees’ efforts in the 1980s appeared to remain relatively sound and effective, Congress also tried to regulate further details of intelligence operations, a move that the Reagan administration apparently saw as an excessive intrusion into the executive branch’s discretion to conduct intelligence operations. Particularly significant here was the first Boland Amendment, which was passed in 1982 to prevent covert assistance to the Nicaraguan anti-Marxist forces known as the Contras. In response, President Ronald Reagan created a secret organization (the Enterprise) to fund covert actions in Nicaragua outside the appropriation process of Congress, relying in part on secret weapons sales by the Central Intelligence Agency to Iran (the Iran-Contra affair). The revelation of this secret program in 1986 resulted in an investigation by a joint select committee, numerous reform proposals in 1987, and a general decline of trust between Congress and the intelligence community.

The following decade saw the rise of another problem in the congressional intelligence committees: a growing tendency for partisan advocacy, which became particularly prominent after the Republican takeover of the Senate and the House in 1995. Partly due to this adverse political environment—together with the lack of clear direction and priority in national security policy in general after the fall of the Soviet Union—the oversight efforts in the 1990s were marked by politically charged disputes over relatively minor issues in the annual intelligence authorization bill. This trend has been

seen by some of the former committee members as part of the reason why the committees were unable to initiate the strategic reforms that the intelligence community needed in the 1990s to meet the increasingly prominent security threats, such as nuclear proliferation and Islamic fundamentalism.

In the atmosphere of national emergency following the terrorist attacks on September 11, 2001, ambiguity and acquiescence characterized the congressional intelligence oversight in the 2000s. To various degrees, this general trend affected the four key developments during the decade. The first was the inquiries into two intelligence failures: one concerning the terrorist attacks in September 2001 and the other regarding the Iraqi weapons of mass destruction in 2002. The second issue was controversial intelligence activities conducted as part of the so-called Global War on Terrorism, which Congress was unable to regulate effectively. The most significant among those were the use of detention and torture to extract intelligence from terrorist suspects and the National Security Agency’s warrantless eavesdropping in the United States (for which the agency decided to notify only eight senior congressional members, or the so-called Gang of Eight, even though that option of limited notice applied only to covert actions abroad). The third was the failure during the second half of the 2000s to enact annual intelligence authorization bills, which Congress enacted from FY1979 to FY2005. The fourth issue, which largely stemmed from the first three, was the numerous proposals for intelligence reform, including some related to intelligence oversight. The 9/11 Commission’s final report in 2004 served as a basis for the Intelligence Reform and Terrorist Prevention Act of 2004 (which created the Director of National Intelligence) and less drastic administrative changes (e.g., the creation of congressional subcommittees on intelligence oversight). Many of the proposals made by the 9/11 Commission and other parts of the government, however, remained to be implemented.

Rationale and Objectives

The task of intelligence oversight does not fall exclusively in the hands of Congress. Directly responsible for intelligence policy, the executive branch has conducted its own inquiries and issued Executive Orders (including President Gerald Ford’s Executive

Order 11905 in 1976 prohibiting political assassination). In the judiciary, the high court judges intelligence-related cases, and the Foreign Intelligence Surveillance Court is to approve the government's surveillance operations within U.S. territories aimed at collecting foreign intelligence. The mass media has also play an important role in uncovering intelligence-related problems.

Nevertheless, in the realm of intelligence, where much of the information is not released to the public, congressional oversight—with its special procedure designed to protect sensitive information—remains the central part of checks and balances, which has the potential to reduce the risk of arrogance and narrow-mindedness on the part of the executive branch, to balance secrecy (which is seen as necessary for national security) and openness (a key aspect of a liberal democracy), to assure the public that the intelligence agencies are being used properly and effectively, and thereby to maintain public confidence and support for the intelligence community.

Practically, the congressional committees pursue two broad objectives: (1) to ensure that the intelligence community is operating in conformity with the Constitution, laws, and basic values of the United States (e.g., civil liberty and human rights) and (2) to help improve the efficiency of the intelligence agencies by making sure they have the necessary capabilities, resources, guidelines, and leadership.

Organizations and Mechanism

The most important players in congressional intelligence oversight are the Senate Select Committee on Intelligence and the House Permanent Select Committee on Intelligence, both of which are responsible for the oversight of the intelligence community as a whole. In addition, the issue of domestic surveillance falls into the jurisdiction of the Judiciary Committees and the Homeland Security Committees, whereas the Armed Services Committees are expected to play a significant role in the oversight of military intelligence. Some of the congressional support agencies (e.g., the Congressional Research Service, Government Accountability Office, and Congressional Budget Office) also help those committees to examine the activities and accounting of the intelligence agencies.

The key powers and means available to Congress vis-à-vis the intelligence community largely fall into four, overlapping categories. The first is the passage of legislation that regulates certain aspects of intelligence activities, including covert action, domestic surveillance, and the handling of information. The second is the appropriation of the intelligence budget—the use of the “power of the purse”—through the annual Intelligence Authorization Act, which approves funding for intelligence programs and thereby serves as a general guideline for intelligence operations. The third is the power of the Senate to approve or disapprove presidential nominees for some of the key posts in the intelligence community, such as the director of national intelligence. The fourth is various forms of inquiry, which include briefing sessions with intelligence officers, official hearings, field trips, independent investigations, and program evaluation.

The executive branch is to provide relevant information necessary for the committees to carry out their oversight duty. In particular, the executive branch is to inform the committees of any covert operation before its initiation. One exception to this principle of prior notice is that in a case of highly sensitive covert action abroad, the president can limit notice to the so-called Gang of Eight (the chairs and ranking minority members of the intelligence committees, the majority and minority leaders of the Senate, and the speaker and minority leader of the House of Representatives). Even in such cases, however, the president has to write a notice to the full members of the intelligence committees at the earliest possible occasion and explain the reason for the delay in reporting.

Problems and Challenges

The executive branch has failed to share information with lawmakers for various reasons, including simple technical errors, the need to protect sensitive information, the desire to conceal a controversial program, and the general disregard of congressional oversight based on the belief that the business of intelligence must be left in the hands of “professionals” in the executive branch.

In addition, the congressional committees themselves have had technical, administrative, and political problems—notably, limited time and resources

with which to investigate vast and complex intelligence activities, jurisdictional ambiguity and overlap among different congressional committees, partisan political pressure on committee members, and the relatively low electoral incentive of intelligence oversight, which operates largely behind closed doors and usually has little direct effect on the committee members' constituency.

The most basic problem, though, lies in the constitutional uncertainty regarding the checks and balances between the executive branch and Congress in the area of national security in general and intelligence in particular. There has been a long debate among legal professionals as to whether—as the executive branch has claimed—the U.S. Constitution (Article II) endows the president a constitutional privilege over national security and, if so, whether and when that privilege allows the president to circumvent the statutory requirement to keep Congress informed. Likewise, the congressional committees face the corresponding ambiguity over the extent to which the Constitution (Article I) allows Congress to shape or regulate intelligence-related policies. In the face of this constitutional uncertainty and the constantly changing context of national security, effective congressional intelligence oversight requires strong, bipartisan leadership in the congressional committees as well as proper dialogue between Congress and the executive branch.

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See also Central Intelligence Agency; Congress, U.S.; Congressional Relations, Military; 9/11 Commission

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INTERNATIONAL CRIMINAL COURT

The International Criminal Court (ICC) is the world's first permanent body exercising jurisdiction over grave offenses under international law. Established on July 17, 1998, by the Rome Statute, the ICC did not achieve meaningful existence until July 1, 2002, when it exceeded the critical mass of support needed from signatories to the statute. The court consists of two components: (1) a judiciary, comprising a president, judges, and administrative personnel, and (2) the Prosecutor's Office, embracing an independent prosecutor and investigators. The Assembly of States Parties, composed of representatives of states that have both signed and ratified the Rome Statute, supervises the work of the ICC and oversees its budget. The assembly may also increase the number of ICC's judges (currently 18) by a two-thirds vote. Its 18 judges are allocated among the ICC's various divisions (pretrial, trial, and appeals). This entry discusses the formation and jurisdiction of the ICC.

Background of the ICC and Its Formation

Like a river in full spate, the late 19th century was a channel bursting with international initiatives to mitigate the harshness of war. The idea of an international court to try war crimes emerged during this era, but it did not find firm purchase until the end of World War I, when the victorious authors of the Versailles Treaty provided in Article 227 for the prosecution of the Kaiser by an international court. Significantly, this proviso of the treaty was scuttled on the opposition of U.S. delegates to the peace conference and was not successfully revived until 1945. In the shadow of the Nazi atrocities, the moment seemed propitious for establishing a permanent international court. Instead, the prosecution of Axis criminality unfolded in ad hoc international tribunals (Nuremberg and Tokyo) and sundry national and military courts. Not until the late 1980s would a concerted effort to create a permanent international criminal court again arise.

The occasion was a proposal by Trinidad and Tobago in 1989 to establish an international

criminal court for combating the illicit drug trade and terrorism. A draft statute was forwarded to the UN's International Law Commission for its consideration. The International Law Commission then sent an assessment of the draft statute to the UN General Assembly. The report went far beyond the modest parameters of drug trafficking and terrorism, envisioning a court with robust jurisdiction over a wide range of crimes under international law. Over the next several years, the General Assembly, nongovernmental organizations, and other parties developed a blueprint that eventuated in the Rome Statute in 1998. After a successful vote by the delegations to the Diplomatic Conference (120 in favor, 7 opposed, and 21 abstaining), the statute creating the world's first permanent international criminal court was opened for signature.

Jurisdiction of the ICC

The Preamble to the Rome Statute describes the ICC as a body authorized to punish "shocking" crimes that threaten global peace. According to Article 13(b), the court may begin an investigation when the UN Security Council refers an alleged violation to the ICC prosecutor. (Chapter VII of the UN Charter supplies the ostensible basis for this referral.) The substantive offenses over which the court has jurisdiction are set forth in Articles 6 to 8.

Article 6 confers jurisdiction on the court over cases of genocide. The text of Article 6 reprises the elements of the offense in the UN Genocide Convention of 1948, that is, acts committed with the "intent to destroy in whole or part a national, ethnical, racial, or religious group as such." Such actions include homicide, inflicting serious physical or mental harm, willfully imposing conditions of life designed to destroy the group, maiming, preventing births within the group, and "forcibly transferring children of the group to another group." Like the 1948 Convention, Article 6 excludes social or political units from its definition of "group."

In both form and substance, Articles 7 and 8 closely follow the charges against Nazi war criminals listed in the Charter to the International Military Tribunal at Nuremberg. Article 7 invests the court with jurisdiction over crimes against humanity, including murder, torture, rape and other kinds of sexual violence, forced sterilization, enslavement, deportation, and similar acts causing severe and gratuitous suffering. To be justiciable, however, the

prosecutor must show that such acts were both deliberate and "part of a widespread or systematic attack directed against any civilian population, with knowledge of the attack." Article 8 furnishes the ICC with jurisdiction over four categories of war crimes: (1) "grave breaches of the Geneva Conventions," (2) "serious violations of the laws and customs applicable in international armed conflict," (3) grave offenses prohibited under Article 3 common to the four Geneva Conventions (a category of offense restricted to "armed conflict not of an international character"), and (4) "other serious violations of the laws and customs" of war.

In addition to the three substantive crimes outlined above, Article 5(1)(d) of the statute asserts the court's jurisdiction over the "crime of aggression." Article 5, paragraph 2, however, recognizes that the court will not exercise jurisdiction over this offense until its elements are subsequently defined. At the Review Conference of the Rome Statute convened in Kampala, Uganda (June and May 2010), the Assembly of States Parties deferred final determination of the issue until after January 1, 2017, when the support of two thirds of the States Parties and ratification by at least 30 of them will confer jurisdiction on the ICC to try crimes of aggression.

Conclusion

While the ICC's creation is an immensely important event in the history of human rights enforcement, the court remains hamstrung by superpower politics. From the beginning, the United States has opposed robust operation of the ICC, rejecting the model of universal jurisdiction in favor of one based on a state's voluntary acceptance. The United States also extracted a concession (found in Article 17) that made the ICC "complementary" to domestic courts—meaning it would intervene only when the courts of the offender's host country refused to prosecute. Moreover, under Article 16, members of the Security Council can stymie the ICC by requesting a moratorium on investigations or prosecutions for 1 year (and renewable thereafter). These limitations notwithstanding, other features of the ICC, particularly its permanence and its rejection of immunity for heads of state (Article 27) and the defense of superior orders (Article 28), are cogent evidence for the historic character of this institution.

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See also Crimes, Military; Geneva Conventions; Genocide; Human Rights; Humanitarian Intervention, Foreign

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INTERNET

The Internet is a series of interconnected networks operating on a common set of protocols. These protocols provide the foundation to support the applications most often associated with the Internet. These applications include the World Wide Web (www), instant messaging (IM), voice over Internet protocol (VoIP), file transfer protocol (ftp), and e-mail. The Internet is accessed from a wide variety of communication platforms, including telephone lines, cable, fiber optics, satellites, and cellular networks. Users connect to the Internet with a variety of devices including personal computers, cell phones, appliances, and gaming consoles. In short, the Internet is a network of networks that facilitates the interactions between computers, devices, and users. While not developed directly for a military application, its creation was largely influenced and funded by the military. This entry traces the history of the Internet and discusses its military uses.

History

Two researchers, Paul Baran and Donald Davies, from separate institutions, are credited with inventing the basic foundation of the Internet. Baran, a researcher at the RAND Corporation in the early 1960s, sought to create a communications network capable of surviving a nuclear attack. His premise was to build a decentralized command-and-control communications system whereby military communications could take any number of routes to their destinations. In the event that any component of the network was destroyed, the message would

still arrive through the remaining parts. In 1966, Davies, a physicist at England's National Physics Laboratory, was working on an improvement to telephone circuit switching. Both Baran and Davies independently came up with packet switching as the solution to their respective problems. Davies coined the actual term *packet switching*, which stuck.

Packet switching is accomplished by cutting full messages into smaller data packets. These small data packets are then sent to a series of interconnected routing stations. The routing stations accept and forward data through the most efficient route available until the data packets arrive at their final destination. If any of the routing stations go offline, as in the case of a nuclear attack, a new path is automatically chosen. Once all the data packets arrive at the final destination, the entire message is reassembled. The routing systems are asynchronous, so the individual routing stations decide the most efficient path, not the message sender. For example, depending on network conditions, the fastest way to route data packets from California to New York is through Asia to Europe and across the Atlantic. Packet switching was the framework on which the Internet was built.

Advanced Research Projects Agency (ARPA), DARPA, and ARPANET

In 1957, after the launch of the satellite *Sputnik*, President Dwight D. Eisenhower sponsored the creation of the Advanced Research Projects Agency (ARPA). ARPA was initially tasked with the responsibility of designing antimissile weapons and satellites, but shortly thereafter, the mission changed focus to the research and development of forward-thinking military applications. These uses ranged from ballistic missile defense to nuclear test detection. One division within ARPA was the Information Processing Techniques Office. It was within the Information Processing Techniques Office that the original Internet was incubated.

In 1967, ARPA awarded Stanford Research Institute a contract to design the first Interface Message Processor network, based on the original packet-switching technology. Using Honeywell's DDP-516 computer hardware, the first node of the network was installed at the University of California, Los Angeles, in the spring of 1969. In the fall, the second node came online at Stanford Research Institute. The initial network was rounded

out in December, with nodes being installed at the University of California, Santa Barbara, and the University of Utah. This network became known as ARPANET. The network grew as other research institutions joined.

Uses of ARPANET varied greatly. Scientific researchers were early adopters of the system, using it to access more powerful computing resources and to share information. For example, ARPA climate researchers, in support of military-related weather planning, used ARPANET to connect to supercomputing resources. Researchers sent weather simulation data to and from the participating computing resources at the various universities. The military used ARPANET for signals processing and seismic nuclear test monitoring in support of nuclear test ban treaties. Seismic monitoring signals were transferred directly to the processing stations within hours. This was a dramatic improvement over storing the signals on tape and mailing them for processing, an operation that took several days. The military also used the network to collaborate on the development of new weapons programs. Productivity and usage of ARPANET increased dramatically in 1971, when the computer programmer Ray Tomlinson developed a program that sent electronic messages between the networked machines. This program eventually developed into e-mail. E-mail became the most popular and widely used application because it allowed users to quickly communicate and collaborate with one another.

In a series of activities that aligned the ARPA closer to its military roots, it was renamed DARPA in 1972 (the *D* representing Defense). In 1975, due to the fact that ARPANET was no longer a “research” entity and needed to be managed with more oversight, the military’s Defense Communications Agency was tasked with running ARPANET. This brought the underlying tension between the scientific community and the military to the forefront. Once the Defense Communications Agency started operating ARPANET, exposure to and use of the system within the military grew. As a result, greater security and oversight were required, which exacerbated tensions with the scientific community, which preferred a more open and sharing environment.

In addition to ARPANET, ARPA brought two other networks online. The first was PRNET, a computer network that transferred information between computers through radio waves. This was a natural for applicability to military uses as radio was the

standard for battlefield communication. However, while well conceived, it was never fully developed. The other network that ARPA brought online was SATNET, a satellite-based packet-switching system. SATNET had a series of ground stations that communicated with the satellite. By connecting these three different networks together, the researchers at ARPA had built the foundations of a system network that could bridge different types of networks in a decentralized format. This fit the U.S. military’s need for connecting disparate networks, operating independently, and communicating in tandem with air-, land-, and sea-based systems.

The Next Internet

The next major advancement occurred in 1973, when the ARPA researchers Vinton Cerf and Robert Kahn developed the network protocol Transmission Control Protocol (TCP)/Internet Protocol (IP). This new network protocol improved the packet-switching concept. The main improvement came by creating a two-part protocol. Part 1, TCP, focused on communication between hosts. Part 2 was IP, which focused on communication between machines. By splitting the functions, the packet switching became more efficient. TCP/IP has been so successful that it remains the foundational protocol for the modern Internet.

ARPANET was converted over to TCP/IP in 1983. However, to ameliorate the tension between the military and scientific communities, ARPANET was split, and a military-only network called MILNET was created solely for the military. MILNET made use of stricter access controls as well as encryption to protect sensitive data. This split was logical and inevitable given the sensitivity of military data and the fact that academic institutions could not enforce the rigorous security standards necessary to support the military. Philosophically, the two were increasingly at odds. The researchers wanted a more open and inclusive sharing of information and resources, whereas the military wanted a more closed and controlled environment. At the same time, the TCP/IP technology was made available for commercial purposes. This allowed for greater development and innovation of the technology by the business world. This came about at the same time the personal computer market was establishing itself.

In parallel with ARPANET, the National Science Foundation (NSF) launched Computer Science

Network (CSNET), a high-speed network based on the TCP/IP protocol. CSNET charged money to any research institution that wanted to participate. A condition for participation was that the network was not to be used for commercial purposes. However, by 1990, with the redundancy that had emerged between ARPANET, CSNET, and other networks, CSNET and ARPANET were shut down and replaced by the National Science Foundation Network (NSFNET). NSFNET served as the new research-based network. In 1991, the NSF decided to turn ownership of the network to the private sector. In 1995, the modern, commercial Internet, as it is known today, replaced NSFNET.

No sooner had the commercial Internet taken hold than research and education institutions once again sought a separate network to support large-scale connections to supercomputers. Led by the NSF, the “next generation” Internet, named Internet 2, was built in 1995. Its design for high-speed data transport connects institutions involved in complex scientific applications supporting data-intensive applications.

The World Wide Web

The biggest problem with the NSFNET (and its predecessors) was that all the programs and interactions were text based. This made it difficult for nontechnical users to make use of the technology. Commercial Internet access providers, such as CompuServe and America Online, attempted to bridge this gap by creating private, graphics-based online communities that allowed users to e-mail, chat, shop, research, and perform other virtual activities. Then in 1990, Tim Berners-Lee, an employee at the European Organization for Nuclear Research, created a technological breakthrough that dramatically changed the way the Internet was used. Berners-Lee created the basic structure of what became the web. The web consists of four parts: (1) a transmission protocol, (2) an addressing scheme, (3) a programming language, and (4) an application to tie them all together. The hypertext transmission protocol (http) is the way in which information is exchanged between websites. The uniform resource locator (url) is the addressing scheme that allows users to type in a web address (e.g., www.internet.com) and be taken to the website in question. The hypertext markup language (html) is a programming language that codes information so it can be displayed. The

web browser is the program that communicates with websites with the help of urls over http and displays the html webpages. The html allowed for the easy display of text and images and subsequently audio and video. The development of the web made the Internet visual and accessible for nontechnical users. The rapid adoption of the www is arguably why most users equate the www with the Internet.

The Dot-Com Era

As the web became better known, communities sprouted up to support the different aspects of the web. The most dramatic development occurred in 1993 when Marc Andreessen led a group of programmers at the National Center for Supercomputing Applications at the University of Illinois to develop a new web browser called Mosaic. Mosaic was a graphics-based browser that made it easy for users to point and click on the information they desired. This browser was exceedingly popular and spurred the dramatic growth and popularity of the www. Andreessen and his staff left the National Center for Supercomputing Applications, moved to Silicon Valley, and started a company called Netscape. This spurred the creation of websites, search engines, and eventually e-commerce sites like Amazon.com. This was the dawn of the Internet-driven dot-com boom.

Before the www was introduced, finding information on the Internet was a challenging task. With the www, and the explosion of data that followed, finding content became exponentially more difficult. David Filo and Jerry Yang, graduate students at Stanford, created a solution to this problem by writing a computer program to index the web. They started doing this by hand and then eventually employed automated web crawlers to collect the information and organize it. They took their search engine and formed the company Yahoo!. Other search engines (Lycos, Infoseek, Magellan, Excite, etc.) joined Yahoo! as portals for finding information on the web.

Shawn Fanning, a student at Northeastern University, made extremely effective use of Internet technology by developing a small Internet application in June 1999 that forever changed the music industry. The application, known as Napster, was a simple utility to allow users to freely share digitized music files, known as MP3s, with anyone in the world using the service. Millions of users exchanged

hundreds of millions of songs without paying a single penny to the music industry. This had a dramatically negative impact on record companies, which in turn successfully sued to have Napster shut down. Yet the success of Napster demonstrated the power of the Internet as a media distribution channel. It sent a clear message to media companies that their future was inextricably linked with the Internet.

The Bubble Bursts

These technological breakthroughs created the excitement that led to significant investment in Internet-related companies. As the investment increased, these companies went public. The stocks of these companies shot through the roof. The dot-com bubble, which spanned approximately 1996 through April 2000, was defined by greed, excess, and the drive to get rich quick. A litany of tech start-up companies went public during the dot-com boom. Most of these companies had limited or poorly thought-out business plans. For example, pets.com, an online pet store, offered discounted prices and free shipping. However, free shipping for 40-pound bags of dog food proved to be financially unsustainable as the company burned through cash with minimal revenue growth. Despite these results, within weeks (and sometimes days) of going public, stock prices for many companies increased anywhere from 200% to 400%. Companies acquired other companies based on these inflated stock values. As an example, Yahoo! bought Broadcast.com, an online content delivery site, for \$6 billion in stock. Broadcast.com did not own its content, and its delivery system was rudimentary at best, but the perceived value was in providing content over the Internet; this was a prescient prediction, just not one worth \$6 billion. Other telecommunications companies poured significant money into infrastructure investments, running fiber optics and cables all around the world, betting that as the Internet grew bigger, data pipes were going to be needed. Perhaps the most visible sign of the dot-com excess was the purchase of Super Bowl ads by various dot-com companies. These companies spent tremendous amounts of money, driving the cost of 30 seconds of airtime to more than 1 million dollars. Unfortunately, the dot-com bubble burst during the first two months of 2000. The boom was over, and the future of the Internet was in question.

Web 2.0 and Beyond

In the aftermath of the colossal failure resulting from the dot-com bubble burst, a new web and Internet developed. Many of the technological innovations of the dot-com boom, while lacking good business plans, were significant. More important, the investments made in infrastructure provided a platform for a more productive Internet. Anchored by the emergence of a new and simple search engine called Google, developed by the Stanford students Larry Page and Sergey Brin, a new Internet emerged. This new Internet is commonly referred to as Web 2.0. Web 2.0 is built around simplicity and utility, eschewing the excesses of the dot-com bubble. It is marked by bidirectional interactions. Whereas the original www, now referred to as Web 1.0, was about one-directional information, where information was posted on websites for consumption, Web 2.0 engages users in creating, consuming, and interacting with the content. The two most notable examples of Web 2.0 are YouTube and Wikipedia. YouTube, created in 2005 by Steven Chen, Chad Hurley, and Jawed Karim, is a platform where anyone can upload a video to share. Not only can users share content, but other users can interact with the content by commenting, rating, or sharing the content with their friends. Wikipedia is an online encyclopedia developed by Jimmy Wales and Larry Sanger. What is the most unique, and most often criticized, feature of Wikipedia is that anybody can add/edit/delete any entry. A community of volunteers maintains the integrity and accuracy of the encyclopedia entries. The technology of Web 2.0 and increased user interaction have also led to the success of social networking. Services like Facebook, Myspace, and Twitter allow users to share all aspects of their lives with their friends and the broader digital world. What makes social networking so powerful is that users can connect with websites from a variety of different computer platforms, including cell phones. With the explosion of cell phone availability and the emergence of smart phones, users can share pictures, videos, and their thoughts easily through the various social networking sites. The ability to connect the various cellular networks to social networking websites is the result of a common and flexible Internet infrastructure. Furthermore, the improved technology of Web 2.0 has blurred the line between the underlying Internet and the web.

The Internet and the Future of Warfare

Many security analysts and pundits are predicting that the Internet will be the battleground of the future. As more and more nonmilitary systems—banks, stock markets, private industry, and core infrastructure—become connected (directly or indirectly) to the Internet, they become susceptible to attack from foreign enemies. There have been a number of highly publicized cyber incursions by Chinese hackers into U.S. business and energy systems to steal proprietary secrets. Many of these hackers have been traced back to the Chinese army. The Chinese are not alone in this endeavor, however; many other countries, including Russia, actively engage in hacking as a method of indirect warfare. The United States has developed an extensive arsenal of methods and tools for conducting web-based operations against enemies. While many of these capabilities and operations remain classified, the recently publicized Stuxnet Attack brought to light some of America's cyber capability. According to numerous sources, the United States developed Stuxnet, a computer worm designed to override software controls in industrial software, and allegedly deployed it in Iran's nuclear enrichment facilities. Rumors suggest—but neither country will confirm them—that the worm caused damage to as many as 1,000 of Iran's centrifuges, setting back their nuclear program.

The foreign cyber threat has forced the military to develop both offensive and defensive strategies for protecting the United States from cyber attack. The U.S. Air Force, the branch most associated with high technology, has been tasked with developing and implementing cyber capabilities. Initially, the air force created a dedicated Cyber Command, but in 2009, it transitioned it to the 24th Air Force and integrated it into the Air Force Space Command. To keep up with the rapid pace of technological change, the air force spends hundreds of millions of dollars with private contractors in support of its cyber duties. Also, though not publicized at this point, one has to assume that the cyber protection of the United States requires the intra-agency collaboration and resources of the National Security Agency, the Federal Bureau of Investigation, the Central Intelligence Agency, the Department of Homeland Security, and all branches of the military.

Conclusion

Where the Internet ranks in terms of the greatest inventions of all time remains to be seen. As of 2012, the Internet was largely responsible for the near collapse of the newspaper industry, and the broadcast media industry is increasingly shifting to distribution over the Internet. The cultural and social impacts of the Internet are nearly incalculable. An entire generation, commonly referred to as the millennial generation, has grown up immersed in Internet-based technology. Through use of the Internet, they have had the answer to any question at any time a mere mouse click away. It has reshaped the global economy; as the author Thomas L. Friedman argues, the world is now flat, and physical location is increasingly irrelevant as a result of the Internet. Others regard the Internet as the next big utility. If so, how will the utility be fairly distributed? How much government regulation does there need to be? Will the Internet be taxed? The Internet is not without its dark side. Internet addiction is a recognized ailment. Criminals and terrorist organizations have made extensive use of the Internet as a tool. Some countries even censor portions of the Internet. Yet the Internet's greatest impact may be its use as a battleground for future wars. The Cold War is long over, but its influence lives on in ways previously unimagined. A network conceived to survive a military attack, built with decentralization and open standards, has turned out to be the perfect platform for innovation, commerce, and, ironically, warfare.

Hugo Evans

See also RAND Corporation; Technology

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INTERPRETERS AND TRANSLATORS

Interpreters and translators have always played a critical role in history. Kings in ancient Greece had interpreters alongside them. Missionaries served as interpreters between native peoples and others. Interpreters and translators have also played a critical role in the military. From the beginnings of our country, interpreters have served as guides and negotiators with the native peoples of America, as diplomats to foreign countries, and, in the case of the Navajo code talkers during World War II, even as speakers of linguistic code. This entry discusses the duties and types of interpreters and translators in the U.S. military.

Definitions

Because translators and interpreters both work to convert words from one language (called the source language) to another (called the target language), the terms are often used interchangeably. However, there is a distinction between a translator and an interpreter.

Translators are responsible for converting the written word from one language to another, while *interpreters* are responsible for translating speech from one language to another. In the military, specialists are called on to both interpret speech and translate documents as needed. For this reason, the position in Military Occupational Specialties is listed as interpreter/translator (09L for army/2799 for Marine Corps). Regardless of whether an individual is working as a translator or an interpreter there are certain skills required.

Interpreters and translators must be fluent in two languages: the source language and the target language. Both should have familiarity with the subject

area being discussed to use and translate specialized terms correctly. Both must also have an awareness of the cultures that the languages spring from. This knowledge helps them to accurately convey the meaning of the expressions, not just the literal translation. In addition to these proficiencies, because translators work with written language, they must also possess good writing and editing skills.

Types of Interpreters

There are basically two types of interpreters: simultaneous and consecutive.

Simultaneous interpreters provide interpretation as soon as the speaker begins to talk. This requires the interpreter to listen and translate the words at the same time. In other words, the interpreter translates and keeps pace with the speaker. This requires a great deal of concentration and skill and an excellent knowledge of both languages and the subject matter. Originally, simultaneous interpretation amounted to an interpreter sitting next to his or her client and whispering in the target language. However, this was incredibly inefficient and distracting to all parties involved. This changed with the invention of the electronic simultaneous interpretation equipment.

While there is some debate as to exactly when the system for simultaneous translation was invented, its use has been documented since the 1940s. The system is designed so that interpreters are in sound-proof booths. Listeners are set up with earphones and can turn the dial to the language they wish to hear. This allows for many simultaneous interpreters to be working at the same time and many languages to be available. A good example of this type of interpretation is the system that is used in the United Nations.

In the case of *consecutive interpreters*, the interpreter does not begin talking until after the speaker has stopped speaking. This may be a pause between thoughts or longer pieces of speech and may require the interpreter to take notes. Typically, this type of interpreter will translate sentences or passages. For example, this type of interpreter may be used in situations such as speeches or lectures. However, the military also uses consecutive interpreters to conduct interviews with friendly civilians in areas of military operation.

In addition, interpreters may be specialists in certain types of interpreting. For example, they

may serve as liaison interpreters, guides, medical interpreters, or conference interpreters. Interpreters and translators are also used by the military in legal proceedings such as investigations and war crimes trials. During the Nuremberg trials, for example, testimony was provided in four languages: French, Russian, German, and English.

Interpreter Duties in the Military

Anyone who wishes to become an interpreter or translator in the military must pass a language test. The type of test given will depend on whether or not the person already speaks a foreign language. The Department of Defense has two different types of tests: (1) the Defense Language Proficiency Test, a language proficiency test given to people who already speak another language to assess their current level of proficiency in the foreign language, and (2) the Defense Language Aptitude Battery, a language aptitude test to determine an individual's ability to learn a language. Because the need for interpreters in specific languages changes with time, the Defense Language Aptitude Battery is probably given more often as the number of interpreters in any given language changes over time and interpreters are always needed to meet new language demands.

Once individuals have completed coursework at the Defense Language Institute and passed the tests, they could be assigned to different positions depending on the specific language spoken and the branch of the military.

The U.S. Army has a unique brigade, the 300th Military Intelligence Brigade, which is composed of six battalions and has interpreters and translators fluent in 19 different languages. Members of the 300th Brigade work all over the world in positions as translators, interpreters in the field, and interrogators, and in counterintelligence.

In the U.S. Navy, linguists work from submarines, ships, or bases and may serve as interpreters for navy officials or dignitaries. However, the majority of naval linguists are focused on intelligence. Naval linguists focus on translation and interpretation of communications, classified documents, and cryptography.

Working With Civilian Interpreters

While it is preferable to hire highly trained interpreters who are under contract with the military as either

soldiers or contracted civilians, this is not always possible. The military often has to rely on local civilians who serve as interpreters. This can be problematic for a number of reasons. Foremost, locals who are skilled in English may not be willing to work for the military. Reasons for this reluctance vary with the situation. For example, in World War II France, the army's rate of pay was so low that highly skilled interpreters were not interested in taking the job. In Iraq during the 2003–2011 Iraq War, working as an interpreter for the coalition forces could increase the risk of harm to the interpreter or his or her family.

In addition, local civilians may not have enough knowledge of English to communicate effectively. This can affect the quality of interpretations and the outcome of investigations. Finally, security can be a problem when working with local interpreters. Interpreters may accidentally mention things that they heard or saw while working to their friends and family. For this reason, caution should be exercised in determining the types of jobs open to the interpreter and the access the interpreter has to military posts. Access should be limited and away from areas where classified information could be accessed.

On the other hand, locals can be very useful because of their knowledge of the local people, environment, and customs. This can provide added insight into cultural components that can affect the success of the discussions. For example, in some cultures it is necessary to follow certain rituals before a discussion can begin; in others, specific topics may be taboo or only approached in specific ways. A local interpreter can help you follow the appropriate protocols.

However, choosing a local interpreter must be done with great care. Consideration must be given to characteristics like age, gender, and ethnicity as those features can influence the outcome of a conversation. For example, in many cultures elders must be respected. This could lead to a less assertive questioning of important sources. In other cultures, women cannot speak to men, or certain ethnic groups will not speak to other ethnic groups—making successful communication nearly impossible. All of these factors can influence the amount of respect, information, and truthfulness the interpreter receives. For this reason, it is critical to be well versed in the community in which the interpreter will be working.

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See also Coalition Provisional Authority; Counterintelligence; Defense Language Institute; Iraq Insurgency (2003–2011); Officer Career Fields

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INTERROGATION

The exploitation of human intelligence (HUMINT) is essential to winning on the conventional and unconventional battlefield. By questioning prisoners of war and other detainees, interrogation supports this effort through the careful collection of valuable intelligence information. The purpose

of any battlefield interrogation is to elicit the maximum amount of reliable information in the least possible amount of time. Because this process involves establishing a dynamic relationship between two (often) adversarial individuals, and because today's battlefield is increasingly fluid, interrogation or "HUMINT collection" remains both a science and an art. It requires a cadre of professional practitioners who have the necessary experience, ingenuity, and tenacity to successfully—and lawfully—interrogate subjects of intelligence interest. This entry describes the basic procedures and techniques of military interrogations through the lens of the U.S. Army, the largest and most experienced HUMINT force in the U.S. military. Particular emphasis is placed on recent wartime operations in Afghanistan and Iraq and the controversy surrounding so-called enhanced interrogation techniques.

Interrogation History, Assets, and Doctrine

The U.S. military acquired significant experience in HUMINT collection during World War II when it conducted prisoner-of-war interrogations on a mass scale. Employing linguistically and culturally competent interrogators, the U.S. Army effectively questioned German and Japanese prisoners without the use of coercion. The Joint Interrogation Center at Fort Hunt, Virginia, secretly debriefed thousands of German government officials, military officers, and scientists, pioneering many innovative interrogation and eavesdropping techniques along the way. Likewise, the experiences of the Luftwaffe interrogator Hanns-Joachim Scharff (who amicably questioned captured Allied pilots) exerted considerable influence on U.S. military practices after World War II. Many of Scharff's noncoercive, rapport-based interrogation techniques form the foundation of today's HUMINT methodology. These practices were continued in Vietnam, Grenada, Panama, and the Persian Gulf.

Although every service branch of the U.S. military has indigenous HUMINT collection assets, the battlefield resources of the army are the most operationally diverse. Officially called "human intelligence collectors," army interrogators are primarily soldiers, noncommissioned officers, and warrant officers and are supported by commissioned officers and federal civilian employees in the intelligence field.

They are responsible for interrogating prisoners of war and other detainees, debriefing civilians and friendly forces, and processing captured enemy documents and materiel. At the U.S. Army Intelligence Center at Fort Huachuca, Arizona, interrogators at all levels undergo a rigorous training program in HUMINT collection methodology, applicable U.S. and international law, the order of battle analysis, cultural awareness, and warfighting skills. Some interrogators also receive extensive foreign language training at the Defense Language Institute in Monterey, California. As a result of the Global War on Terrorism, the army's interrogation force will increase to more than 7,000 by 2013, alongside the activation of three new HUMINT collection battalions with dedicated interrogation teams.

Based on wartime experiences in Afghanistan and, later, in Iraq, army interrogators may operate as small, mobile HUMINT collection teams that canvass the battlefield with combat units. They are, however, primarily located at fixed, long-term interrogation facilities—called Joint Interrogation and Debriefing Centers—within larger military detention complexes. Interrogators may be assisted by certified army interpreters or civilian contractors who possess the necessary linguistic and cultural competence for HUMINT operations. Interrogators also work closely with military police, who process and safeguard prisoners of war and other detainees. Although they may provide information on interpersonal relationships, military police personnel are strictly forbidden to participate in or “soften up” individuals for interrogations.

The current version of the U.S. Army Field Manual on interrogation is FM 2-33.3: *Human Intelligence Collector Operations* (2006). It outlines the tactics, techniques, and procedures for conducting successful interrogations under U.S. and international law. Issued in the aftermath of the Abu Ghraib scandal, the manual incorporates many of the hard-won lessons learned from HUMINT collection in counterinsurgency operations during the Global War on Terrorism. Under these new battlefield conditions, FM 2-33.3 reaffirms the importance of rapport-based interrogation techniques. It applies the Geneva Conventions (which concern, in part, the humanitarian treatment of prisoners of war under armed conflict) to all detainees in U.S. military custody regardless of their status. The manual explicitly prohibits the use of torture, coercion,

and humiliation. With the Detainee Treatment Act of 2005 and President Barack Obama's executive order “Ensuring Lawful Interrogations” in 2009, the U.S. government effectively banned all coercive interrogation techniques. Obama's order also established FM 2-33.3 as the legally binding doctrine for the entire U.S. military and all governmental agencies, including the Central Intelligence Agency. The manual is unclassified and available for public distribution.

Interrogation Process

HUMINT collection efforts utilize two types of questioning methodologies on the battlefield: tactical questioning and doctrinally sanctioned interrogation. Tactical questioning is an expedient method of direct questioning, often used after the moment of capture, to gather intelligence information of immediate value. Interrogation, on the other hand, is a carefully orchestrated five-phase process for ensuring that the maximum amount of reliable intelligence information is—successfully, effectively, and lawfully—collected in the least possible amount of time.

The interrogation phases are planning and preparation, approach, questioning, termination, and reporting:

- During the planning and preparation phase, the interrogator reviews the detainee's file and circumstances of capture to prepare an interrogation plan.
- During the approach phase, the interrogator establishes an interpersonal relationship—based on rapport—with the detainee for the purpose of gaining cooperation.
- During the questioning phase, the interrogator systematically questions the detainee and collects information to satisfy the military's priority intelligence requirements.
- During the termination phase, the interrogator completes the questioning session and reestablishes rapport with the detainee.
- During the reporting phase, the interrogator prepares a written report on the intelligence information collected.

The approach is the most crucial phase of any interrogation, because the establishment of rapport—that is, mutual trust and respect—is absolutely

essential for obtaining credible and actionable intelligence information. Interrogators will always first employ the “direct approach,” which involves the straightforward, targeted questioning of the detainee. In U.S. military conflicts from Vietnam to the Persian Gulf, some 90% to 95% of prisoners of war and other detainees fully cooperated with interrogators under this particular method. If the direct approach is unsuccessful and the detainee remains uncooperative, interrogators are trained to use a variety of noncoercive psychological ruses, tricks, and ploys to persuade or pressure detainees into divulging intelligence information. These approaches mostly play on human emotions—love, hate, anger, fear, pride, jealousy—by exploiting a detainee’s weakened emotional state while in captivity. They are conducted under strict adherence to the established protections of the Geneva Convention with regard to the ethical treatment of prisoners of war.

Important differences exist between military interrogations and those conducted in domestic law enforcement operations. Although both procedures use psychologically influenced techniques to elicit information, their goals diverge in crucial ways: Whereas military interrogations are designed to collect reliable information for battlefield intelligence, police interrogations are undertaken to build cases that prove guilt or innocence in a criminal investigation. To these ends, military interrogations are largely framed by the Law of Land Warfare tradition, while police interrogations are governed by constitutional concerns such as the right to silence and counsel.

Interrogation in the Global War on Terrorism

The beginning of the Global War on Terrorism in 2001 posed several unique challenges for the U.S. Army’s HUMINT collection efforts. First, interrogation practices were devised for the large-scale mechanized warfare of the Cold War and not the difficult counterinsurgency and antiterrorist operations in Afghanistan and Iraq. This situation created a tension between the army’s tactical need to collect battlefield intelligence information and the more strategic efforts to identify, track, and question high-value targets for the purpose of crushing al Qaeda’s terror network. Second, considerable confusion arose regarding the legal status of Taliban and al Qaeda personnel taken captive on and off

the battlefield. The decision by President George W. Bush to declare these individuals unlawful enemy combatants—thus denying them prisoner-of-war status under the Geneva Conventions—left interrogators without the support of familiar doctrinal guidance.

These unlawful enemy combatants were relocated to the U.S. military detention facility at Guantanamo Bay, Cuba. During the initial interrogations, many detainees offered a high degree of resistance to traditional interrogation practices. In response to this development, the Bush administration authorized the use of so-called enhanced interrogation techniques. These new techniques included stress positions, sleep deprivation, sensory bombardment, religious and sexual humiliation, and the exploitation of phobias. Many of these practices were reverse-engineered from resistance-to-interrogation methodologies at the U.S. Army’s Survival, Evasion, Resistance, and Escape school. The school’s grueling training regimen introduces military personnel to a variety of coercive interrogation techniques, especially those that could be employed by enemy forces operating outside of the Geneva Conventions. These practices were designed to mentally and physically debilitate a subject to the point of utter exhaustion and submission. They were largely based on well-known Chinese and Soviet interrogation protocols, which were used to brainwash political prisoners into producing false confessions for propaganda value.

Military observers have since argued that enhanced interrogation techniques constitute physical and mental coercion and are wholly incompatible with the prohibition against torture, which has appeared in every army interrogation manual since 1956. Originally authorized for Guantanamo Bay only, many of these practices soon emigrated to military detention facilities in Afghanistan and Iraq. With the exposé of detainee abuse at the Abu Ghraib facility in Iraq in 2004, military interrogations quickly became a topic of national public concern. This and other revelations prompted a number of high-profile governmental disclosures, congressional inquiries, military investigations (e.g., the Fay and Taguba Reports), and executive orders that severely criticized—and eventually banned—the use of enhanced interrogation techniques.

Former and current interrogators continue to assert that coercion and torture not only are unlawful interrogation methods but also are highly

ineffective for HUMINT collection. According to these experts, torture produces false, misleading, and unreliable intelligence information; exposes captured U.S. personnel to greater risk of enemy abuse; and discredits the moral authority of the United States. Some controversy remains today as to whether the abuse of detainees was deliberately sanctioned—*carte blanche*—by the U.S. government or largely the result of a “few bad apples” acting on their own accord. Subsequent military investigations have tended to blame these abuses on inadequate interrogation training and the lack of clear command responsibility at detention facilities. A number of detailed memoirs by U.S. Army interrogators in Afghanistan and Iraq have also been published in the wake of Abu Ghraib, most notably Chris Mackey’s *The Interrogators*. These texts reiterated the importance of noncoercive, rapport-based interrogation techniques and the effectiveness of highly imaginative psychological ruses, tricks, and ploys for eliciting intelligence information.

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See also Abu Ghraib; al Qaeda; Defense Language Institute; Global War on Terrorism; Guantanamo Bay Prison; Intelligence, Human; Interpreters and Translators; Iraq War (2003); Police, Military; Prisoners of War; War in Afghanistan

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IRAN

Among the countries in the Middle East, Iran has one of the longest histories and strongest identities as a separate nation, with its own culture and traditions. Throughout the centuries, its leaders have shown a willingness to endure great costs to repel foreign invaders and maintain Iran’s identity. The Iranian Revolution of 1979 led to a religious dictatorship that has used its militias to crack down on internal dissent, in recent years most visibly during protests of the disputed presidential election of 2009. Concerns regarding Iran’s nuclear program has led to the intensification of Western economic sanctions, which have had a debilitating effect on Iran’s economy. They have also led to threats by Israel to launch a preemptive airstrike on Iran.

Historical Background

Throughout most of its history, the geographical area that is modern Iran was known as Persia. It has existed as a national society with a distinct national identity and culture for approximately 5,000 years. In the 7th century, Arab armies marching in the name of Islam conquered a vast area from Central Asia to North Africa, including Persia. However, although the Persians adopted Islam, they refused to abandon their national identity. Persia never adopted Arabic as its national language, although it adapted the Arabic script to the Persian language. By the 9th century, Persia had regained its

independence. Islam was the state religion, but the country was once again an independent state ruled by Persian rulers.

By the 16th century, Iran had once again become an empire, under the Safavid dynasty, which successfully repelled attempts by the Ottoman Empire to add it to its list of conquests. Successive dynasties were unable to prevent growing incursions into Iranian territories by the ascending European powers, especially Imperial Russia, which in a series of wars occupied a large area of Persian territory. In the 18th century, an enfeebled Persia got caught up in the “great game” between Russia and Britain, losing more northern territory to Russia and its holdings in modern-day Afghanistan to Britain. The last dynasty to rule Iran, the Pahlavis, took power in 1925, when Reza Pahlavi, an officer in the Iranian army, mounted a successful coup against the Qajar dynasty. He renamed the country “Iran,” and instituted a vast and ambitious program of rapid modernization. He got the foreign aid and expertise he needed primarily from Germany, the one European power with which Iran had never had an adversarial relationship, since it had never been part of the great game between Russia and Britain. In 1941, Russia and Britain invaded the country, forcing the shah to abdicate in favor of his son Mohammed Reza Pahlavi, who agreed to allow British technical experts to replace the Germans and to allow Iran’s railroads to be used to ferry lend-lease supplies to the Soviet Armies fighting the Wehrmacht.

In 1951, the Iranian prime minister, Ali Razmara, was assassinated. The parliament elected Mohammad Mossadegh, whose appointment was ratified by the shah. Unwilling to accept a British diktat, Mossadegh nationalized the oil industry. President Dwight D. Eisenhower supported the British prime minister, Winston Churchill, in his efforts to force the Iranian authorities to accept cut-rate royalties from BP by embargoing Iranian oil. When this did not succeed in deterring Mossadegh, the United States and Britain helped engineer a coup that overthrew Mossadegh and allowed the shah to rule the country as an absolute monarch. This was the first time the United States had overthrown an elected, civilian government.

The shah initiated a series of far-reaching economic and social reforms, including land redistribution that

benefited the peasantry; he increased industrialization and established a degree of secularization that did not exist in any other predominantly Muslim country, with the possible exception of Mustafa Kemal Ataturk’s Turkey. However, these moves alienated the country’s religious leadership and the conservative merchant class, the so-called Bazaaris. At the same time, corruption and the shah’s growing despotism alienated members of the growing educated middle class, who should have been his biggest supporters. The ruthlessness with which he crushed any political dissent, especially the notorious culture of torture that characterized the feared SAVAK (the secret police), made him a hated figure among vast swaths of Iranian society.

Ayatollah Ruhollah Khomeini assumed the leadership of the opposition. In 1964, after having been under arrest for 18 months, he was exiled. After living briefly in Turkey and Iraq, he settled in Paris, from where he continued to build the opposition to the shah in Iran.

The Islamic Revolution

In January 1978, after more than a decade in exile, Khomeini felt that the time was ripe for him to strike. On his instructions, waves of major demonstrations and strikes against the shah erupted. By January 1979, the country and its economy had become totally paralyzed by strikes. President Jimmy Carter, who regarded the shah as a cruel and ruthless despot undeserving of American support, pressured him not to order his security forces to mow down the demonstrators. Dissent morphed into rebellion, the shah abdicated and fled, and Khomeini returned from exile. Three weeks later, the Pahlavi Dynasty collapsed when Iran’s military declared itself “neutral” after guerrillas and rebel troops overwhelmed troops loyal to the shah in armed street fighting.

By the end of 1979, a theocratic constitution had been approved, with Khomeini declared the supreme leader. Shortly afterward, the clerical establishment turned with a vengeance on the nationalists and Marxists who had joined forces with them to overthrow the shah, executing thousands.

Immediately following the revolution, relations with the United States, which had been Iran’s main ally, rapidly deteriorated. On November 4, 1979,

Iranian students occupied the American embassy in Teheran. U.S. diplomats were held hostage for more than 400 days, before being released in January 1981. The United States and Iran have not maintained formal diplomatic relations since this incident.

Iran-Iraq War

In 1975, Iraq was forced to sign a treaty in which Iran agreed to cease supporting Kurdish rebels fighting for independence from Iraq in exchange for Saddam Hussein's agreeing to a disadvantageous redefining of the border with Iran along Shatt al Arab River. Following the Iranian Revolution, Saddam saw an opportunity to regain this lost territory and inflict a punishing blow on Iraq's neighboring adversary. Saddam Hussein invaded Iran in September 1980, capitalizing on the weakness of the Iranian armed forces in the wake of the revolution. The powerful Iranian military had lost much of its trained officer corps, because its members had been predominantly royalist and were in exile, in prison, or dead.

Saddam's initial aim was to force the ayatollahs to accept a humiliating peace treaty that would restore the territories Iran had acquired from Iraq and to annex the oil-rich Iranian province of Khuzestan, which has a predominantly ethnic Arab (not Persian) population. His ultimate strategic goal was to weaken the regime to the point where it could be overthrown.

It is important to understand the fear and loathing with which Arab nationalist leaders regarded the very idea of an Islamic Republic. Arab nationalism was a new phenomenon. In most of the Arab states colonizers created, a minority was able to grab control: in Lebanon the Christians, in Jordan the Bedouins, in Syria the Alawis, and in Iraq the Sunnis. These regimes, unpopular with the majority of the nations' citizens, tried to legitimize themselves by encouraging and fostering a sense of nationalism and a national society. This came at the expense of Islam, the historical anchor of Arab society. Until the 20th century, *Arab* had been primarily a cultural and linguistic term, not one that referred to national identity. In all the Arab countries in which secular nationalist movements gained power, the Muslim Brotherhood and other Islamic movements were regarded as a major threat and ruthlessly persecuted.

No country was more threatened by the Iranian Shiite Islamic Republic than Iraq, which was ruled by the ultrasecular and nationalist Baath party, dominated by the minority Sunnis. Iraq was by far the most fractured of all the Arab countries, with probably the least cohesive society of any Arab country. The fact that the Sunni minority ruled Iraq's predominantly Shiite population made things even worse. Saddam hoped that a quick victory over Iran would enhance the legitimacy of his regime among his own people and other Arab states and remove a potent threat to him and every other secular-nationalist Arab regime.

Saddam miscalculated. The clerical establishment headed by Khomeini was able to galvanize public support for the regime following Saddam Hussein's decision to invade. Iranian society may have begun growing weary of their stifling theocracy, but as a mature, proud, and cohesive society, they rallied around it to meet the threat posed by the invader. Although the Iranian military was in dire straits, short of weapons and trained troops and commanders, it had overwhelming numbers of troops, outnumbering Iraq 5:1. By 1982, the Iranians had succeeded in blunting the Iraqi advance, and a stalemate ensued. Gradually, they began to slowly drive the Iraqis back in a grinding war of attrition in which they lost almost 1 million troops, more than 10% of them the victims of Iraqi chemical warfare. In 1988, the mutually exhausted countries agreed to a cease-fire.

Following the end of the war in 1988, the Islamic Republic faced a political crisis when Khomeini died in 1989. Akbar Rafsanjani, a wealthy and prominent member of the conservative merchant class, with a reputation as a can-do businessman and technocrat, was elected president, and he initiated a series of programs to expedite economic recovery from the war. In 1997, Rafsanjani was succeeded by Mohammed Khatami. In 2005, Khatami's successor, Mahmoud Ahmadinejad, took office; he won a second term that ends in 2013.

Iranian Armed Forces

Over the past three decades, the Iranian military has undergone a complete transformation. From 1921 until 1979, it was a Western-based military, using exclusively Western-made weapons systems and trained according to Anglo-American doctrines. The

Islamic Revolution and the resulting deterioration of relations with the West in general and the United States in particular forced the military to reinvent itself. It currently purchases most of its equipment from Russia and China and is increasingly self-sufficient, thanks to the rapidly growing capabilities of the domestic defense industry.

The Iranian armed forces consist of the Iranian military and the Pasdaran. The Iranian military is made up of the Islamic Republic of Iran army, the Islamic Republic of Iran navy, and the Islamic Republic of Iran air force. The Pasdaran, also known as the Guardians of the Islamic Revolution or Iranian Revolutionary Guard Corps, constitute a separate military structure created by the ruling party. Unlike the regular military, their sole mandate and loyalty are to the regime, not the state or society at large. The corps includes the Basij militia and has its own ground forces, air force, navy, intelligence, and special operations units.

The Iranian army has a total strength of 815,000, with 465,000 serving as regulars. Conscription of young males provides a significant source of the army's manpower. The AK 47 (Kalashnikov) is the standard infantry weapon. The Iranian military uses original, Soviet-made AKs; the Type 56, a Chinese knockoff; and, increasingly, a locally manufactured version (copied from the Chinese), the KL7. Other infantry assault rifles and machine guns in common use include the MP5, the locally manufactured version of the Heckler & Koch Tondar submachine gun; MG3 and PKM machine guns; and the SVD sniper rifle. Most of these weapons are produced locally under license from companies that own the patent/weapon system.

The Iranian army has approximately 15,000 armored personnel carriers—mostly Russian-made BMTs and locally made BMRs. Some U.S. M113s are still serviceable. In terms of tanks, the army still possesses a number of American-made M47/78 and Pattons, and British-made Chieftains that were acquired under the shah. More recent additions include the Russian-made T-72 and T-62 and the North Korean Chonma Ho, which is an upgraded version of the Soviet-era T-55.

Iranian ground forces have several thousand tactical missiles, mostly various models of the Fajar missile, a locally made missile based on the Soviet-era Katyushas, Grads, and Frogs. The range of these weapons can be anywhere from 25 to 75 kilometers.

Iranian ground forces operate their own helicopter forces, independently of the air force. These include 80 U.S.-made Sea Cobra attack helicopters and more than 200 transport helicopters, the most common one being the Bell 205.

The Iranian air force comprises 52,000 men and is generally acknowledged as the weakest branch of the armed forces. During the Iran-Iraq War, the Iranian air force possessed a fleet of American aircraft (e.g., F-4 Phantoms, F-5s, and F-14 Tomcats), which proved ineffectual due to maintenance problems. The air force has 24 F-1 Mirage and 40 MiGs in service. Since 1979, the Iranian government has sought to diversify the fleet by acquiring F7Ms—a Chinese knockoff of the MiG 21—and has 17 in service. The air force has also received between half a squadron and a squadron of the locally produced Saeq and Azarkash multirole/ground attack aircraft. The air force operates approximately 50 transport helicopters, 10–15 air refueling aircraft, a motley fleet of approximately 100–120 transport aircraft, and 5 P3 maritime patrol aircraft.

The country's air defense system is a mixture of locally upgraded missile batteries based on the U.S. Hawk and more modern Russian and other East European equipment. Iran claims to have succeeded in deploying two Belarus or Ukrainian-supplied SS 300 anti-aircraft batteries, purchased on the international black market; these claims are yet to be verified.

The Islamic Republic of Iran navy is the smallest of the Iranian military's services, with a total of 28,000 officers and men. Prior to the 1979 revolution, the navy had been in the early stages of building a force of U.S. surface ships capable of projecting Iranian naval power in the Indian Ocean. The Islamic revolution ended this program. Realizing that it cannot hope to match U.S. sea power, the Iranian navy's task is to protect Iran's ports and coastal waters. Its sole offensive mission is to block the Strait of Hormuz, choking much of the world's oil supplies, which pass through the narrow strait. Its home port is Bandar Abbas.

The navy does possess a fleet of submarines that includes 3 *Kilo* class (Russian), 4 *Yugo* class (North Korean), and 1 *Nahang* and 11 *Ghadir* class, both produced domestically. Three American-built destroyers remain in the fleet but are not currently operational. The navy has three British-built *Alvand*-class frigates and two domestically produced

Moudge class. The navy also possesses a significant number of smaller craft, including 24 missile boats. The Chinese-built *Houdong* class weighs 171 tons, has a top speed of 35 knots, and is armed with 4 C802 SSMs; and the Iranian-built *Sina* class weighs 275 tons, with a top speed of 36 knots, and is armed with 4 C802 SSMs.

Pasdaran (Islamic Revolutionary Guards)

As mentioned above, the ultimate loyalty of the Pasdaran is to the regime, not the state. It has a separate command structure and is ultimately answerable to the supreme leader, not the chief of staff or the Ministry of Defense. It has approximately 120,000 fighters, all professionals. The Pasdaran is considered to be better trained and equipped than the regular army. Its doctrine is to serve as a rapid response force, capable of rapid deployment in the event of the regime being threatened internally or externally, or to intervene on behalf of Iran's regional allies, primarily Syria, Hezbollah, and Hamas. It has its own air force and navy, and a large special operations (Quds) unit. This 15,000-strong special operations unit has been deployed in the Balkans, Lebanon, Latin America, the Far East, and Africa to train and equip pro-Islamic, anti-Western forces.

The Pasdaran controls Iran's clandestine nuclear program and its strategic surface-to-surface missile force, the country's main long-distance strategic offensive arm. This force's most potent weapons are its 18 mobile, 3,200- to 4,000-kilometer-range Musudan ballistic missiles, based on the Soviet R27 Zyb. The Pasdaran's arsenal also includes the Fajr-3, a 2,000-kilometer-range multiple independent reentry vehicle (MIRV) ballistic missile. It is probable that this name has been given to MIRVed versions of several Iranian missiles with similar range and capabilities, including the Shahab 3, a 2,000-kilometer intermediate-range ballistic missile. Other nuclear-capable missile systems include the Ghadr 110, a 2,000-kilometer-range missile; the Ashoura, a solid-fuel version of the Shahab, developed in cooperation with Pakistan; and the Sajjil, an improved version of the Ashoura, with a lower set-up time. Other improvements to the Sajjil include a better navigation system, a better targeting system, more payload, longer range, faster lift-off, longer storage time, quicker launch, and lower detection possibilities.

The Pasdaran's shorter range missiles and rockets include AS-15 Kent Soviet-era cruise missiles; the Nasr 1, an Iranian-made short-range antishipping cruise missile; the Zelzal, an Iranian-made heavy-artillery rocket based on the Soviet Frog, capable of delivering a 600-kilogram warhead 200 kilometers; and the Fateh-110, an Iranian-built (based on the Chinese DF 11A) single-stage, solid-propellant, surface-to-surface missile with at least a 200-kilometer range, capable of carrying a nuclear warhead.

The Basij constitute a 400,000-strong militia. It acts as the regime's storm troopers—shock troops to quell civil unrest. It is under Pasdaran command. The Basij was founded in 1980 to recruit hundreds of thousands of untrained youth to fight in the Iran-Iraq War, most of whom died in suicidal human-wave attacks designed to clear the way for the more professional forces behind them. After the war, the Basij was reorganized as a militia to enforce Islamic dress codes and other religious laws and to be ready to intervene on the streets in any case of protest or dissent against the regime. The Basij was instrumental in crushing the postelection protests in 2009.

Most Basijis are part-timers. They receive some military training and are required to be called up on short notice. In case of major disturbances, a reservoir of up to 1 million reservists can be called on. The Basij has also developed major economic interests and owns a string of companies involved in almost every aspect of Iranian economic life, a model adopted from the Chinese army.

Iran's Clandestine Nuclear Program

Iran began to develop its nuclear program under Shah Mohammad Reza Pahlavi. The program was purely civilian in nature. It was suspended after the Islamic Revolution but was restored shortly thereafter. Until 1988, it remained primarily civilian in scope, since Khomeini, who abhorred the idea of nuclear weapons, had issued a fatwa against them. After Khomeini's death, the Pasdaran high command convinced the new supreme leader that Iran needed nuclear weapons to ensure the regime's survival, following the North Korean example. A clandestine program, designed to give Iran nuclear weapons capability, was implemented.

On becoming president, Ahmadinejad expedited this program. Nuclear facilities were dispersed all over Iran to prevent an Israeli attempt to destroy

the facilities with an attack similar to the one Israel launched on the Osirak nuclear reactor in Iraq in 1981. To further inhibit an attack, the facilities were all built deep underground. Despite the hardening of these facilities, they have not been impervious to attack. Reliable reports indicate that in the early 2010s, the American and Israeli intelligence services were able to plant a virus into the computer systems controlling the centrifuges in a key enrichment facility, destroying a number of them. Iran has sought to minimize the damage caused by this and other cyber attacks.

Concern over whether Iran has the capacity to build nuclear weapons has promoted an increasingly effective effort to impose sanctions by the United States and the United Nations. Economic sanctions against Iran were first implemented by the United States in response to the Islamic Revolution of 1979, but they were considerably strengthened in the 1990s in response to Iran's support for international terrorism and in the 2000s in response to Iran's clandestine nuclear program. Essentially, U.S. sanctions ban any investment or trade with the Iranian regime by an American citizen or company, with only limited exemptions for items such as food and medicine. The United Nations first implemented sanctions under Security Council Resolution 1737 (2006) and reaffirmed them with Resolutions 1747 (2007), 1803 (2008), and 1929 (2010). These sanctions are weaker than those imposed by the United States and ban countries from supporting Iran's nuclear enrichment system as well as from selling major weapons systems to this nation.

These sanctions have cut Iranian revenues from petroleum exports as well as isolated it from much of the international financial system. By 2012, they led to a dramatic depreciation in the Iranian national currency, making it increasingly difficult for Iran to pay for vitally needed imports. Although the United States does not purchase Iranian oil, a number of nations have been unable to end their dependence on oil from this nation, most notably Japan.

Clashes have publicly emerged between the United States and the State of Israel regarding how to respond to the current nuclear program and the wisdom of launching a preemptive military strike to inhibit Iran's nuclear capability. At least publicly, Israeli leaders have called for such action to forestall even the possibility of Iran acquiring nuclear weapons. Under President Barack Obama, the United

States has not only sought a diplomatic solution but also moved to intensify sanctions against the Iranian regime.

Jonathan Ariel

See also Iran-Contra Scandal; Iraq; Middle East Conflict

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IRAN-CONTRA SCANDAL

The Iran-Contra scandal came to light in November 1986, when it was revealed that the National Security Council (NSC) and Central Intelligence Agency (CIA) had undertaken secret arms sales to Iran. The profits from the sale of American weapons were funneled to rebel Contra forces in Nicaragua. Officially, the United States was an active partner in a worldwide weapons embargo on the Islamic Republic of Iran. Additionally, several acts of Congress prohibited U.S. support of the Nicaraguan Contras.

Iran: The Problem

Iran's radical clerical regime had a direct hand in a series of anti-American actions that began in November 1979, when Iranian students and militants stormed the U.S. embassy in Tehran and captured 52 American diplomatic personnel. Iranians held these Americans hostage for 444 days, before releasing them in January 1981.

Two years later, Iranian-backed forces attacked American interests in Lebanon. In April 1983, with money and direction from senior Iranian officials, Hezbollah orchestrated a suicide bombing of the

U.S. embassy in Beirut. A truck full of explosives detonated directly under the CIA's embassy-based offices, wiping out many of America's intelligence assets in the region and killing 63 personnel. In October 1983, Hezbollah blew up a U.S. Marine barracks in Lebanon, killing 241 Americans. In March 1984, Hezbollah captured America's CIA station chief in Lebanon, William Buckley. Over the course of the next 15 months, Hezbollah tortured Buckley and sent the gruesome videotapes of Buckley's long agony to the CIA. Iran also backed a series of kidnappings of Westerners in Lebanon during the course of the mid-1980s.

Given the death and mayhem visited on American interests by Iran, why, beginning in 1984, did the White House make a series of overtures to Iran?

The answer is twofold. First, President Ronald Reagan was genuinely moved by the plight of Western hostages held by Iran's allies in Lebanon. Second, the president was persuaded that Iran could be reenlisted as a Cold War ally. U.S. actions, however—the secret transfer of 2004 TOW anti-tank missiles and 18 airborne HAWK missiles—contradicted an ongoing State Department campaign to embargo transfers of arms to Iran. The arms transfers were also at odds with stated American policy. At a news conference in June 1985, Reagan declared, “America will never make concessions to terrorists. . . . Once we head down that path there would be no end . . . to the bloody ransom all civilized nations must pay.”

The transfer of arms to Iran also seemed to contradict ongoing American support for Iraq. When weapons sales to Iran began, more than 60 American officers were in Baghdad advising Iraq on how to prosecute a war Saddam Hussein had begun with Iran in early 1980.

Elements of the arms transfers to Iran were the stuff of dark comedy. High-level Americans appeared in Tehran bearing gifts, including a chocolate cake baked in the shape of a key (as in the key to good relations). Americans also offered the Iranians a Bible bearing Reagan's personal signature. Americans secretly flew to Tehran in transports laden with weapons, accompanied by a coterie of high-level Israeli intelligence officers. Three American hostages were released before this arrangement became public.

In early November 1986, details of the weapons transfers were printed on broadsheets and distributed by pro-Iranian agents in Lebanon. Oddly,

weeks after the revelations, parts of the plan lurched along. The State Department—long the leader of attempts to isolate Iran—appeared grievously compromised. On November 16, 1986, Secretary of State George Shultz confessed to an incredulous interviewer on *Face the Nation* that he could not speak with authority about U.S. policies toward Iran since he was unsure what they were.

With Shultz's statement, the president was forced to end NSC- and CIA-backed activities in Iran. The heads of the NSC and CIA soon resigned. Other high-level resignations throughout the national security community soon followed.

The Law, the President, and the Contras

The diversion of monies from the sale of American weapons to Iran was consistent with the president's repeated desire—as a report to Congress later put it—“to take action unilaterally to provide assistance” to the Contras and to “confront the Congress on the constitutional question of who controls foreign policy.” Ronald Reagan came into office determined to take a hard line against the Soviet Union and had little tolerance for the Sandinista regime of Daniel Ortega, which had come to power in Nicaragua in 1979. The Reagan administration immediately cut off foreign aid to the Sandinista regime and condemned the regime for its links to communist Cuba. Reagan ordered the CIA to foster the rise of an opposition movement—the Contras—that engaged in armed struggle against the Sandinistas.

Contra aid was the most problematic. In January and February 1984, the CIA secretly mined Nicaraguan harbors. Ten ships, six belonging to U.S. allies, were damaged. Congress had not been informed. Republican Barry Goldwater wrote CIA director William J. Casey a letter stating that he was “pissed off” that an “act of war” had been committed by the CIA without congressional consultation. Tired of reports that the Contras had involved themselves in drug smuggling, human rights abuses, and thuggish havoc, Congress cut off U.S. funding in a law signed by the president in late 1984.

But the law did not inhibit assistance from U.S. allies. Taiwan, Chile, Guatemala, El Salvador, and Honduras contributed weapons, money, and logistical support to the “Enterprise,” as the operation to help the Contras became known. The Sultan of Brunei gave money. The Taiwanese and Koreans anted up. The Saudis contributed. The Israelis ran

a huge operation supplying arms to the Contras. Some of the “private” Contra supply support teams were abetted by Panama’s General Manuel Noriega. In getting support to the Contras, some funds and payoffs seem to have involved illegal drugs. Nearly all of the Contra’s supply efforts appear to have been orchestrated by the CIA.

The Investigation

The revelation in November 1986 of U.S. arms sales to Iran and the diversion of those profits to the Contras led to immediate calls for a special prosecutor and congressional investigations. Lawrence Walsh served as special prosecutor, independent of the Department of Justice; a House-Senate investigative committee was impaneled in 1987. Senator Daniel Inouye served as chair and Senator Warren Rudman as vice chair.

Politically, congressional Democrats focused much of the scandal on the funding of the Contras, which many argued was a clear violation of statutory law. Surprisingly, less attention was paid to the dubious decision to sell arms to a regime that had humiliated the United States during the hostage crisis of 1979–1981. Moreover, in the same period, the United States was providing substantial aid to the Iraqi regime in its war with Iran.

The Iran-Contra scandal raised a fierce debate over the constitutional role of the president in shaping foreign policy and as commander in chief. The Reagan administration and its allies insisted that the president had the inherent right under the Constitution to encourage other countries to support the Contras despite congressional prohibitions on spending U.S. governmental funds to assist them. Civil-military issues were also raised due to the fact that key members of the administration were current or former officers of the armed forces. National Security Advisor Robert McFarlane was a retired Marine Corps lieutenant colonel, and his successor, John Poindexter, was a U.S. Navy rear admiral. A Marine Corps officer detailed to the NSC staff, Colonel Oliver North played an instrumental role in orchestrating the arms sales and diverting the funds.

Politically, the public hearings backfired on congressional critics of the Reagan administration. North offered a masterful defense of his actions, arguing that those actions served the national interest and that he was essentially following the orders of his superiors. The hearings made North a cult

hero in many circles and launched him on a successful career in the media. Vice Admiral Poindexter accepted responsibility for the Iran-Contra scandal and absolved Reagan of any personal responsibility. If the initial testimony of Reagan’s NSC advisor was accurate, Poindexter, in particular, calculated what Reagan really would have done if he had been informed and not constrained by the law.

How Reagan could condone actions so contradictory to his own publicly stated positions puzzled observers. Later, a number of the president’s aides explained that Reagan forgot what U.S. policy was, did not know what was going on, or did not understand what his administration was doing. The president’s chief of staff, Donald T. Regan, blamed it on the president’s NSC staff. NSC staffers had told the president so many cover stories that, according to Regan, it “sort of confused the presidential mind.” Reagan bristled at suggestions that he was not in charge, however, and the Iran-Contra scandal contributed to his decision to fire Regan as chief of staff.

Investigations by a panel appointed by the president, the special congressional panel, and the special prosecutor never took the president to task for anything more than not understanding that helping the Contras was “incompatible” with the law (as the independent prosecutor put it in his long-awaited 1992 report). Moreover, the decision to grant several officials immunity in return for their testimony made it difficult to secure convictions in criminal court.

In the end, 14 people were charged with criminal offenses in the Iran-Contra affair. Eleven were convicted, but two convictions were overturned on appeal. Only one official served time in prison—Thomas G. Clines—and that was for not reporting to the Internal Revenue Service income he derived from abetting the arms sales to Iran. President George H. W. Bush pardoned six officials (Elliott Abrams, Alan D. Fiers Jr., Clair E. George, Robert C. McFarlane, Duane R. Clarridge, and Caspar Weinberger). One case was dismissed when the Bush administration refused to declassify information necessary for trial. The rest were ordered to pay a fine, perform community service, or serve probation.

Iran-Contra and Executive Power

The Iran-Contra affair shaped the views on presidential power of members of the administration of President George W. Bush. In 2005, in response to

a reporter's question about his views on presidential power, Bush's vice president, Dick Cheney, tried to put administration policies in context and commented,

Nobody remembers it now, but you should take a look at the minority [position] . . . as reflected in the Iran-Contra Report. . . . [It is] a robust view of the President's prerogatives with respect to the conduct of especially foreign policy and national security matters.

The House 1987 minority investigative report said that the great executive "mistake" in the Iran-Contra matter was Reagan's "less-than-robust defense" of his inherent powers. The minority House report specifically cited President Reagan's failure to exert executive privilege in the face of Congress's investigation. This view was controversial when it was asserted in 1987, and no consensus has emerged on this issue.

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See also Constitution, U.S.; Iran; Iraq; Nicaragua Intervention (1920s); President as Commander in Chief

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IRAQ

Iraq (from *Eraq*, an ancient Semitic word for lowlands) is the Arabic term for the area known in the West as Mesopotamia (the land between the rivers). It was the existence of these two rivers (Euphrates and Tigris) that enabled what would otherwise have been barren desert to become one of the cradles of civilization. This entry briefly reviews the history of Iraq and its evolution as a modern state.

Historical Background

By 4000 BCE, farming was already widespread, and by 3000 BCE, Sumer, the first of several empires that were to control the area, had developed. Between 3000 BCE and 500 BCE, several empires, mostly Semitic states, ruled the area. The best known of these are Babylon and Assyria.

In 530 BCE, Babylon was defeated by the Persians, who incorporated Mesopotamia into their empire, bringing to an end the age of Semitic ascendancy

in the region. Following the defeat of the Persian Empire by Alexander the Great, Mesopotamia came under Hellenistic rule for two centuries. The Persian Parthian dynasty conquered Mesopotamia around 150 BCE, and by 150 CE, Mesopotamia was firmly under Parthian control and remained so until the Islamic conquest in the 7th century CE.

In 750 CE, the Abbasids, in the name of Shiite Islam, overthrew the Sunni Umayyad dynasty. Their claim to legitimacy was that they were direct descendants of Mohammed and thereby had the right to rule (the Umayyad family, although an old Arab family, had no genetic link to Mohammed).

Shortly after their success, the Abbasids embraced Sunni Islam and eliminated those of Mohammed's descendants whom they could not directly link to their branch of the family. This created an intense feeling of betrayal among the Shiites, in whose name the Abbasids had overthrown the Umayyads, intensifying the rift between the Sunnis and Shiites in Iraq. For five centuries, the Abbasid Caliphate ruled from Baghdad. In the 13th century, the caliphate was conquered by Hulagu Khan, Genghis Khan's grandson. In 1517, Mesopotamia formally became a province of the Ottoman Empire, which fought a series of border wars with Persia during the 17th and 18th centuries over control of the area.

Modern Iraq

In 1918, Mesopotamia came under British imperialist rule, following the defeat and dismemberment of the Ottoman Empire. In 1932, facing a growing insurrection, the British ostensibly granted Iraq its independence, installing Feisal as King Feisal the First. A Sunni Arab, Feisal ensured that the new country would be dominated by Sunni Arabs, despite the fact that they were the smallest of the three major ethnic groups. The Shiites (the largest ethnic group) and the Kurds (Sunni Muslims but not Arabs) were politically and economically marginalized. In 1958, a group of officers, inspired by Egypt's Free Officers Movement, mounted a coup, and Iraq became a republic.

Baath Rule

The Baath party was founded in Syria in 1947 by a group of secular socialist intellectuals, several of whom were from the minority Christian and Alawi groups. In 1963, it succeeded in mounting coups in

both Syria and Iraq. Although a Pan-Arab movement, the party gradually adopted a more country-specific nationalism.

The main threat to the Baath regime came from the Kurds, who were the majority group in northern Iraq. In 1960, the Kurds, seeing their demands for regional autonomy ignored, rebelled against the Iraqi regime and by the late 1960s had achieved a de facto though unrecognized autonomy.

In 1968, the Baath party regained control of Iraq and renewed the war against the Kurds. The Kurds, supported by the United States and Israel, which supplied them via their mutual ally Iran, were able to hold their own. In 1975, Saddam Hussein, who had emerged victorious from an internecine power struggle within the Baath party to become the sole ruler of Iraq, negotiated a deal with Shah Mohammad Reza Pahlavi of Iran, agreeing to Iranian demands for border rectifications along the Shatt al Arab River in return for Iran ceasing to supply the Kurds. The Kurdish resistance collapsed, and over the next 10 years approximately 100,000 Kurds were killed and more than 200,000 were arrested and/or forcibly relocated to reduce their presence in and around Mosul and Kirkuk.

Buoyed by his success against the Kurds, the Iraqi leader sought to reestablish Iraq as the pre-eminent Arab power, a status it had not enjoyed since Baghdad's Medieval Golden Age. In 1977, he embarked on a clandestine nuclear arms program, which ended when Israel bombed the Osirak reactor in 1981.

Iran-Iraq War

In 1979, Ayatollah Ruhollah Khomeini toppled the Shah of Iran. Iran was no longer a pro-Western kingdom but a radical, anti-American Islamic republic. Relations with the United States, which had been Iran's main weapons provider, were soon ruptured, leaving the Iranian armed forces significantly weakened as the United States ceased all supplies of arms and spare parts to Iran. In addition, Khomeini purged the officer corps, which was primarily secular and pro-Western, which he did not trust, and which he feared might launch a coup. Thousands of senior and midranking officers were either executed or purged and had to flee the country, further weakening the Iranian armed forces, especially its air force.

Saddam Hussein understood immediately that the Iranian revolution posed a major threat to Iraq, which had been under the firm control of its Sunni minority, which had marginalized, exploited, and oppressed the country's Shiite population, its largest ethnic group. The idea of a Shiite Islamic republic actively pursuing a Shiite resurgence on his border was anathema to Saddam Hussein and the entire Iraqi Sunni establishment.

Deciding that his best opportunity to bring down the Islamic republic was while its armed forces had not yet recovered from the purge and the loss of American supplies, Saddam issued Iran an ultimatum on September 17, 1980, demanding territorial concessions. Five days later, his forces invaded Iran. Iraq hoped to exploit Iran's military weakness to gain full control of the Shatt al Arab (Arvand) River, acquire the three islands of Abu Musa and the Greater and Lesser Tumbs, annex the predominantly Arab Khuzestan (Arabistan) province, and force Iran to sign a humiliating peace treaty that would facilitate the fall of the Islamic regime.

Initially, it seemed that Saddam's plans would succeed. Caught by surprise, the disorganized and still weakened Iranian forces retreated before the superior Iraqi formations. The Iranian air force, short of trained pilots and operational aircraft, ceded air superiority to the Iraqis.

However, despite the poor state of its armed forces, Iran had two strategic advantages: (1) its large size (at 640,000 square miles, it is approximately 50% larger than Iraq) and (2) its population, which was more than thrice the size of Iraq's (approximately 70 million compared with Iraq's 20 million). In addition, its mountainous terrain enabled the defending forces to neutralize Iraq's superiority.

Within a few months, what had looked like an Iraqi cakewalk became a morass. Like the USSR fighting Germany in 1941, Iran traded space for the time it needed to build a defensive network of trenches and minefields capable of blunting the Iraqi advance. In addition, Iran used human-wave tactics to overrun Iraqi forces through sheer weight of numbers. The Iraqi forces lacked the logistical capabilities required to successfully invade a country as large and as rugged as Iran. Within 6 months, the Iraqi invasion had stalled, and by the end of 1981, the morale of the Iraqi forces had plummeted, enabling Iran to take the initiative.

In March 1982, Iran launched a major offensive. By June, the Iraqi forces had withdrawn from Iranian

territory, and Saddam asked the USSR to broker a cease-fire. Khomeini, encouraged by his military victories, refused, pledging not to end the war until the secular Baath regime had been eliminated and Iraq was ruled by the Shiite majority. In July 1982, Iranian forces crossed the border into Iraq.

Within a few weeks, the Iranians discovered that attacking was a far more difficult and demanding task than defending. For more than 6 years, a bloody stalemate ensued, as the Iranian forces got bogged down before Iraqi defenses. The Iraqi forces showed much higher morale defending their country than they had when invading Iran, and now they enjoyed the logistical advantages of fighting on home ground.

The Iranians tried to use the human-wave tactics to overcome the Iraqi defenders but were repulsed by the Iraqi forces. During this stage of the war, the Iraqi forces resorted to major use of chemical warfare to break the Iranian human tidal waves assaulting their positions. Both sides sought to break the stalemate by attacking each others' major cities and economic targets but were unable to do so. In August 1988, both sides, having mutually exhausted each other, accepted a UN-brokered cease-fire, effectively ending the war.

Persian Gulf War

The end of the war found Iraq in dire economic straits. By the end of 1982, Iraq faced bankruptcy. The stalemated war had severely affected its oil exports, the country's main source of revenue. Much of the country's infrastructure had been destroyed, and the defense budget had ballooned. In 1979, the Iraqi armed forces numbered approximately 200,000; by the end of the war, it could field almost half a million troops.

Saddam Hussein was saved by his oil-rich Sunni neighbors Kuwait, Saudi Arabia, and the United Arab Emirates, which provided loans and grants to keep the Iraqi economy afloat and enable it to significantly increase military spending. These countries, all conservative monarchies, had no love for the revolutionary secular Baath party that ruled Iraq. But as much as they disliked Iraq, they feared and despised Shiite Iran much more.

After the war, both Saudi Arabia and Kuwait started pressuring Saddam to repay the war debts he owed them. Saddam refused, claiming that he had been protecting the interests of the entire Arab-Sunni

world and that the loans should become grants as the two countries' contribution toward keeping a dangerous foe of the entire Sunni world at bay.

Saddam held a particular grudge against Kuwait. He demanded that Kuwait write off Iraqi war debts and accused it of exceeding its OPEC (Organization of the Petroleum Exporting Countries) quotas at Iraq's expense. Saudi Arabia, eager to avoid a crisis, hosted talks between the two countries, but on July 19, 1990, the talks broke down acrimoniously. On August 2, Saddam's forces crossed the border. Kuwait's relatively puny military forces were unable to put up much resistance. Within a week, the royal family had fled, barely escaping the Iraqi forces entering Kuwait City. By the end of August, Kuwait had been "reunited" with Iraq and had a new provincial governor, Saddam's cousin Ali Hassan al Majid.

Many foreign policy experts believe that Saddam decided to invade Kuwait thinking he had a tacit U.S. "yellow light" from his conversations with the U.S. ambassador April Glaspie. In reality, he had received no such message; his lack of understanding of America and his poor English skills caused him to totally misread her and what she had told him.

President George H. W. Bush immediately demanded a full and unconditional Iraqi withdrawal. The administration began building a North Atlantic Treaty Organization-based military and diplomatic alliance designed to achieve an Iraqi withdrawal, and it began building up U.S. forces in the region. On November 29, the UN Security Council passed a resolution giving Iraq until January 15 to complete its withdrawal from Kuwait, and it authorized member states to take whatever action would be required to ensure Iraqi compliance.

On January 17, the U.S.-led coalition opened an air campaign against Iraq, targeting and neutralizing the country's air defense systems. Almost immediately, the allied air forces gained total air superiority and shortly afterward began a ground campaign. The Iraqi forces, outmanned, outgunned, and outgeneraled, began a retreat, which turned into a rout. By the end of February, Kuwait had been liberated, and the Iraqi forces had retreated toward Baghdad.

Iraq's Shiite and Kurdish communities, who had been oppressed and persecuted under Saddam's brutal regime, started up spontaneous and uncoordinated uprisings, hoping to overthrow the Iraqi dictator. They assumed that the United States would provide them with the assistance they required.

However, they soon realized that they had badly miscalculated. The Bush administration feared that Iraq's Shiites would ally themselves with Iran; it decided that Saddam represented the lesser of the evils and allowed him to use the remnant of his forces to crush the Shiite uprising.

The Kurds were luckier. Although not willing to risk the breakup of Iraq by allowing Kurdish independence, the United States decided to give the Kurds enough wiggle room to establish a *de facto* autonomous zone. The Peshmerga (Kurdish guerrilla army) was well trained (it had been trained and supported by Israel in the 1970s and 1980s), highly motivated, and familiar with Kurdistan's mountainous terrain; it was able to handle Iraqi ground forces as long as they lacked close air support. The United States obliged by getting northern Iraq declared a "no-fly zone," effectively keeping the Iraqi air force out of Kurdistan's skies. The war ended with Saddam strong enough to maintain his rule of Iraq but weakened enough to prevent him from posing any kind of threat to his neighbors.

President Bill Clinton continued to enforce the no-fly zone over northern and southern Iraq. American and British air forces engaged in a low-intensity air war against Saddam to enforce the no-fly zone. Sanctions against Iraq continued to be enforced by the United Nations, which limited revenue for the government and caused hardship for the civilian population, mitigated in part by the humanitarian "oil for food program." In retrospect, Saddam lacked the capability to build weapons of mass destruction after the Gulf War of 1991, but his failure to fully comply with UN Security Council Resolution 687, mandating disarmament, fueled suspicion, especially among neoconservatives within the United States. His regime would play what has been termed a "cat and mouse" game with the UN inspectors, sometimes granting access to facilities and individuals while at other times denying it.

The Iraq War of 2003 and Its Aftermath

In the public justification for waging a second war against Iraq, President George W. Bush claimed that the United States must prevent Iraq from acquiring weapons of mass destruction. Bush also argued that the United States was engaging in a war against Saddam Hussein's regime to spread democracy in the Middle East. By toppling Saddam's government and replacing it with a democratic regime,

the United States could promote democratization throughout the Middle East. In contrast to the 1990 Gulf War, the United States did not receive the backing of the UN Security Council, and a number of American allies refused to send troops, including Canada, France, and Germany. The United States, along with coalition forces, had little problem defeating the Iraqi military forces but struggled to effectively control even the capital of Baghdad after cessation of hostilities. Lawlessness, followed by a growing Sunni insurgency, damaged an already fragile economy and hindered the role of the United Nations and nongovernmental organizations in aiding the reconstruction. For instance, the United Nations was forced to withdraw from Iraq after a car bomb destroyed its headquarters in 2004, killing scores of officials. Paul Bremer, who governed Iraq during the American occupation, has been criticized for his aggressive policy of de-Baathification, especially his dissolution of the Iraqi army, which helped to further fuel an insurgency aimed at U.S. forces and allies within the country. Although the United States poured billions into Iraq for reconstruction, much of this money was lost through corruption, inflated charges by private contractors, and ill-conceived projects that were often destroyed by insurgents.

The United States did establish an interim government and returned sovereignty to Iraq in June 2004. In early 2005, Iraq held multiparty elections that highlighted the fractured religious and ethnic divisions within the country. The constitution promulgated by the new government proclaimed Iraq an Islamic republic that respected the religious freedom of other minority groups, including Christians. It also provided a significant degree of regional autonomy. Legislative power under the constitution rested with a Council of Representatives; yet to be implemented is an upper house, the Council of Federation. The president was made a largely symbolic head of state elected by the Council of Representatives. Executive power rested with a prime minister, who is also elected by the council.

Despite the lofty principles of the constitution, the security situation deteriorated dramatically in 2005 and 2006, with the Iraqi government unable to provide basic security to its population. The security situation in Iraq improved dramatically under the leadership of General David Petraeus, who took over as commanding general in Iraq in 2007. Not

only did the number of American forces increase but a new effort was made to protect civilian populations from insurgent attacks. This new military strategy was combined with sustained efforts to co-opt Iraqi Sunnis and split them from their erstwhile jihadist allies, eventually bringing the situation under some kind of control. However, by allying themselves with the Sunnis, the Americans basically eliminated whatever chance they may have had of achieving strategic cooperation with the Shiites. This empowered the Shiite parties, which preferred an alliance with Iran over one with the Americans, who were once again perceived as betrayers by the majority of Shiites. The result is a sectarian Shiite government allied with Iran.

The improved security arrangements helped revive a morbid Iraqi economy and allowed the gradual restoration of basic services such as electricity. Oil production levels soared and by 2011 surpassed the levels in the final years of the Saddam regime. Iraq has even attracted foreign investment from South Korea, China, and other countries. Improved revenues have freed the Iraqi government from dependence on American foreign aid.

During the U.S. presidential election of 2008, Barack Obama declared that he stood by his earlier opposition to the United States going to war against Iraq in 2003 and pledged to withdraw combat troops from this country. President Obama's plans to leave Iraq were welcomed by a Shiite-dominated government eager to see foreign forces leave the nation. The American forces ended their combat role in 2010 and focused on training Iraqi forces until the American forces totally withdrew at the end of 2011. Although the United States and Iraq have maintained relations under the Strategic Framework Agreement negotiated at the end of 2008—stating that the two nations will continue to maintain a mutually supportive bilateral relationship—the Shiite-dominated government has also sought to maintain good relations with neighboring Iran. Since the U.S. withdrawal, relations with the Sunni minority have been troublesome, to the point where Iraq appears on the verge of either breaking up or breaking into a civil war.

Iraqi Military Capabilities

The Iraqi military at this time is incapable of posing any kind of threat to its neighbors. Following the

2003 U.S. invasion, it has undergone a complete and total metamorphosis. The Saddam-era Iraqi military was predominantly Soviet supplied and trained. This military was disbanded by the U.S. occupation forces. To replace it, the United States began building from scratch a U.S.-trained and -equipped military force, conceived and designed primarily as a counterinsurgency force rather than a conventional military.

In recent months, this force has become increasingly sectarian, reflecting the growing sectarianism of Iraqi society as a whole. Sunni units, considered untrustworthy by the Shiite government of Prime Minister Nouri al-Maliki, have been increasingly sidelined. At the same time, there is growing evidence of the gradual inclusion of irregular Shiite forces loyal to Muqtada al-Sadr, the pro-Iranian Shiite leader, into the Iraqi military and security forces.

Officially, the Iraqi security forces (including the ground forces, air force, navy, police, and security forces) number approximately 250,000. However, these figures include the Sunni units, whose operational capabilities have been compromised by the government's policy of sidelining them.

These figures do not include the Shiite militias, which are increasingly cooperating with the government and are unofficially being inducted into the security forces to eventually replace the Sunni units, which will either be demobilized or defect if civil war erupts. The bottom line is that it is difficult to state with certainty the exact size of Iraqi military and security forces.

It is also unclear, given the increased tension between Baghdad and Washington, for how long the United States will continue to supply Iraq with military equipment. The most likely scenario is that all security cooperation between Iraq and the United States will eventually cease and that the Iraqi military will undergo a countermetamorphosis, reverting to being a mainly Russian- and Chinese-equipped and -trained military force.

Whatever the outcome, the increasingly sectarian (Shiite) Iraqi military is unlikely to be able to pose any kind of threat to any of its neighbors. Its focus will be civil unrest and possibly civil war; its most likely foes will be Sunni forces and those of any neighboring state that may decide to intervene if civil war should break out in Iraq.

Jonathan Ariel

See also Abu Ghraib; Bush Doctrine; Iran; Iraq Insurgency (2003–2011); Iraq War (2003); Iraq War, Planning for; Middle East Conflict; Neoconservatives; Persian Gulf War; Petraeus, David; Rumsfeld, Donald

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IRAQ INSURGENCY (2003–2011)

In March 2003, the administration of President George W. Bush initiated a preventive war to destroy the Baath party regime of Saddam Hussein without first mobilizing the elements of U.S. national power required to conduct a long-term occupation of Iraq, provide physical security for its population, or rebuild its civil infrastructure. This entry discusses the prolonged insurgency that followed the destruction of the Baath regime, and the U.S. countereffort to reestablish security and create the preconditions for an eventual withdrawal.

Overview, 2003–2011

U.S. forces defeated Iraq's military between March 20 and April 9, 2003. However, coalition (United States and United Kingdom) forces were unable to preserve civil order or maintain essential public services during the subsequent wave of looting, sabotage, and intersectarian revenge killing. The initial plans for a quick handover of sovereignty to a government of returned Iraqi expatriates gave way to an extended occupation authorized by the United Nations, which, in terms of international law, made the coalition responsible for the well-being of the occupied population. However, the coalition failed to normalize electrical, water, or sewage services due to a chronic insufficiency of uniformed civil affairs and engineer personnel in the theater and an extremely slow deployment of nonmilitary reconstruction assets. Insufficient troops, headquarters discontinuities, and staff personnel turbulence also prevented the coalition's separate civil and military

chains of command from effectively cooperating to disarm the sectarian Sunni and Shiite militias that formed after the Baathist collapse.

By mid-2004, two parallel insurgencies had emerged, both of which employed mortar and rocket fire, direct fire ambushes, and improvised explosive devices (IEDs) to impede coalition access to local Iraqi communities. The first was an alliance of convenience between former Baathists and Sunni religious extremists intent on preserving their prewar dominance in postwar Iraq. The second was a Shiite militia, Jaish al-Mahdi, loyal to Muqtada al-Sadr, who sought to drive the coalition out of Iraq and assume control of the state on behalf of the historically oppressed Shiite majority. Sunni-Shiite violence accelerated after the destruction of the al-Askari mosque, Shiite Islam's most venerated shrine, in February 2006. In the context of this escalating, triangular struggle, the U.S. military began to shift from "kinetic" missions designed to kill insurgents mounted from large, forward-operating bases to counterinsurgency (COIN) operations aimed at achieving increased population security in critical neighborhoods via smaller combat outposts from which troops patrolled on foot. As brigade and battalion commanders groped their way empirically toward classic COIN techniques, they were assisted by a group of active and retired general officers in the United States, who pushed for an increased COIN emphasis *and* a large, short-term increase in U.S. troop levels to reduce sectarian violence in central Iraq. Concurrently, key Sunni and Shiite leaders decided to cease resistance to and/or cooperate with the occupation, provided their own communities were shielded from ethnic cleansing. This process culminated in the "surge" of 2007–2008, during which the number of combat brigades in Iraq rose from 15 to 20. This increase, dispersed in combat outposts throughout Greater Baghdad, was better able to collect the intelligence necessary to neutralize the death squads and IED cells.

Both coalition and Iraqi deaths dropped significantly from mid-2007. This reduction in violence established a delicate equilibrium between Shiite, Sunni, and Kurdish political leaders and their associated militias, which allowed them to pursue their opposing political goals through parliamentary procedural maneuvers rather than armed force. In turn, this permitted the incoming administration of President Barak Obama to draw down U.S. combat

forces throughout 2009 and 2010 while initiating a limited surge in Afghanistan's Operation Enduring Freedom, largely patterned on the Iraqi experience. Operation Iraqi Freedom formally ended on August 31, 2010. The subsequent U.S. "advise and support" mission in Iraq, Operation New Dawn, was terminated unexpectedly early when the Iraqi parliament refused to negotiate a status of forces agreement that would have sheltered U.S. military personnel from prosecution in Iraqi courts for violations of Iraqi law. The last American occupation personnel exited Iraq on December 18, 2011.

Coalition Loss of Initiative and the Emergence of a Dual Insurgency, 2004–2006

The war aim the Bush administration hoped to achieve through Operation Cobra II, the invasion of Iraq, was usually defined in terms of the following "end state": a democratic and stable Iraq with a market economy, able to control its borders, at peace with its neighbors, and an ally of the United States in the Global War on Terrorism. In effect, this required the United States to transform Iraq into a Western-style liberal democracy immediately after destroying its full range of existing governing institutions. The initial failure to achieve any element of this end state between 2003 and 2006 was due to five primary causes: (1) profound American ignorance of the nature of Iraqi society and the probable actions of the major political constituencies in Iraq after the destruction of Baathism; (2) the structural and doctrinal inability of the U.S. military and diplomatic establishments, in 2003, to rebuild Iraq along the lines required by the end state; (3) the military and civil-military decisions taken by officials of the Department of Defense under Donald Rumsfeld intended to accomplish "regime change" in Iraq with a *minimal* commitment of resources, in the pursuit of the "transformation" of the U.S. military away from a reliance on heavy, mechanized forces; (4) the failure of the commander of U.S. Central Command, General Tommy Franks, to insist on political guidance sufficient to plan for Iraq's "postconflict phase"; and (5) the initial decision of the Coalition Provisional Authority (CPA), under L. Paul Bremer, to "de-Baathify" Iraq, which triggered an immediate armed Sunni resistance to the U.S. occupation.

The neoconservative think tank figures who assumed key roles in the Department of Defense

during the Bush administration believed that the collapse of the Soviet Union eliminated the last coherent ideological opposition to the classical liberal principles of representational politics, a market economy, and the smallest possible central state. Furthermore, they believed that the United States had both a right and a duty to sponsor the expansion of these “values” globally, by armed force if necessary, even if doing so would violate existing tenets of international law based on the autonomous sovereign nation-state. The neoconservatives assumed that all peoples, globally, want what Americans “naturally” want, irrespective of all other national histories and cultural traditions. These officials, thus, never critically examined what to them was a self-evident truth that the Iraqi people would welcome the coalition forces as “liberators” and that they would wait patiently for their liberalization.

Bush administration officials also failed to closely study the domestic impact within Iraq of the 40 years of one-party Baath rule and the UN sanctions imposed after the Persian Gulf War. Stated simply, an enormous distance existed between the Iraqi state and Iraqi society. The state in Iraq had never appeared to the Iraqi people as a neutral arbiter between social classes and ethnic/sectarian communities, allocating resources through representative institutions and resolving disputes through the rule of law. Instead, it represented a set of coercive institutions used to enforce the dominance of one community over all the others, while simultaneously serving as an upward-mobility corridor for ambitious individuals through Baath party membership. Iraqis excluded from direct access to the state were forced to seek support from local tribal or ethnic authorities approved by the Baath party but who lacked communal legitimacy. When the Baath regime collapsed, and the coalition appeared unable to provide essential services, Iraqis refused to rally around the coalition-approved expatriate politicians installed in Baghdad’s Green Zone. Instead, they armed themselves, tried to secure their neighborhoods, and gravitated toward authentic sectarian leaders who had remained within Iraq and survived Baathist repression, such as Grand Ayatollah Ali al-Sistani and Muqtada al-Sadr, who opposed the occupation. Thus, there was in 2003–2004 no single set of legitimate political actors in Iraq who could both interpret the actions of the coalition to the population and prepare to receive the reins of

civil power *from* the coalition, in pursuit of the U.S. end state.

The CPA, under Ambassador Bremer, was unable to act constructively in the initial stage of the occupation. In fact, it threw gasoline onto the fire with its first two acts: CPA Order Number 1, for the “De-Baathification of Iraqi Society,” May 16, 2003, and Order Number 2, for the “Dissolution of Entities,” May 23, 2003. As originally promulgated and understood by the Iraqi people, these discharged the entire Iraqi army, even those units that negotiated surrenders with the advancing coalition units, including the Sunni-dominated officer corps. Deprived of both the income and the status of their positions, numerous former officers, with knowledge of both the Baathist intelligence network and the locations of numerous munition dumps throughout Iraq, immediately organized the first insurgent cells in the Sunni-majority cities north and west of Baghdad. CPA Order Number 1 also had the effect of excluding more than 30,000 middle- and upper-level technocrats who had held rank in the top four levels of the Baath party from public sector employment in all national ministries (Oil, Electricity, Health, Education, etc.). This doomed the coalition’s civil reconstruction effort to years of paralysis: Insufficient numbers of Iraqis remained in place to centrally operate the electrical grids and the water purification and sewage plants necessary to stabilize everyday life. Tribal networks and sectarian militias stepped into the gap by providing water, electricity, and medical care, with profits from the sales of generators, fuel, and cooking oils often funding insurgent activities. This fragmentation and regionalization of civil society further impeded the development of a unified Iraqi national identity.

The first year of the occupation also revealed that neither the U.S. State Department nor the defense establishment were organized, resourced, or trained to reconstruct the Republic of Iraq. In fact, the concept of “nation-building” had long been ridiculed by neoconservative thinkers. Even after seeking and receiving responsibility for the “postconflict mission” in Iraq, Secretary of Defense Rumsfeld was concerned, above *all* other considerations, to conduct the invasion with an absolute minimum of heavy-maneuver forces and withdraw them from Iraq as soon as possible. While nothing could have entirely prepared U.S. commanders for the chaos of April–May 2003, the troop basis

for the invasion was critically short of the military police, civil affairs, and engineer units necessary to limit the destruction of essential civil infrastructure, even though those units existed in the United States and were doctrinally better prepared for “stability” operations than combat arms units. Within a month of the fall of Baghdad, Rumsfeld ordered the U.S. Army’s 3rd Infantry Division (Mechanized) and 1st Marine Division to prepare for redeployment *from* Iraq to the United States and canceled the follow-on deployment of the 1st Cavalry Division *to* Iraq. In addition, he permitted (or ordered, it is not clear which) General Franks to redeploy the headquarters that had overseen the invasion, Central Command’s Combined Forces Land Component Command, from Iraq to Kuwait and to replace it in Iraq with a much smaller and less capable headquarters element, V Corps, which had commanded the army’s mechanized task forces during the “run” to Baghdad. This had the effect of removing from day-to-day operations in Iraq all the senior staff officers in Combined Forces Land Component Command who had extensive knowledge of Iraqi society and politics. V Corps was subsequently redesignated as Combined Joint Task Force Seven, but it remained undermanned until the spring of 2004, while the dual Sunni and Shiite insurgencies metastasized throughout central and southern Iraq.

In addition to the insufficient troop basis for the enforcement of civil order in Iraq and inadequate command and control, doctrinal confusion bedeviled the U.S. military during the first year of the insurgency. In 2003, the army identified four phases to a ground campaign: Phase I, Deter/Engage, in which the battlefield is “shaped” preparatory to the beginning of combat operations; Phase II, Seize the Initiative; Phase III, Decisive Operations; and Phase IV, Transition. While U.S. commanders understood that they could be required to conduct “full-spectrum” operations ranging from high-intensity maneuver warfare to “postconflict” stability and support tasks, most viewed these as operating *sequentially*, with a single point in time marking a *permanent* transition from Phase III to Phase IV. However, what emerged in Iraq was a requirement for battalions to conduct *simultaneous* full-spectrum missions *back and forth along the spectrum*, with troop units in adjacent districts facing completely different combinations of lethal threats and fleeing,

short-term opportunities for the co-optation of local elites. During 2004–2005, some commanders believed that they were in the last days of Phase III, opposing “diehard Baathist elements,” which encouraged them to mount large-scale sweep operations that disrupted the lives of nonresisting Iraqis. Only gradually did the U.S. forces realize that the coalition was facing a *mosaic* of local insurgent elements that did not trunk up into a single-directing leadership, as was the case in Malaya, Algeria, and Vietnam. Thus, they were not in *any* of the four phases of a conventional maneuver campaign. Nor were they confronting a Maoist-style protracted war. Instead, they faced a decentralized insurgency whose essentially local character was both its key strength during its expansion in 2004–2005 and, after 2006, its key weakness once the coalition commanders became skilled at driving carrot-and-stick wedges between its different, mutually hostile elements.

During 2004 and 2005, U.S. divisional commanders launched numerous large clearance operations to pacify urban areas in central Iraq, viewed as under the effective control of forces implacably opposed to the coalition. In June 2003, the 4th Infantry Division (Mechanized) conducted Operation Peninsula Strike in Diyala and Salah ad Din Provinces in the “Sunni Triangle” north of Baghdad, and 1 month later, the 1st Marine Expeditionary Force lunged into Fallujah in Operation Vigilant Resolve after the grisly killing of U.S. civilian security contractors. Operation Peninsula Strike served primarily to detain a large number of insurgent suspects of minimal intelligence value, which began the cycle of overcrowding in coalition detention facilities that contributed to the Abu Ghraib scandal, while Operation Vigilant Resolve was terminated short of its objective when the marines’ use of artillery and AC-130 gunship fires inside Fallujah generated negative press coverage throughout the Middle East. Also in April–May 2004, the 1st Armored Division and 2nd Armored Cavalry Regiment mounted what their commanders termed an “extension campaign” in the Sadrist-stronghold cities of An Najaf, Kufa, and Karbala and the Sadr City neighborhood of eastern Baghdad. These operations temporarily neutralized the Jaish al Mahdi militia forces in those cities. In October 2004, the 1st Infantry temporarily cleared the Sunni stronghold of Samarra, and in November, a combined marine-army task force returned to Fallujah

in Operation Al Fajr, clearing the city of insurgents and conducting a transition to units of the reconstituted Iraqi army, for the “holding” task central to classic COIN theory. However, the modest military success during Al Fajr was counterbalanced by the far more important negative political impact: The pacification of Fallujah universalized Sunni opposition to the coalition, causing a Sunni boycott of the nationwide January 2005 elections for seats in the Iraqi Transitional Assembly. This created a self-fulfilling cycle of Sunni alienation from what subsequently emerged as a Shiite/Kurd-dominated interim national government. Sunni leaders north of Baghdad and in Anbar province permitted al Qaeda cells to plant IEDs along coalition logistical routes and conduct attacks on Shiite populations in ethnically mixed neighborhoods. This caused the penetration of the Iraqi National Police by radical Shiite elements, who formed nocturnal death squads to counter-ethnic-cleanse Sunnis from majority Shiite communities. This cycle of violence and counter-violence continued to escalate throughout 2006, a year that also saw the introduction of a new and terrifying type of IED: the explosively formed penetrator. The explosively formed penetrator, set up in arrays of three to five, angled to strike the crew compartment of a five-man Humvee throughout that vehicle’s speed range, used a hypervelocity jet of molten copper capable of penetrating the armor of all U.S. fighting vehicles deployed to Iraq, causing horrific injuries to crew members who were not killed outright.

Throughout 2006, as the casualties increased and a creeping sense of tactical frustration mounted among U.S. combat leaders in Iraq, a gradual consensus emerged on the lessons to be learned from the anti-insurgent operations up to that point. To a remarkable extent, the doctrine promulgated in Field Manual 3-24, *Counterinsurgency*, December 2006, moved *up from* the field, as opposed to hierarchically down from Fort Leavenworth’s “schoolhouse,” as in all previous paradigm shifts. Reduced to a single phrase, the fundamental lesson was the centrality of population security: the absolute imperative to make the lives of ordinary Iraqis safer *immediately*, by constructing barriers between hostile or contested communities, creating and arming neighborhood self-protection groups, dispersing U.S. troops into a larger number of smaller garrisons,

and requiring those soldiers to patrol on foot rather than in vehicles.

The Coalition Regains the Initiative, 2007–2008

The American public correctly associates the turnaround in U.S. fortunes in Iraq with the surge of 2007–2008. The surge depended on six mutually supporting factors: (1) the reorientation of the U.S. Army and Marine Corps leadership within Iraq toward a COIN posture; (2) the Bush administration’s decision to temporarily increase troop levels to improve security in Baghdad; (3) the Shiite cleric Muqtada al-Sadr’s decision, in August 2007, to cease violent resistance to the occupation; (4) the Sunni Arab “Anbar Awakening,” which neutralized al Qaeda in Iraq; (5) the decision of authorities in Syria, Saudi Arabia, and Iran to reduce the flow of “foreign fighters” into Iraq and, in the case of Iran, to reduce its support of client militias within Iraq; and, finally, (6) the cumulative decisions of thousands of Iraqi security force members to begin serving the Republic of Iraq despite the appalling risks and to operate as national, not sectarian actors. Only the first two of these factors were under the direct control of the coalition, and it should be understood that the surge “worked” because virtually all forces in the region decided that it would be at least marginally in their interests that it should work, thereby creating the precondition for a U.S. drawdown.

The surge, which is discussed in depth elsewhere in this encyclopedia, can best be understood as a simultaneous increase in U.S. forces and a reposturing of those forces, in a campaign that foregrounded the basic principles of COIN within the combined U.S.-Iraqi military of 2007–2008. This campaign was effective enough, as evidenced by the reduced sectarian killings and attacks on U.S. forces, to induce other regional powers to abjure actions that would have further destabilized the U.S. pacification effort, while also convincing Iraqi officers in the army and National Police of the necessity to purge their ranks of sectarian actors and function more as a *national* security establishment. This gave Prime Minister Nouri al-Maliki the opportunity to launch a quixotic but unexpectedly successful Iraqi army effort to clear Basra of Sadrist militias in the spring

of 2008, just as the U.S. surge brigades were “turning the corner” in Baghdad.

The Drawdown, 2009–2011

The tendency of the dual Sunni and Shiite insurgencies during 2006 to devote more energy to sectarian violence than to attacks on coalition forces opened up a political window of opportunity that the United States was able to exploit with a new doctrine and a new theater leadership. However, this opportunity did not result from a formal revision of war aims by the president but rather from a process of self-criticism and reform within the military. In effect, the most socially unjust aspect of the war effort, the repeated deployments of volunteer army junior officers, noncommissioned officers, and enlisted men to Iraq, created a revision of war aims *from below*. Soldiers reflecting on their earlier experiences during the first and second tours understood that kinetic operations had minimal effects, while efforts, however awkwardly executed, to understand and meet the basic security needs of Iraqi citizens bore fruit in numerous incremental, local ways, which accreted during the surge to operational success. The original end state, a centralized and Westernized Iraq, in which all sectarian divisions were dissolved into a single national identity, gave way, during 2007–2008, to the creation of increased political stability through a reduction of public violence: the precondition for an orderly U.S. withdrawal. At the human level, U.S. soldiers and junior leaders went partially “native,” learning to negotiate within indigenous Iraqi structures of authority and social legitimacy. This allowed them to more effectively “partner” with Iraqi security forces to achieve clear-and-hold security in urban Iraq’s remaining multisectarian communities. However, all critical questions about the nature of Iraq’s future as a single, peaceful sovereign state remain undecided at the time of this writing.

Operation Iraqi Freedom came to an end on August 31, 2010, and was succeeded on September 1 of the same year by Operation New Dawn, which was intended to mark the point at which U.S. forces would operate exclusively in partnership with Iraqi units to further their professionalization and ability to plan and execute complex tactical missions.

Between March 19, 2003, and December 18, 2011, a total of 4,474 U.S. service personnel died while serving in Operations Iraqi Freedom and New Dawn.

Roughly 32,000 were wounded. A large proportion of those wounded were injured so severely that they will require technologically intensive medical care for the rest of their lives in their home communities. The monetary costs of the war while it was waged, which were typically quoted at \$2 billion to \$3 billion per week during 2007–2008, may have contributed to the collapse of the U.S. investment economy in 2008–2009 and certainly ended the dream of military transformation. Operationally a “near-run thing,” the Iraq War will probably be viewed in the future as a strategic failure partially redeemed by a synergistic alignment of highly contingent factors that could just as easily not have occurred.

John S. Reed

See also Counterinsurgency; Iraq War (2003); Surge, Iraq War

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IRAQ WAR (2003)

In the spring of 2003, the administration of President George W. Bush initiated a preventive war against the Republic of Iraq and the Baath party regime of Saddam Hussein. This entry discusses the causes, conduct, and immediate consequences of the initial conventional phase of the Iraq War. A separate entry discusses the Iraq insurgency of 2003–2011.

The ground-air campaign to defeat the Iraqi military required only 3 weeks. However, coalition (United States and United Kingdom) maneuver forces were unable to preserve civil order or reestablish essential public services after the collapse of the Baathist regime. Indigenous nationalist and sectarian forces subsequently mounted a protracted insurgency against the U.S. occupation. Three interrelated factors produced this outcome. First, the Bush administration and the U.S. defense establishment assumed that the U.S. occupation would not be resisted by the Iraqi people. Military staffs in particular believed that residual Iraqi security forces would be available and sufficient to maintain public order. Consequently, the Coalition Provisional Authority's first two acts were to dissolve the Iraqi army and bar all members of the Baath party's top four leadership levels from day-to-day administrative roles in Iraq's civil ministries. This shifted the burden of internal security, social services, and local governance onto commanders of troop units untrained for such duties. Second, the Defense Department and U.S. Central Command under General Tommy Franks failed to plan adequately for what are termed "stability operations" in army doctrine. Thus, neither military nor civilian assets were in place or in the deployment "pipeline" to restore the water, sanitation, electrical, and medical services that had been degraded by the post-1991 sanctions regime against Iraq and the 2003 air campaign. Finally, all aspects of the planning for Phases I through III of Operation Cobra II were infused with Secretary of Defense Donald Rumsfeld's fixed idea of transforming the post-Gulf War U.S. military into an "agile" force exploiting special operations, smart weapons, and "information dominance" to achieve quick-in, quick-out victories: the "Afghan Model" that neutralized (but did not destroy) the Taliban in 2001–2002. He accordingly reduced the number of heavy divisions executing Operation Cobra II to the absolute minimum consistent with operational success, without consideration for postconflict "nation-building." This meant that the United States would be held responsible by the Iraqi citizenry for not preventing a crippling outbreak of looting, infrastructure sabotage, and revenge killing. The interaction of these factors ensured that the virtuosic performance of the coalition military in the minimally resourced mechanized offensive would be irrelevant to the dual Sunni-Shiite insurgency that began to emerge

in the summer of 2003. The lack of U.S. government interagency planning also meant that the excellence of soldiers and commanders in joint maneuver warfare would be of minimal use in the initial effort to rebuild Iraq's civil infrastructure. Finally, it is difficult to assess the success or failure of the 2003 campaign at the strategic level of war, because the Bush administration advanced so many distinct, audience-specific justifications for the resort to war that it is unclear whether a single national war aim *past the initial destruction of the Baath regime* was ever identified. Thus, although the ground campaign was a stunning achievement at the tactical and operational levels of war, it did *not* achieve decisive strategic results because the struggle to stabilize postconflict Iraq degenerated quickly into a resisted occupation and a protracted counterinsurgency campaign.

Causes

In the aftermath of the Iranian Revolution of 1979, the single, irreducible goal of U.S. foreign policy in the Middle East was to prevent the emergence of a single regional power capable of disturbing the world's oil market or posing an existential threat to the State of Israel. In spite of his failures during the Iran-Iraq War of 1980–1988 and his ejection from Kuwait in 1990–1991, Saddam Hussein's Iraq seemed, throughout the 1990s, to be the most likely candidate to establish regional hegemony. His subsequent suppression of Shiite revolts in southern and central Iraq after hostilities ended in 1991, his use of chemical weapons on Kurdish communities in the north, and his continuation of an Arab nationalist, one-party tyranny ensured that he would be demonized during the presidential administrations of both Bill Clinton and George W. Bush. Meanwhile, several developments within the United States made a second war with Iraq more likely. The first of these was the dominance of neoconservatives within the Bush White House. Central to neoconservatism was a belief in the ability of a "muscular" foreign policy to expand liberal political and economic institutions and an emphasis on military "hard power" (rapid deployment of mechanized forces, very long-range bombers, naval cruise missiles, etc.) at the expense of the "soft power" institutions (diplomatic, economic, and cultural) that had reinforced the U.S. strategy to contain the Soviet Union's influence in the developing world between 1947 and 1989. During the 1990s,

numerous vocal defense intellectuals embraced the concept of militarized “regime change.” This blurred the critical distinction between a *preemptive* war to forestall an imminent attack of one sovereign state on another, permitted under international law (with a very high evidentiary bar), and a *preventive* war to remove a perceived potential threat. A preventive war is a form of aggression, and it was not surprising that China, Russia, Germany, and France refused to endorse the Bush administration’s unilateral military solution to the dilemma Iraq posed for the international community in the absence of clear proof that Saddam Hussein had retained his chemical warfare capabilities and/or was actually developing nuclear weapons. This evidence could not be supplied for the simple reason that no Iraqi mass effect weapons program in fact existed in 2003. Second, the terrorist attacks of September 11, 2001, created a popular atmosphere in which journalists and politicians were discouraged from questioning the administration’s manifest intent to visit regime change on Iraq. Other justifications mooted by Bush administration spokespersons in addition to the weapons threat included putative Iraqi linkages to and support for al Qaeda and Saddam Hussein’s ongoing repression of non-Sunni populations. Even the UN-imposed sanctions regime, which was causing extreme suffering for non-Baathist segments of the Iraqi population, was employed as a reason to attack Iraq: The sooner Saddam fell, the sooner the sanctions would be lifted. Finally, the war seemed eminently “doable”; the lethality and joint doctrinal sophistication of the U.S. military made an overland campaign to Baghdad appear to pose no more than minor administrative and logistical problems.

Numerous journalistic accounts place Vice President Richard Cheney at the center of an initial consensus in the post-9/11 Bush White House that regime change in Iraq would remove a grave impediment to stability in the Middle East by creating a liberal democratic state to counterbalance the influence of Syria and Iran. Milestones along the way to an American public embrace of this project included President Bush’s January 29, 2002, “Axis of Evil” address to Congress, which equated Iraq to Iran and North Korea; the congressional authorization of October 11, 2002, for the use of armed force against Iraq; and Secretary of State Colin Powell’s failed attempt to secure a similar UN authorization in February 2003. European skepticism triggered a

jingoistic spasm in the domestic electronic and print media that neutralized public opposition to a now overdetermined conflict.

Conduct

The initial planning for the invasion of Iraq envisioned two primary lines of operation: one north from Kuwait toward Basra and Baghdad and one south from eastern Turkey toward Baghdad through Iraqi Kurdistan. Special operations forces would enter western Iraq from Saudi Arabia to prevent rocket attacks on Saudi Arabia or Israel, while searching for the weapons of mass effect Iraq was believed to possess. However, the Turkish parliament denied ground transit rights through Turkey, which prevented the U.S. Army’s 4th Infantry Division (Mechanized) from participating in the initial invasion. Operations in northern Iraq were limited to the use of the 173rd Airborne Brigade, based in Vicenza, Italy, and special operations detachments to consolidate Kurdish Peshmerga control over Iraqi Kurdistan.

The southern offensive was prosecuted by two corps-level headquarters. The first of these was the U.S. Army’s V Corps, which contained the 3rd Infantry Division (Mechanized), the 101st Airborne Division (Air Assault), a brigade of the 82nd Airborne Division, and the 11th Attack Helicopter Regiment. The second was the U.S. Marine Corps’s 1st Marine Expeditionary Force, which contained the 1st Marine Division (MARDIV), the British 1st Armoured Division, and the two smaller marine expeditionary units that formed Task Force Tarawa. V Corps, rich in Abrams tank and Apache attack helicopter assets, would advance on the general axis As Samawah–An Najaf–Karbala–Baghdad. The 1st Marine Expeditionary Force was tasked to secure Basra and the port facilities at Umm Qasr using the British 1st Armoured, while advancing north with the 1st MARDIV and Task Force Tarawa on the general axis An Nasiriyah–Ad Diwaniyah–An Numaniyah–Baghdad.

The subordinate elements of V Corps and the 1st Marine Expeditionary Force advanced from the Kuwaiti border to the outskirts of Baghdad between March 20 and April 4, 2003, against resistance that was frequently courageous but lacked tactical coordination and indirect fire support. The armor-heavy units (3rd Infantry and 1st MARDIVs) maintained

their momentum and bypassed local centers of Iraqi army or irregular Baath party *fedayeen* resistance, while the lighter forces, including V Corps's air assault and airborne units and the marines' Task Force Tarawa, secured temporary logistical bases and kept ground lines of communication open to the Kuwaiti rear. A "tactical pause" during March 24–30 rested vehicle crews during an intense sand and rain storm, while providing an opportunity to resupply the temporarily halted forward units with food, fuel, and ammunition. The overall pace of the advance was so rapid that the few Iraqi command-and-control headquarters that actually functioned issued commands that were instantly "overtaken by events." However, the *fedayeen* were able to inflict several costly ambushes on marine units and army logistical convoys moving north, most notably the 507th Maintenance Company at An Nasiriyah on

March 23. Coalition air assets opened their campaign with an initial "shock and awe" attack on Baath party facilities in Baghdad on March 20, followed by close air support to the ground advance. Laser and other precision-guided munitions constituted 67% of all air-dropped ordnance during Cobra II.

After attacking across the Euphrates River at Karbala between April 1 and 3, the 3rd Infantry Division approached Baghdad on the west bank of the Tigris River, while marine units approached along the Tigris's east bank. Baghdad International Airport and the capital itself were secured between April 4 and 9, after the repulse of several *fedayeen* counterattacks against U.S. forces occupying Baghdad International Airport and several staging areas in the capital's western suburbs. Finally, two battalion task forces of the 3rd Infantry Division



Members of the guerrilla fighting group Fedayeen Saddam marching on March 5, 2003, in Baghdad, Iraq. They were dressed in shrouds, ready to die in battle.

Source: Photo by Mirrorpix/Getty Images.

executed “thunder run” raids into the Baath Regime District, which later became known as the International or Green Zone, while two regimental combat teams of the 1st MARDIV secured eastern Baghdad. This marked the defeat of the military forces of the sovereign state of Iraq and the beginning of a brief interregnum that would yield, by midsummer, to an insurgency against the coalition occupation.

In the south, Basra was cordoned off by the UK 1st Armoured Division. As a direct assault on the city would have resulted in unacceptable civilian casualties, British commanders waited until they had acquired precise intelligence from the city’s Shiite population on *fedayeen* strong points, which were later directly assaulted without close air support to further reduce collateral destruction. Coalition special operations forces were also able to secure Iraq’s southern oil fields with less demolition and environmental damage than had occurred during the Gulf War of 1990–1991.

Consequences

The operational objectives of Cobra II were achieved at a historically low cost in friendly troops: Coalition combat-related deaths between March 20 and May 5, 2003, totaled 171 (138 U.S. and 33 UK). However, the direct result of the destruction of the Baath Party governing structure in Iraq and the liquidation of the Iraqi army was not the establishment of a “bridgehead of democracy” in the Middle East but the insurgency, which did not finally abate until the troop surge of 2007–2008—after 4 years of agony for the Iraqi people and the families of U.S. service personnel killed and wounded. While it is too early to judge the war’s overall consequences, it would appear that Iraq has become a weak sovereign state that may not be able to control its borders and airspace for another generation, while Iranian influence within Iraq has been elevated through its support of a Shiite political renaissance. The United States spent in excess of \$50 billion to partially reconstruct Iraq’s civil infrastructure, but the demand for services remains far in excess of capacity. As domestic political considerations prevented an increase in the size of U.S. ground forces after 2003, the Iraqi surge could only be executed at the cost of underresourcing the Afghan War. The Taliban was thus able to reconstitute itself and metastasize into provinces

that had been thought largely pacified. Over all, the Iraq War of 2003 would seem to provide evidence of what the British general Sir Rupert Smith has theorized as the *inutility* of force in the 21st century: the increasing inability of sovereign nations to create desired political end states in the less developed world through the traditional mechanisms of state violence.

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See also Iraq Insurgency (2003–2011); Surge, Iraq War

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IRAQ WAR, PLANNING FOR

Planning for the invasion of Iraq in March 2003 and its aftermath involved senior policymakers in George W. Bush’s presidential administration, the Departments of Defense and State, and the armed forces, particularly the U.S. Army and the U.S. Central Command. Battlefield victory and the rapid ouster of Saddam Hussein’s regime drew praise for the invasion plans, but postwar planning has been criticized for its overly optimistic assumptions and its failure to incorporate expert insights from the State Department’s Future of Iraq (FoI) Project. This entry surveys the pre-invasion planning for the Iraq War and discusses reports by the Army War College’s Strategic Studies Institute and the FoI project on postwar planning.

Initial Planning for War

Contingency plans for war with Iraq and policy calling for Iraqi regime change predated both the September 11, 2001, attacks on the United States

and the Bush presidency, but after 9/11, planning for a war and for regime change proceeded apace. Saddam's refusal to comply with international weapons inspectors' demands suggested Iraq's potential capability to proliferate weapons of mass destruction (WMDs), perhaps to terrorists. By tying Iraq to the terror threat, neoconservative officials who had long advocated the removal of Saddam's Baathist regime seized on 9/11 as an opportunity to advance that agenda. Indeed, Deputy Secretary of Defense Paul Wolfowitz reportedly called for military action against Iraq just hours after the attacks.

In late November 2001, Bush directed Secretary of Defense Donald Rumsfeld to review the existing contingency plans for war with Iraq. Within days, Rumsfeld had begun a dialogue with U.S. Central Command commander General Tommy Franks about the then most current plan, Operation Plan (OPLAN) 1003. From late 2001 through much of 2002, a contentious bargaining process between civilian officials and military planners resulted in a compromise war plan later criticized for being thin on manpower and short on foresight about how to secure a post-Saddam Iraq.

From OPLAN to No Plan to Operation Iraqi Freedom

Last revised in 1998, OPLAN 1003 reflected conventional military wisdom about war in the Persian Gulf. Shaped by American military experience in Operations Desert Shield and Desert Storm, it was heavy on mechanized infantry, assault forces, and expeditionary marines and called for some 380,000 troops. Rumsfeld complained that the plan was cumbersome and outdated, and he instructed Franks to develop a new plan. An outspoken proponent of transformational warfare, Rumsfeld believed that advanced technologies should be leveraged to minimize "boots on the ground." Rumsfeld's emphasis on air power and precision bombing allowed him to demand corresponding reductions in the numbers of troops, vehicles, and ground equipment sent into combat. The Iraq invasion would be a showcase for Rumsfeld's vision for future military interventions: lighter, faster, and more nimble.

General Franks's initial viewpoint reflected conventional army wisdom that a heavy personnel "footprint" overwhelms the enemy and assists in creating a secure postwar environment. Franks's

early plans bore the hallmarks of the conventional wisdom; one such plan, "Generated Start," would require some 275,000 troops. Insisting on a much leaner deployment of perhaps 75,000, Rumsfeld demanded revisions and, at times, micromanaged Franks's war plans, reportedly even red-lining specific units. Over time and under pressure, Franks internalized the call for a lighter and faster approach. By striking fast and hard, argued Franks, U.S. forces would disrupt Iraqi capacity to respond and quickly achieve victory. Franks reminded his staff and the press that "speed kills" the enemy.

After 10 months of rejected war plans, revisions, and red-lining, a new war plan emerged: Hybrid 1003V OPLAN. Later renamed Operation Iraqi Freedom, it featured roughly 140,000 troops, nearly twice the number Rumsfeld wanted but far fewer than what some senior military officials thought necessary. For example, Army Chief of Staff Eric Shinseki testified before the Senate Armed Services Committee that several hundred thousand soldiers would probably be needed to secure a postinvasion Iraq—a statement that elicited dismissive reactions from civilian officials like Wolfowitz. Secretary of State Colin Powell had reservations but expressed them to Bush and Franks only privately; publically, Powell stood firmly with the administration as it planned for war.

Marshaling Support for an Invasion

As the military plans took shape, political and diplomatic plans also moved forward. Vice President Dick Cheney and national security adviser Condoleezza Rice in media appearances spoke about the "gathering" WMD threat and the possibility of preventive military action against Iraq. In August 2002, White House Chief of Staff Andrew H. Card Jr. convened the White House Iraq Group, a senior group including Rice, the communications strategist Karen Hughes, the senior political adviser Karl Rove, and I. Lewis "Scooter" Libby, Cheney's chief of staff, to develop the public relations campaign to precede the military campaign.

The White House Iraq Group prompted Powell to make the case for war at the United Nations using unconfirmed evidence of Iraqi WMD production, collated in part by the Central Intelligence Agency and the Pentagon-based Office of Special Plans. Britain's Prime Minister Tony Blair bolstered the case

for war by citing evidence of an Iraqi WMD program, but France and Germany opposed an invasion and the UN Security Council did not authorize the U.S. decision to invade Iraq. Nevertheless, the appeal to UN member states, allies, and the American public was an important element of prewar planning, designed to legitimize and attract support for the invasion.

Diplomatic appeals included negotiations for foreign military cooperation and support, including overflight rights, staging areas for U.S. troops, and assembly of coalition forces to supplement and confer broader legitimacy on the U.S. invasion force. International support was lukewarm; for example, the Multi-National Force–Iraq (emplaced in May 2004 to stabilize Iraq) would comprise some three dozen countries, but only three (the United Kingdom, Australia, and Poland) contributed troops to the invasion force. The North Atlantic Treaty Organization’s ally Turkey declined an American request to launch a northern ground offensive into Iraq from Turkish territory. Instead, ground campaigns had to come solely from the south; army forces west of the Euphrates River and Marine Expeditionary forces along the Tigris River to the east linked up south of Baghdad to destroy Saddam’s Republican Guard and, along with the “shock and awe” bombing campaign, the Iraqis’ will to fight.

Planning for Postwar Operations

Postinvasion plans for the stabilization and restructuring of Iraq were neglected. The administration’s focus on justifying and generating support for the war and the Pentagon’s focus on logistics, invasion plans, and the destruction of Saddam’s regime diverted needed attention from postwar planning. Phase IV “postconflict” operations turned out to be ironically mislabeled in a country that sank into bloody insurgency within months of the fall of Saddam’s regime.

Perhaps working from best-case-scenario assumptions encouraged by the charismatic Iraqi exile Ahmed Chalabi, upbeat neoconservative officials stressed reports of the Iraqis’ desire for liberation from a brutal, repressive regime. Planners assumed that Iraqi opposition groups would rally behind the American soldiers and that Iraqi soldiers would be co-opted and assigned garrison details—and that the State Department would help install a functioning

provisional government almost immediately on completion of hostilities. However, Rumsfeld maneuvered to wrest control of postconflict operations from the State Department, marginalizing its influence and magnifying the flaws in the postwar planning process.

Blame can be and has been apportioned to General Franks for inadequate postwar planning, but as an institution, the army was not blind to the challenges of Phase IV. One month before the invasion, the Army War College’s Strategic Studies Institute published an 84-page report on reconstructing a postconflict Iraq that anticipated a severe burden on military forces in civil and security affairs; it noted the problems likely to arise from the tribal, ethnic, and religious differences in Iraqi society and asserted that a fragmented population living with weak political institutions and old habits of violent rule would vastly complicate any occupation.

According to the report, a successful occupation would require careful interagency planning, large forces, and a nationally supported, multiyear commitment to nation-building—precisely the opposite of what senior political officials wanted to hear. The actual occupation suffered from a lack of interagency cooperation, exacerbated by turf battles between Defense and State; a deficit of forces capable of securing Baghdad, much less all of Iraq; and an administration that shunned nation-building and sought to transfer hastily the burden of creating a functioning state to the inexperienced and divided Iraqis.

Plans and Reality: From Liberators to Occupiers

The State Department’s contingency planning for stabilization and reconstruction of a post-Saddam Iraq had begun as early as October 2001 with the initiation of the FoI project. Reluctant to participate in postwar planning for fear of implying tacit support for war, diplomacy-minded officials at the Department of State nevertheless set about the task. Seventeen expert working groups addressed topics ranging from democracy and civil society to public health, education, the economy, the environment, and energy resources. Included among the experts were many Iraqi expatriates involved in the Iraqi National Congress and other exile groups. Exiled Iraqis largely agreed that any postwar occupation

should be brief, but they sharply disagreed on the shape of a post-Saddam Iraq—in part because some were jockeying for high-level government positions in a new regime.

Despite marked divisions among its participants, the FoI project accurately predicted many of Iraq's postwar problems in its 13-volume final report. State Department warnings to the U.S. Central Command in February 2003 that the existing plans and the military's reluctance to engage in postwar policing could undermine an initial military victory fell on deaf ears, and an unreceptive Office of the Secretary of Defense likely ignored the findings of the FoI project when designing and empowering the Coalition Provisional Authority (CPA).

The CPA's first two public orders illustrate the Pentagon's poor utilization of the FoI project findings. CPA Order 1, demanding the de-Baathification of Iraqi politics and society, was nominally consistent with the recommendations of the Democratic Principles working group; however, that group's caveat that dismissal of all administrators with Baathist ties would destabilize Iraq was overlooked by the CPA's blanket de-Baathification order. CPA Order 2 summarily disbanded and dismissed Iraq's armed forces, despite the recommendation a year earlier by the Defense Policy and Institutions Working Group that the army gradually be halved and transformed into a democracy-supporting institution. Together, the two CPA orders dismissed, idled, and disillusioned many thousands of government and military personnel, in turn providing both spark and fuel for the insurgency that began in the summer of 2003.

Conclusion

The insurgency triggered a massive, sustained counterinsurgency that kept American combat forces in Iraq for the duration of the Bush presidency and beyond, an outcome that the journalist Thomas Ricks has labeled a fiasco. The contribution of poor postwar planning to that outcome is highlighted by the U.S. Army itself in *On Point II*, the Army's official history of the first 18 months of its postinvasion operations. A peaceful, democratic Iraq might yet emerge as the concluding chapter of the Iraq War saga, but in March 2003, the plans' authors had only the barest sketch of how to realize that goal.

Jonathan M. DiCicco

See also Coalition Provisional Authority; Iraq; Iraq Insurgency (2003–2011); Iraq War (2003); 9/11 (2001); Persian Gulf War; Shock and Awe Offensive; War in Afghanistan

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ISRAEL

Israel is a country of 7 million people in the eastern Mediterranean littoral. It is bounded by the Sinai desert on the south, the Jordan River valley on the east, and Lebanon on the north, although its exact borders have been the subject of both war and political negotiations. Since 1967, Israel has occupied the Gaza Strip, the West Bank, and the Golan Heights, which it conquered in the Six Day War. Nonstate entities exercise some level of control over the occupied territories— Hamas over the Gaza Strip and the Palestinian Authority over the West Bank—so the borders between Israel and these areas are not international in nature. In addition, Israel has extended administrative rule to the Golan Heights and has

annexed East Jerusalem, a move that few countries have recognized. This includes the United States, which maintains one consulate in West Jerusalem and another 5 minutes away in East Jerusalem. This entry examines the political, economic, and social systems of Israel and Israel's relationship with the United States.

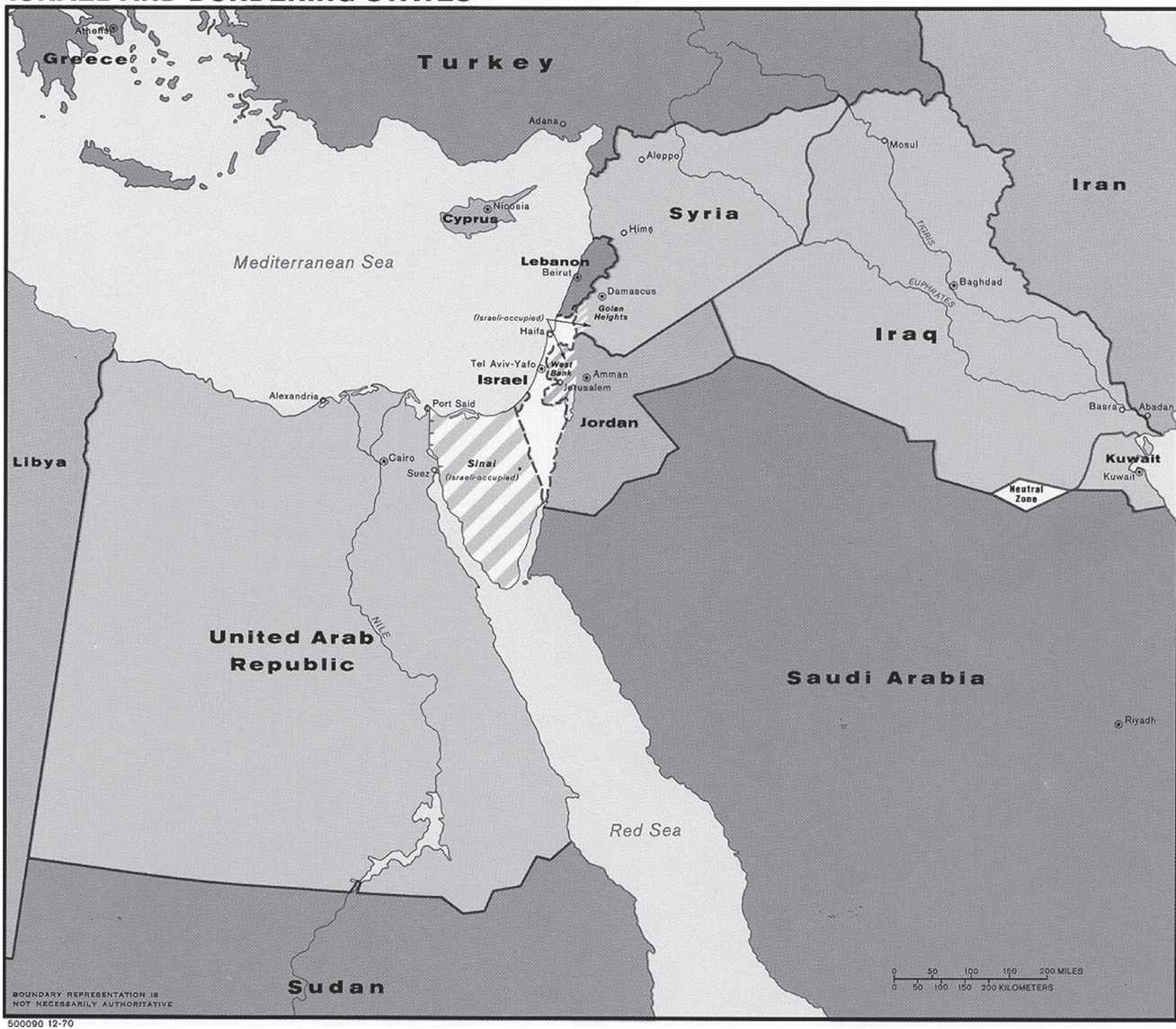
Israel's capital is Jerusalem, although the United States and most other countries maintain embassies in the coastal city of Tel Aviv. Almost all Israeli government institutions are headquartered in Jerusalem,

including the Knesset, Israel's legislature. One notable exception is the Ministry of Defense, whose headquarters is in Tel Aviv.

Political, Economic, and Social Systems

Two themes have influenced Israel's political, economic, and social systems: security and identity. Security has shaped institutional development and is a perpetual part of Israeli discourse. For example, Israelis follow the news avidly; one explanation

ISRAEL AND BORDERING STATES



Map of Israel and the surrounding areas.

Source: CIA map, courtesy of University of Texas Libraries.

given for this phenomenon is that whereas people in other countries watch the news, Israelis live it. Identity has also been a factor in institutional development in Israel, as well as a source of tension. For example, Israel is both a Jewish state and a democracy. This has implications for Israel's non-Jewish citizens, who constitute about one fifth of the population.

Political System

Israel is a parliamentary democracy with a proportional representation voting system. Political parties are allocated seats in the 120-seat Knesset based on their proportion of the overall vote, with a 2% vote threshold. There are no voting districts, and the people vote for closed party lists as opposed to individual candidates.

The low vote threshold—typical thresholds range between 4% and 6%—gives smaller political parties in Israel a disproportionate influence in government. Since larger parties rarely win more than one fourth to one third of the seats, smaller parties can exact policy concessions from larger coalition partners. Historically, the two main parties have been the left-leaning Labor party and the more conservative Likud, although the late prime minister Ariel Sharon formed the centrist Kadima party in 2005, which led the governing coalition until 2009, when it passed into the opposition. Smaller parties like the religious conservative Shas party and the nationalist Yisrael Beiteinu party have also played important roles in recent Israeli governments.

Israel's political system and its security environment are tightly linked. Parochial interparty competition generally recedes in the face of armed conflict—during the intifada in the early 2000s, when the intensity of Palestinian suicide and rocket attacks reached its peak, there was considerable popular support for severe constraints on Palestinian movement in the occupied territories, targeted assassinations, home demolitions, and the construction of a controversial barrier separating the West Bank and Israel.

The disproportionate influence of smaller parties is ever present, sometimes in spite of the security situation. The settler movement, for example, which supports the creation and protection of living space for Israeli Jews in the occupied territories, enjoys continued influence in government despite the fact

that only about 300,000 Israelis live in the West Bank. In fact, Israeli government resources to support settlement in the occupied territories—mostly military protection and housing subsidies—have increased steadily since the 1970s. Israeli Jews living in the occupied territories have been the targets of terrorist attacks over the years, and the settlements themselves are one of the primary issues in Palestinian-Israeli negotiations.

Civil-military relations are emblematic of the security-politics nexus in Israel. All Jewish and Druze citizens are liable for military or national service for 2 to 4 years, depending on gender, marital status, military specialty, and rank. Israel's active military force numbers about 175,000, with about 500,000 in the reserve force. Most Israeli males are reservists into their 40s, participating in training every year. Israel usually spends about 7% of its gross domestic product on defense. With so many resources and people dedicated to the military, it is an important part of Israeli politics.

A distinguished military career is a boon to those with political aspirations. Israel's most revered leaders commanded in the Israel Defense Force (IDF) with distinction during wartime. David Ben Gurion, regarded as the father of Israel, unified the various Jewish militias into the IDF and led these forces during Israel's 1948–1949 War of Independence. Yitzhak Rabin, who was the IDF chief of staff during the Six Day War, was prime minister when Israel signed the Oslo Accords with the Palestine Liberation Organization (PLO) in the early 1990s. Ariel Sharon, who was prime minister during most of the second intifada in the early 2000s, led an armored breakthrough in the Sinai during the Six Day War and was lauded as a hero in the 1973 Yom Kippur War. The judgment of senior military leaders carries a great deal of weight in matters of security, and public friction between civilian and military leaders is rare. There is an uncommon level of civil-military comity in Israel, symptomatic of Israel's security environment.

Israel's political system is also closely connected to issues of identity. The 1950 Law of Return grants all Jews in the world the right to Israeli citizenship, and there has been substantial discussion since on to whom this applies. Furthermore, Israel is both a Jewish state and a democracy. Although non-Jewish citizens enjoy the full rights of citizenship, there are some benefits to being an Israeli Jewish

citizen. For example, non-Jewish school children are often disadvantaged by not being able to take as many courses of a foreign language as their Jewish counterparts, as Hebrew fluency is required and non-Jews typically do not learn Hebrew as a native tongue. With the exception of some religious Jews, all Israeli Jewish citizens are required to serve in the IDF, service that is optional for Arab Israelis but is often a career enhancer for those who do serve. Despite this, non-Jewish Israeli citizens enjoy more rights and privileges than co-ethnic communities in surrounding countries. While there is some tension between Israel as a Jewish state and Israel as a democracy, Israel remains a strong democracy in a region of nondemocracies.

Economic System

Israel's economy is characterized by both large, state-run companies and vibrant entrepreneurship, a phenomenon that also has links to security and identity. Israel is prosperous; it enjoys a per capita gross domestic product that is more than five times the regional average and is one of the world's leading producers of high-tech military hardware and software technology, especially in information security. At the same time, the Israeli economy is burdened by a large public sector and social programs such as the national health care system. Israel has few homeless people, but this puts a significant strain on the economy.

The large government influence in the economy has its roots in issues of security and identity. From the earliest days of statehood, the preparation for war made arms production, communications, and transportation very important for defense. Today, these sectors are dominated by state-run companies. Not only do they play an important role in mobilizing for and conducting war, but they also provide employment for many Israelis. The size of the public sector reflects Israel's Jewish identity as well. In the days of the *yishuv*—the Jewish community in Palestine before Israel was established—Jews often could not rely on non-Jews in times of need, so the community rallied to support all of its members. The collective farming and small-scale manufacturing that began during this time as *moshavim* and *kibbutzim* still go on today and typify this mentality of collective support.

The Israeli penchant for entrepreneurship also has links to security and identity. The shoestring

military of Israel's early days required a great deal of creativity and initiative from the young leaders. This was reinforced by Israel's success in the Six Day War. Israel was outnumbered and outgunned, but Israel's leaders took a gamble that paid off handsomely—Israel tripled the territory under its control. Israelis also pride themselves on being flexible decision makers, a mind-set that also hearkens back to the lean, trying years of the *yishuv*.

Social System

Security and identity also have an influence on Israel's social system. Israeli worldviews range from secular and liberal, on the one hand, to religious and conservative, on the other. The compulsory military or national service that Israel requires of its citizens has an important socializing effect on those who serve and an exclusionary effect on those who do not, such as ultraconservative Jews and some non-Jewish citizens. Serving does carry with it employment and other opportunities, but some of those who serve complain that they are bearing the burden of securing ultraconservative Jews, who do not serve.

Social identity is also tied to where and how Israelis live. Tel Aviv is more liberal and secular than Jerusalem, which is more religious and conservative; Tel Aviv's nightlife, for instance, is regarded as vibrant by comparison. Israelis in the settler movement are more religious than those who live inside Israel's 1967 borders. This is not true of all Israelis living in the West Bank, however—government housing subsidies in the occupied territories draw many secular Israeli Jews as well. In addition, Arab and Druze citizens tend to live in their own communities, many of which—like Nazareth—are in the northern Galilee region. While there are no legal barriers to intercommunal social interaction, most socializing and marriages do not cross communal lines.

Relationship With the United States

Without question, Israel enjoys a special relationship with the United States. Some Israelis jokingly call Israel America's 51st state. Israel is the largest recipient of U.S. aid, which amounts to nearly \$500 per year for every man, woman, and child in Israel. In addition to this official support, there is active fundraising for Israel and Israeli causes among interested communities in the United States, especially Jewish

and Evangelical Christian communities. There is also staunch political support for Israel in American domestic politics, to the extent that it is rare to hear American lawmakers express criticism of Israeli actions. The United States has on a number of occasions also used its UN Security Council veto to deflect or block international condemnation of Israel.

The American-Israeli relationship has not always been this close. American support for Israel was relatively limited before the Six Day War, although President Harry S. Truman did recognize the new State of Israel only a few minutes after it was established. The United States largely adhered to an international arms embargo on the combatants in the 1948–1949 War of Independence, even after the Soviet bloc violated this embargo in a 1955 Egyptian-Czechoslovak arms deal. It was not until 1963 that the United States sold Israel its first major American weapon system, the Hawk missile. The Six Day War energized American support for Israel, and since then American aid to Israel has increased steadily, as has America's propensity to support Israel politically in the international community. Israel, for its part, has effectively cultivated this support, often hosting key American leaders or facilitating their visits to Israel.

One result of this support has been the IDF's use of a number of American weapon systems. Israel's air force uses the F-15, F-16 fighters, and Cobra and Apache helicopters, and ground forces use modified versions of American small arms, though most are made in Israel. Israel has also deployed the Patriot antimissile system. A notable exception to Israel's use of American weapon systems is its main battle tank, the Merkava, which is of Israeli origin.

With the exception of manning Patriot missile batteries during the 1990–1991 Persian Gulf War, the United States has never maintained a significant combat presence in Israel, although many members of the U.S. military have served there in a diplomatic capacity. One notable mission of this sort is that of the U.S. security coordinator, who oversees the training of nonpolice Palestinian Authority security forces.

Recent History and Future Challenges

Israel's greatest security challenges since the end of the Cold War have involved the Palestinians and Iran. That said, relations with the Palestinians have also been characterized by occasional security

successes, such that there has been a fluctuation between strife and quiet with the Palestinians while there has also been a steadily increasing, and increasingly ominous, security challenge from Iran.

When the Cold War ended in 1989, the population of the occupied territories was 2 years into the intifada, a general uprising against the Israeli occupation. At the same time, the U.S. government entered into a dialogue with the PLO, which led, in 1991, to the Madrid Peace Conference, in the course of which Israeli and Palestinian negotiators met face to face for the first time. By 1993, Israel and the PLO had negotiated the first Oslo Accord, contributing to the dissipation of the intifada and ushering in a hopeful period of peacemaking between Israel and the Palestinians.

This security success was short-lived, unfortunately. After the signing of the first accord, the militant group Hamas began using suicide bombers with increasing frequency in terrorist attacks on Israeli civilians. In addition, after Prime Minister Yitzhak Rabin signed the second Oslo Accord with Yasir Arafat and the PLO in 1995, he was gunned down by a radical Orthodox Jewish Israeli. Shimon Peres, who succeeded Rabin as prime minister, tried to keep the peace process moving, but he was not able to withstand the electoral challenge of the opposition Likud party, especially in the face of Hamas suicide bombing campaigns.

From 1996 to 1999, Likud's Benjamin Netanyahu was prime minister. While Israel enjoyed a period of relative quiet, especially in the last 2 years of Netanyahu's tenure, Israel and the Palestinians did not conclude a final peace agreement to establish an independent Palestinian state and ensure Israel's security. After Labor leader Ehud Barak became prime minister, hopes were again high that the two sides would negotiate a final peace agreement. While Barak successfully withdrew the Israeli forces from southern Lebanon—they had been there since 1982—he was not able to conclude an agreement with the Palestinians at Camp David in the summer of 2000.

A second intifada erupted in the fall of 2000, this one much more violent and organized than the first. Despite the fact that Barak was closer to an agreement with the Palestinians at Taba in December 2000 than he had been at Camp David earlier that year, the opposition Likud party came to power in early 2001, installing Ariel Sharon as prime minister.

Palestinian militant groups stepped up their terrorist attacks, resulting in a much greater loss of life than in the mid-1990s. The period from 2000 to 2004 was the most challenging security episode of the post-Cold War era, but Israeli policies and Palestinian infighting eventually contributed to a diminution of the second intifada.

In early 2006, Sharon suffered an incapacitating stroke and was succeeded by Ehud Olmert, former mayor of Jerusalem. Olmert's tenure, which lasted until 2009, saw continued improvement in the security situation vis-à-vis the Palestinians, but it also saw Iran increase as a strategic threat. Evidence of this was demonstrated by the 2006 Second Lebanon War, in which Iranian-backed Hizbullah forces fought the IDF to a standstill, despite the

fact that Israel seriously degraded Hizbullah's missile forces and destroyed significant portions of southern Lebanon's infrastructure. In addition, Israel's December 2008 to January 2009 incursion into the Gaza Strip in Operation Cast Lead precipitated a drastic reduction in Palestinian rocket fire from the Gaza Strip. Iran, for its part, had for years funded and trained the militant groups Hamas and Hizbullah, but when Mahmoud Ahmadinejad was elected president in 2005, he ramped up anti-Israeli rhetoric. This, coupled with Iran's failure to verify the purpose of its nuclear program, has made Iran Israel's primary strategic challenge.

This security situation has remained largely unchanged—uncertainty on both the Palestinian and the Iranian fronts—during Benjamin Netanyahu's



Gaza Strip—January 6: This handout image provided by the Israel Defense Force shows Israeli troops carrying out ground maneuvers on January 6, 2009, in Gaza. The Israeli army announced that four of its soldiers were killed in two friendly fire incidents that day. Israel continues to intensify its wide-scale ground assault on the Gaza Strip in an effort to put an end to Hamas rocket attacks against the Jewish state.

Source: Photo by Matan Hakimi/Israeli Defense Force via Getty Images.

second tenure as prime minister, from 2009 to the present, despite saber rattling over Iran's nuclear program in 2009 and 2010 and the resumption of direct peace negotiations with the Palestinians in September 2010. There is no consensus on how to proceed in this uncertain security environment, although current Israeli discourse suggests a guarded pragmatism for the future. Those who are more hawkish on security argue that Israel can keep the security situation in the occupied territories under control indefinitely, and they tend to be more willing to strike at Iran's nuclear program now, before Iran tests a nuclear device. Less hawkish views hold that a peaceful Palestinian state is a long-term strategic necessity and that any attack on Iranian nuclear facilities would not be as successful as those against Iraq (1981) and Syria (2007). In addition, Israel seems to have responded to American pressure not to launch an attack on Iran, and few observers are openly optimistic regarding negotiations with the Palestinians, as negotiations have broken off and resumed a number of times, both directly and indirectly, since 2010. This guarded pragmatism will likely lead Israel to maintain its strategic flexibility into the future, with Israel able to pursue either

peace or war with the Palestinians or Iran as the case may be.

Nathan W. Toronto

See also Egypt; Hamas; Iran; Middle East Conflict; Persian Gulf War; Syria; Terrorism

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JAPAN

Since the early 1950s, the U.S.-Japan alliance has been the cornerstone of security and peace in East Asia. Following the end of the Cold War, the U.S.-Japan security relationship has been experiencing significant transformations to adapt itself to changing security environments in this region and elsewhere. What follows is a discussion of the current state of the U.S.-Japan security alliance, as well as the process that has led to the ever-closer security relationship between the two in recent years.

Japan: Its Geography and Political, Economic, and Social Systems

Located in the most eastern part of the Far East, Japan, a nation of about 128 million people, consists of four major islands and approximately 3,000 smaller islands, making it an archipelago. Japan has an area of 145,882 square miles, making it slightly smaller than California. Tokyo, the capital city, has a population of 13.2 million, and it serves as the political and financial center of the country.

Japan is a constitutional monarchy with a bicameral parliamentary system. The House of Representatives (the lower house) and the House of Councilors (the upper house) constitute the two chambers (the National Diet). The post of prime minister is filled by the head of the party that has the largest number of seats in the lower house. In the

lower house elections held in December 2012, the Liberal Democratic Party (LDP) returned to power after the 3-year reign of the Democratic Party of Japan, the main opposition party.

Japan is a highly developed industrial, free-market economy. It is among the world's major economic powers, although it was surpassed by China in terms of gross national product, losing its place as the world's number two economy in 2010. Furthermore, the Great East Japan Earthquake and the ensuing Fukushima nuclear accident that took place in March 2011 are believed to have a significant negative impact on the present Japanese economy, although opinions have differed among economists about the severity of the impact.

Article 9, U.S.-Japan Security Treaty, and the Self-Defense Forces

After the end of World War II, the Allied Powers, led by the United States, occupied Japan between 1945 and 1952. The twin initial objectives of the occupation were to demilitarize and democratize Japan so that it would never again pose a threat to other nations. Nowhere did these goals more clearly manifest themselves than in Article 9 of the Japanese Constitution, which was essentially drafted by the American occupation authorities. Article 9 stipulates,

Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation

and the threat or use of force as means of settling international disputes.

In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.

Escalating Cold War tensions, however, prompted the United States to shift the goals of the occupation to reconstructing Japan as America's staunch ally. At the conclusion of the occupation in 1951, Japan signed the San Francisco Peace Treaty by which it was readmitted to the community of nations. Simultaneously, the United States and Japan concluded a security treaty to contain the Soviet threat. In 1960, the security treaty was renewed as the Treaty of Mutual Cooperation and Security between Japan and the United States. Under the treaty, Japan granted the United States the right to station U.S. armed forces in Japan to maintain international peace and security in the Far East and the security of Japan.

In the meantime, the rearmament of Japan proceeded with the encouragement of the U.S. government. First, in 1950, the Japanese government established a National Police Reserve, which was reconstituted in 1952 as the National Safety Forces. In the same year, the National Safety Agency was created. In 1954, the National Safety Forces became the Self-Defense Forces (hereafter the SDF) consisting of the Ground, Maritime, and Air Self-Defense Forces, and the National Safety Agency was renamed the Self-Defense Agency (in January 2007, it was upgraded to become the Ministry of Defense).

Today, the SDF constitutes well-funded, well-equipped armed forces. Under the Self-Defense Forces Law enacted in 1954, these land, sea, and air forces are used exclusively for defense-oriented purposes (thus the ban on sending SDF into overseas combat zones) and are subject to the command of the prime minister. For the past few decades, Japan has ranked within the top 10 nations in terms of its defense expenditures, even though its expenditures have almost always been kept within 1% of gross domestic product (in 2011, Japan came in sixth with \$59.3 billion, according to the Stockholm International Peace Research Institute). As of 2012, SDF personnel totaled approximately 225,000, with the Ground SDF numbering about 140,000, the Maritime SDF about 42,000, and the Air SDF about 43,000.

The Redefinition of U.S.-Japan Security Arrangements in the 1990s

The changing security environment since the early 1990s in the Far East and elsewhere has prompted the Japanese government to make important choices about how to use the SDF in times of international crisis.

The Persian Gulf War in 1991 served as a turning point. Even though Japan ended up contributing \$13 billion to the total cost (estimated \$60 billion) of the war, it was initially criticized by the U.S. government as "being too little, too late." Having been forced to realize that "checkbook diplomacy" was insufficient, the Japanese government moved to create a legal framework enabling SDF personnel to be deployed overseas. As a result, the National Diet passed the 1992 UN Peacekeeping Cooperation Law, which permits the SDF to participate in a variety of noncombat missions under UN command.

After the Persian Gulf War came a series of international crises in the Far East that induced both the Japanese and U.S. governments to reevaluate the nature of the U.S.-Japan security cooperation in times of contingencies. They included the North Korea Nuclear Crisis (1993–1994) triggered by North Korea's withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons, and the Taiwan Strait crisis, when China conducted missile exercises off its coast in March 1996. As a result of these events, the issue of how Japan should respond to "perilous situations in areas surrounding Japan" in the framework of the Japan-U.S. alliance became an urgent agenda item for both governments.

In response, the U.S. Department of Defense published in February 1995 the U.S. Security Strategy for the East Asia-Pacific Region, calling for the redefinition of the U.S.-Japan security alliance. In October 1995, the Japan Defense Agency issued a new National Defense Program Outline for the first time in 20 years. The document emphasized the need to make efforts to realize effective cooperation between the SDF and the U.S. forces stationed in Japan. After the Taiwan Strait crisis, President Bill Clinton and the LDP government under Prime Minister Ryutaro Hashimoto issued a U.S.-Japanese Declaration on Security. The statement emphasized close defense cooperation based on a combination of defense capabilities for the SDF and the Japan-U.S. security arrangements. In this document, the geographical area of U.S.-Japan defense cooperation

was extended beyond the Far East to include the Asia-Pacific region. Furthermore, after a yearlong review of the 1978 Guidelines for U.S.-Japan Defense Cooperation, a new set of guidelines was announced by the U.S.-Japan Security Consultative Committee (SCC, composed of the U.S. secretary of state and secretary of defense and the Japanese minister of foreign affairs and minister of defense) in September 1997. It elaborated on various types of security cooperation between the two countries. Regarding “situations in areas surrounding Japan,” the new guidelines state that the concept is not “geographic” but “situational.” Subsequently, the Japanese government enacted in May 1999 the law concerning Measures to Ensure the Peace and Security of Japan in Situations in Areas Surrounding Japan.

9/11 Terrorist Attacks and Thereafter

The Japanese government’s response to the attacks of September 11 was very prompt. The LDP government under Prime Minister Junichiro Koizumi promised the U.S. government various types of support for the U.S. armed forces. To implement this, the Japanese government quickly enacted the Antiterrorism Special Measures Law, enabling the Maritime SDF to engage in refueling activities in the Indian Ocean during the U.S. attacks on Afghanistan. Furthermore, after the outbreak of the Iraq War, the Koizumi administration legislated in July 2003 the Special Law on Humanitarian Relief and Iraqi Reconstruction. This law authorized the deployment of Japanese troops for reconstruction aid in Iraq, resulting in the dispatch, in February 2004, of about 600 personnel of the Ground SDF troops on a reconstruction mission to southern Iraq.

Availing itself of the gathered momentum, the Koizumi government proposed in 2003 a series of bills related to crisis management, including Armed Attack Situation Response Law. Collectively, the legislation passed by the Diet has strengthened the hand of the cabinet in the event of an armed attack on Japan, while establishing a legal framework for the SDF to work with the U.S. forces stationed in Japan in any contingency. Subsequently, in December 2004, a new National Defense Policy Outline was issued. The document identified international peace-keeping activities and counterterrorism as primary components of Japan’s national defense strategy. It also emphasized the creation of a “multifunctional

military capability” to deal with new threats, including ballistic missile attacks.

In the meantime, a high-level security dialogue between the U.S. and Japanese governments was continuously being carried out. In particular, a series of SCC meetings conducted in 2005 and 2006 led to important agreements concerning U.S.-Japan security arrangements. In this regard, the United States-Japan Roadmap for Realignment Implementation announced by the SCC in 2006 is of particular importance. The agreements reached by the U.S. and Japanese governments in the realignment plan include the relocation of U.S. marines from Okinawa to Guam as part of the overall realignment of U.S. forces in Japan, the replacement of Futenma Marine Corps Air Station in Okinawa, and the deployment of a new X-Band radar system in Japan as part of the ballistic missile defense cooperation. These agreements are intended as strategic measures to strengthen the alliance.

U.S. Forces in Japan

U.S. forces in Japan are part of U.S. Pacific Command. There are approximately 80 U.S. military installations, including major military bases throughout Japan, with a total area of about 3.1 million square meters. They are concentrated in a few prefectures, including Okinawa and Tokyo. As of 2012, there are about 38,000 military personnel stationed in Japan. Annually, Japan has contributed a large sum of money as host nation support for the U.S. forces, shouldering about 75% of the cost of maintaining U.S. forces in Japan.

In particular, Okinawa Prefecture (located several hundred miles away from the mainland) currently hosts about 65% of the entire U.S. forces in Japan. U.S. military installations occupy about 20% of Okinawa Island. To alleviate the burden of the U.S. military presence on the local people, the U.S. and Japanese governments set up in 1996 a Special Action Committee on Okinawa (SACO), whose report called for the reduction and relocation of U.S. military installations in Okinawa, provided that alternative facilities were arranged. Furthermore, according to the 2006 realignment plan, the relocation of the Futenma Air Station would be completed by the end of 2014.

However, as of early 2013, the implementation of the SACO agreements and the realignment

plan has been very slow. The most conspicuous failure of implementation is the relocation of the Futenma Marine Corps Air Station to a new facility in Henoko, Nago city, in Okinawa. While the Japanese government has had a hard time reconciling the demands of the local residents who had opposed the original relocation plan with those of U.S. forces and while the local residents in the Henoko district have voiced their concern that the relocation plan would bring about environmental degradation as well as noise and occasional violence by U.S. troops, U.S. officials involved in the negotiation were reported to have been frustrated about the lack of progress in this matter. The scheduled relocation of U.S. military installations elsewhere in Japan also met with local resistance.

Having come to this impasse, the United States and Japan reached a new agreement in February 2012 to transfer 4,700 marines stationed in Okinawa to Guam by separating this transfer from the issue of relocating the Futenma Marine Corps Air Station, even though the 2006 realignment plan called for carrying out the transfer and relocation in an integrated manner. In any event, the issue of how to distribute the burden of U.S. bases and forces in the face of local opposition will likely continue to pose a worrying problem for both governments.

Conclusion

Since the early 1990s, the U.S.-Japan security alliance has undergone significant changes. Both conceptually and geographically, the *raison d'être* of the alliance is no longer geared to the Far East but has moved beyond its confines to include much wider areas. Overall, the U.S.-Japan defense cooperation has made great strides by sharing common strategic objectives in accordance with the changes in the post-Cold War security environment that helped restore considerable momentum to the U.S.-Japan alliance.

There are, however, several prominent legal and societal challenges to improving U.S.-Japan defense cooperation. First, there is the sensitive issue of collective defense—the right to take military action in response to aggression against Japanese allies. The official interpretation of the right to collective defense by successive Japanese governments is that Japan has the right of collective defense but exercising the right is unconstitutional because it exceeds the use of force permitted under Article 9, which

allows only the individual right of self-defense. This constitutional interpretation has placed severe restrictions on the activities of the SDF overseas. Some even argue that SDF participation in noncombat roles overseas, including rear-area support for U.S. forces outside Japanese territory, is an exercise of the right to collective defense in violation of Article 9. Not surprisingly, U.S. officials have occasionally criticized this strict legal interpretation of Article 9, hinting at the need for Japan to change it.

The Democratic Party of Japan government under Prime Minister Yukio Hatoyama (2009–2010) reportedly leaned toward a position in foreign policy that was more independent from the United States, yet diplomatic cables obtained by WikiLeaks revealed that the Hatoyama government spoke with a double tongue: While showing a conciliatory attitude toward the wishes of the residents of Okinawa—by promising that the Futenma Air Station would be relocated outside of Okinawa prefecture (thus easing the burden of Okinawa Prefecture's hosting of U.S. bases)—it simultaneously expressed to the U.S. government its willingness to comply with the bilateral agreements reached in the 2006 realignment plan. The successive governments led by the prime ministers of the Democratic Party of Japan have made little progress on the relocation of the Futenma Marine Corps Air Station.

However, the LDP government of Prime Minister Shinzo Abe (inaugurated in December 2012) quickly returned to the traditional policy of strengthening the U.S.-Japan security alliance, showing its readiness to relocate the Futenma Air Station to the Henoko district as stipulated in the 2006 agreement. Furthermore, Prime Minister Abe and U.S. Ambassador John Roos jointly announced in April 2013 that U.S. military facilities and land south of Kadena Air Base (the hub of U.S. air power in the Asia-Pacific), including the Futenma Air Station, would be returned to Japan in “fiscal 2022 or later.” This plan will reportedly be made possible on condition that the air station is relocated to the Henoko district in Okinawa prefecture.

Meanwhile, pacifism remains strong among the Japanese public. A significant portion of the general public believe that Japan, as the only nation that has suffered nuclear attacks, should preserve Article 9 at all costs, to serve as a lodestar for the cause of the permanent peace of the world. One might argue that amending Article 9 is tantamount to changing the

national identity that Japan has cherished since the end of World War II.

One thing is certain. National debate will continue in the foreseeable future over whether Japan should further deepen defense cooperation with the United States by aligning itself more closely with the broader Pentagon strategy of maintaining a strong military presence of approximately 100,000 U.S. troops in the Asia-Pacific region or if it should choose to edge toward a more independent self-defense posture while adhering to the spirit of Article 9.

Yutaka Sasaki

See also Bases, Foreign; China, People's Republic of; Korea, North; Persian Gulf War; U.S. Pacific Command

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JOINT POW/MIA ACCOUNTING COMMAND

The Joint POW/MIA Accounting Command (JPAC) is a task force within the U.S. Department of Defense whose stated mission is "to achieve the fullest possible accounting of all Americans missing [or prisoners of war], as a result of the nation's past

conflicts" (Joint POW-MIA Accounting Command website: <http://www.jpac.pacom.mil/index.php?page=home&ind>). Their motto, "Until they are home," reflects the priority of this joint command, so named because it is always composed of two or more branches of the military. This entry describes the history, procedures, and structure of JPAC, and examines the importance placed on recovering the dead, for the U.S. military and civilians alike.

JPAC operates from the island of Oahu, Hawaii, but its roots grew out of the Vietnam War, when two U.S. Army mortuaries operated in South Vietnam. When the conflict ended, these mortuaries closed and consolidated their personnel and equipment and relocated to Thailand. There, the U.S. Army Central Identification Laboratory (CIL) was established in January 1973 with a mission to search for, recover, and identify those service men lost as a result of the Vietnam War. Then, in 1976, the facility in Thailand was deactivated and moved to its current location near Honolulu, where the laboratory was redesignated as the U.S. Army Central Identification Laboratory, Hawaii (USACILHI).

On October 1, 2003, CILHI, the largest forensic anthropology laboratory in the world, merged with the Joint Task Force-Full Accounting (known before 1992 as the Joint Casualty Resolution Center), to form the Joint POW/MIA Accounting Command (JPAC). In addition to its headquarters located at Hickam Air Force Base, JPAC maintains another local detachment in Hawaii and three adjunct facilities in Thailand, Vietnam, and Laos.

JPAC's operations are structured into four interrelated components, namely, analysis and investigation, recovery, identification, and closure. Historians and analysts conduct in-depth research from a variety of sources and archival data, which they later use to estimate the most likely location of an unaccounted-for individual. Often, negotiations with representatives of foreign governments may be required before investigative missions can proceed. Then, utilizing the intelligence gathered by the analysts, recovery teams travel throughout the world to locate and retrieve the missing from these predetermined sites.

Teams of approximately 10 to 15 people, under the leadership of an anthropologist, carry out the excavations, often with the assistance of hired local laborers who are brought in to assist with the digging, soil screening, and collecting of skeletal remains and

additional evidence. All remains and artifacts found on these missions are returned to Hawaii where they are analyzed by CIL using a range of techniques to establish identification of missing Americans.

Lab scientists and anthropologists work together during the identification procedure, using mtDNA testing and other supporting forms of data, including material evidence (e.g., personal effects), to determine positive identity. Each separate line of evidence must be analyzed and integrated with the historical evidence, a lengthy process that may add years to the full recovery and positive identification of missing service members. Once identification has been firmly established and verified by an external reviewer independent of JPAC, the next of kin are notified, and the final closure phase can begin.

Since the First World War, the act of risking one's own life to recover the dead has assumed increasingly sacred prominence for U.S. soldiers. The practice can be traced to the fall of 1918, when the secretary of war promised a home burial to all those killed while serving overseas in what was believed then to be the war to end all wars. This American democratic process, as instituted by the government, genuinely attempted to respond to the wishes of its citizens, but as the 20th century passed, soldiers dying a long way from their homeland became increasingly common. This distance may have fostered harmony among soldiers as collective kinships developed in the absence of home and family, but it also became more difficult for the state to justify these conflicts as worthy of American involvement and sacrifice. Thus, abstractions, such as the proliferation of democratic ideals abroad, were invoked to strengthen national unity and bolster the moral and ethical resolve of citizen soldiers to fight. Frequent reminders and adherence to the actions and rituals of past armies added credence to military doctrine and further reinforced a sense of continuity and shared purpose within the ranks. What began as an unwritten tenet with currency to reinforce the solidarity of armies, has become an extension of the fallen soldier myth—one that glorifies the sacrifice of the living for the dead.

Efforts to fulfill this lingering moral obligation to the dead and their families can have dire consequences such as those that occurred on April 7, 2001, when seven U.S. servicemen and nine Vietnamese died in a helicopter crash in Quang Binh province, Vietnam, during a site survey for a planned JPAC

mission. The American team included men from the Joint Task Force–Full Accounting and POW/MIA Affairs, based in Hawaii, who were intent on recovering the remains of American servicemen lost during the Vietnam War. The 2001 JPAC mission with its subsequent tragic loss of life epitomizes the warrior ethos rooted in antiquity but recently codified in the soldier's creed as "I will never leave a fallen comrade." The practice also raises consideration regarding the lengths to which the United States has traditionally gone to avoid burials in countries deemed unworthy.

Lisa M. Budreau

See also Cemeteries, Military; U.S. Pacific Command; Vietnam War; War Dead, Disposition of

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JOMINI, ANTOINE-HENRI

Baron Antoine-Henri de Jomini (1779–1869) was a Swiss-born French and Russian officer who was considered one of the foremost students of Napoleonic warfare and an authority on military strategy. This entry discusses the life of Jomini and looks at his writings and principles for warfare.

Born in the town of Payerne, in the Vaud canton, on March 6, 1779, Jomini's formative years

were influenced by his prominent family. His father, Benjamin, served as a mayor and, later, on the Grand Council of the Helvetic Republic. Early in life, Jomini was encouraged by his family to pursue a career in business, having been enrolled in a private school at the age of 14 for that purpose. Within a few years, he was working at a banking house in Paris. Yet the young Jomini was entranced by the military, a profession that seemed stimulating and full of excitement. Accordingly, Jomini left his career as a banker to enroll in the army during the Swiss Revolution in 1798. Rising to the rank of captain, Jomini served as secretary to the Swiss minister of war. In 1802, when the war was over, he returned to Paris to work in the military equipment industry and to write his first book on military theory, *Treatise on Grand Military Operations* (1805). Marshal Michel Ney, one of Napoleon's top generals, read the book and subsidized its publication. Ney also presented Jomini a position as an aide-de-camp. Later that year, he was offered a commission as a colonel in the French army. In 1806, as Jomini continued to expound his findings on military theory, he served on Napoleon's staff, where he won the Cross of the Legion of Honour, before returning to serve as Ney's chief of staff. Shortly thereafter, Jomini received a promotion to brigadier general.

Despite Jomini's meteoric rise to prominence, personal frictions and disagreements with military and political leaders would hamper his career in the French army. In 1813, after returning to work with Ney, Jomini would be arrested and censored for failing to supply specific staff reports that had been requested. His arrest and sudden disfavor prompted Jomini to leave the French army and join the Russian army as a military adviser to Tsar Alexander I for the next 2 years. In 1815, Jomini returned to Paris with the victorious allied army only to receive their disfavor for attempting to defend his old mentor, Ney, prior to his execution. Similar to his service with the French, Jomini was distrusted by the Russians for his prior affiliations. Nevertheless, he participated in the Congresses of Vienna (1814–1815), Aix-la-Chapelle (1818), and Verona (1822) before he returned to Russia to pursue his military career, receiving a promotion to full general in the Russian army. In the 1820s, Jomini served Russia in the realm of military education, helping found the General Staff Academy at St. Petersburg. His last active field service was in the Russo-Turkish War of 1828 where he received the Grand Cordon of the Alexander Order. He continued to write prolifically

on military strategy despite returning to advise Czar Nicholas during the Crimean War (1854–1855) and Napoleon III for the Italian campaign (1859). Jomini died on March 22, 1869, in Paris, at the age of 90.

Having published dozens of works on warfare by the age of 50, Jomini had cemented his reputation as one of the foremost authorities on military strategy. In his studies of Napoleon, the French Revolution, and Frederick the Great, Jomini emphasized what he considered to be the operational principles on which success in warfare depended: the importance of interior lines of communication, turning the flank of an enemy force, and the use of superior power at decisive points. Moreover, in his writings, Jomini highlighted the element of surprise, the methodical deployment of troops, the complete destruction of the enemy, and the control of geographic locations. Critics countered his writings by expounding on those of the Prussian military theorist, Carl von Clausewitz, who saw warfare in broader terms that were influenced by sociopolitical factors. While Clausewitz died in 1831, 38 years prior to the Swiss writer, historians would later recognize the two men as important military theorists.

Jomini's works were influential beyond Europe, having been translated into English and incorporated into the curriculum at the United States Military Academy at West Point during the early 19th century. As a result, senior officers in both the Union and Confederate armies began the war adhering to the principles set forth by Jomini but eventually moved away from those concepts as the reality of geographic limitations and advanced technology forced them to modify their strategic views during the Civil War. Jomini's theories were also discredited during the Austro-Prussian and Franco-Prussian Wars in which the victorious armies abandoned his rules for concentration of forces and the emphasis of interior lines. Yet Jomini's influence on military thought and strategy is without question as his works are required readings for military officers. In addition to his *Treatise on Grand Military Operations*, Jomini also wrote *Les principes de la stratégie* (1813), *L'histoire critique et militaire des guerres de la Révolution, 1792–1803* (15 vols., 1820–1824), *La vie politique et militaire de Napoléon* (14 vols., 1827), and *Précis de l'art de la guerre* (2 vols., 1838), among other works.

Alexander Mendoza

See also Art, Combat; Clausewitz, Carl von; History, Military: Approaches to; Military Science; Tactics, Ground Forces

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JOURNALISTS, EMBEDDED

Embedded journalists are accredited members of the press attached to military units in combat. They are tasked with providing the domestic and international public with news and information, as well as a firsthand account of conflict in the 21st century. Embedded journalists are given the opportunity to live with a unit or rotate throughout a battalion during an authorized operation or campaign, in accordance with Department of Defense (DOD) policy and criteria surrounding the conflict. Their role and presence in the conflicts have increased in proportion with the public's interest in the events of the conflicts in which the United States is participating.

Embedded journalists are distinguished from military public affairs officers, who are members of the military charged with relaying the official line of information from the military to the public as well as other members of the press. This entry discusses the history of embedded journalists and examines the relationship between the DOD and the media.

History of Embedded Journalists

War reporting has occurred throughout American history, from coverage of the fight for American independence by amateur journalists to photographers documenting developments of the Civil War.

But in the 20th century the concept took on new dimensions. The development of communication technology from the telegraph to the radio allowed for information to be disseminated more quickly, and the public's interest in developments grew. Today, television and the Internet provide the user with almost instantaneous information on the events of a conflict, with details such as the progress of an offensive and recent casualty figures, often with photographs of those involved.

The term *embedded journalist* was first officially used during the 2003 invasion of Iraq. After massive criticism of DOD media policy during the 1991 Persian Gulf War and the 2001 invasion of Afghanistan, the DOD implemented the policy to rectify previous failures at keeping the public informed.

Although DOD media policy evolved with each conflict, it experienced its greatest advances in the aftermath of the Vietnam War. Perceived media biases and their unintended effects on the development and outcome of the war prompted major revisions in how the American military interacted with the media and the American public. The DOD enacted several new access policies, including the creation of media pools, wherein journalists or photographers input their information, which is then made available to all accredited members of the press. The responsibility for coverage was determined on a rotating basis to ensure equal access and equal distribution of the costs and risks associated with sending a reporter and crew to cover a war.

The DOD's media policy was put to its first real test with the start of the air campaign against Saddam Hussein's Iraqi army as part of Operation Desert Storm. The military proved unable to adequately handle the information needs and requirements of embedded and media-pool journalists traveling with units. There were not enough public affairs officers to monitor the interaction between members of the military and the press; the technological capacity to allow journalists to file their stories in a timely manner was insufficient. The press was loath to follow precautions established for operational security (OPSEC); overall, they exhibited a lack of military knowledge and failed to respect other guidelines for their own security in a live combat zone. The media policy proved ineffective and maladapted to the situation, while the press was not prepared for the realities of the situation. The DOD and the media would

experience a chill in relations following the failures of the war, which would only be exacerbated by the landing of marines in Somalia amid the floodlights of live camera crews.

Embedded Journalists in the 21st Century

After the failed attempts at a working relationship in previous conflicts, the 2001 invasion of Afghanistan provided an opportunity for both actors to work together. Unfortunately, media coverage of the invasion was limited and reflected an unwillingness by the military to provide firsthand access to military operations to a media perceived as biased in either direction. The 2003 invasion of Iraq and subsequent counterinsurgency operations exhibited a new phase in the DOD-media relationship. As scrutiny for American military operations in the Middle East increased at domestic and international levels, the DOD allowed embedded journalists to avoid the problems caused by unmonitored and unaccompanied journalists in a theater of war. Although the media policy surrounding their use was limited and outdated at first, over the course of operations, the policy evolved as did the media's understanding of war coverage. The 21-century phenomenon of mass and social media, amplified by globalization, greatly increased the coverage provided by embedded journalists. The effects of their coverage can be seen in the public reaction to military operations domestically as well as around the world, as the media pools allowed accredited foreign press to acquire information as well. The content and breadth of DOD media policy evolved substantially during the Iraq War and has attempted to address many of the errors and mistakes of previous conflicts.

Despite the perceived success of the use of embedded journalists in satisfying the needs of the military and the media during conflicts, there have been many charges leveled against both as to the neutrality of the coverage and access to information. Charges of biased portrayals, slanted in favor of the pro- and antiwar movements were rampant given the nature of the coverage. The popular spin on "embedded journalist" was that of an "in-bedded journalist" implying that the journalist in question was no longer unbiased but, rather, reflected the official DOD line of information. Questions revolved around issues of journalists remaining neutral when their lives depended on the military. Conversely, issues

concerning unfettered access to military personnel and operations in light of the presence of public affairs officers and other perceived censure mechanisms were prevalent as well.

Embedded journalists often place themselves in the line of fire to provide an in-depth view of the events of a war. The level of danger is directly related to the mission of the unit to which the reporter is assigned. During the Vietnam War, Joseph Galloway was assigned to the airborne infantry that fought the Battle of Ia Drang. He was airlifted with the soldiers, was present for the entirety of the battle, and later co-wrote the book, *We Were Soldiers Once . . . And Young*, which served as an influence for a film of the same name. Evan Wright, on the other hand, spent a month with members of the elite Marine 1st Reconnaissance Battalion. During that time, he was often in the lead vehicle and was present during a number of battles during that time. Writing articles focused on the marines' warrior culture for *Rolling Stone*, his work culminated in the book *Generation Kill*, transformed into a TV miniseries. Embedded journalism is not without its risks, however; seven embedded journalists were killed between 2003 and 2009 in Iraq alone.

Media coverage of conflicts in the 21st century has increased in the wake of globalization, mass media, and the public's need for more information. This has been met by cooperation between the military and the press through the use of embedded journalists.

Ariel Garneau and Radu Venter

See also Media Relations, Military; Public Affairs, Military; *Stars and Stripes* (Newspaper)

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JUST WAR TRADITION

The *just war tradition* is an evolving discourse on how individual soldiers and their commanders may make war ethically or how they can pursue their nation's interests with armed force while retaining their essential humanity. Rooted in the work of Roman jurists as elaborated by medieval Christian theologians, most prominently Saints Augustine and Thomas Aquinas, its precepts were gradually accepted by 18th- and 19th-century soldiers as elements of the "customary usages of war." Later, in a more systematic process, the "tests" of the just war tradition became structural elements of international law via the Hague Conventions of 1899 and 1907 and the Geneva Conventions of 1864, 1906, 1929, and 1949.

The morality of a nation's *resort* to war and its ethical *conduct* of war can be evaluated from three alternative philosophical perspectives: pacifism, realism, and the just war tradition. The pacifist denies that any war can be prosecuted ethically or that it can generate a moral outcome. It is the pacifist's duty to nonviolently oppose and refuse to participate in, or otherwise support, all wars. In contrast, the realist denies that a sovereign nation can behave either morally *or* immorally. A nation-state's highest obligation to its citizens is to ensure its own survival and protect its critical interests by any means determined necessary after judicious consideration of existing threats. In this view, excessive levels of state violence are usually counterproductive but are not immoral per se. For the realist, war is a regrettable but natural aspect of human existence, and the first duty of a head of state is to continually weigh the military capabilities and intentions of competing states in a "structurally anarchic" world. The third philosophical synthesis, the just war tradition, occupies a middle ground between pacifism and realism. It holds that while war creates evil, the extent of that evil can be limited. Its advocates believe that while wars *can* be initiated morally and conducted ethically, it is extremely difficult to do so in practice. To this end, just war theorists have assembled a *reasonable* set of principles observable by fallible individuals making decisions of life and death under great stress. Statesmen and soldiers must conform to its fundamental injunctions, which have been codified into the U.S. military's Law of Armed Conflict.

Politicians and security intellectuals increasingly mobilize just war terminology in arguing for and against various militarized foreign policy initiatives, which indicates both the widespread diffusion of those categories and, less reassuringly, the possibility of their rhetorical use against the grain of their original intent.

This entry explains the basic "tests" of the just war tradition. It does not examine the differing opinions that exist within the pluralistic community of just war advocates on the application of those tests in specific scenarios within different military environments. When codified into international law, just war precepts have historically privileged the *external* security of the sovereign nation-state over the search for peace and justice *within* specific states. In this "Westphalian," or positive law, view, all states are formally equal, regardless of disparities in size, wealth, power, and internal politics. Thus, all nations, even "dictatorships," have a right to control their territory free of aggression from other states. In contrast, just war theorists working from a natural law perspective are less concerned with the sanctity of the Westphalian state and are more concerned with the creation of "civil peace" *within* nations, particularly those suffering under totalitarian regimes.

Jus ad Bellum: Tests That Apply to the Resort to War

Five tests apply to a nation's resort to war. First, war may only be waged by *sovereign authority*. War may not be justly initiated by a constituent element of a state, such as its military acting without authorization, or by an ethnic group or political movement seeking to draw the nation into a struggle it commences in pursuit of its own grievances or interests. Second, war must be waged in a *just cause*: to overturn or prevent an actual or imminent wrong in order to reestablish a state of peace. With respect to "wars of choice," in rare cases a *preemptive* war may be retrospectively determined just, but the evidentiary standard for a nation striking first is very high, and it must be able to present proof of an imminent attack, as Israel was able to do after it destroyed the Egyptian Air Force on its airfields in June 1967. In contrast, a *preventive* war undertaken to destroy or disarm a hostile state or political regime because of a threat it poses,

however acutely that threat is felt, fails the test of just cause. Thus, in ejecting the Iraqi army from Kuwait in 1991, the U.S.-led coalition was fighting in a just cause, the restoration of Kuwaiti sovereignty and reestablishment of peace. In contrast, the coalition that removed Saddam Hussein from power in 2003 failed to produce Iraqi weapons of mass destruction and, thus, could not meet the evidentiary threshold for a just preemptive war.

Third, war must be waged with the *right intention*: to restore peace and return to the *status quo ante bellum*. Right intention reinforces just cause by discouraging nations from expanding their war aims with the success of their armed forces. President Harry S. Truman transgressed this principle when he permitted General Douglas MacArthur to cross the 38th Parallel in October 1950, thus expanding U.S. aims beyond the defense of one sovereign state, South Korea, to encompass the elimination of another, North Korea. Most wars of “regime change” are unlikely to meet the test of right intention, as they seek to change the balance of power regionally or globally and not to preserve a peaceful (however tense) equilibrium between the existing set of actors. However, some just war theorists have argued that a war may be justly initiated to create civil peace for the inhabitants of a nation oppressed by a tyrannical regime, even in the absence of an imminent security threat to neighboring sovereign states.

The fourth test of *jus ad bellum* is *last resort*: All reasonable nonmilitary means to redress the wrong threatening to cause the war must first be exhausted. Good faith diplomatic initiatives must, thus, precede military action. Here again, the Persian Gulf War of 1990–1991 provides an excellent illustration of both right intention and last resort: the 4-month buildup of coalition forces in Saudi Arabia, while primarily aimed at assembling overwhelming combat power, concurrently attempted (unsuccessfully) to coerce Saddam Hussein into evacuating Kuwait. In addition, President George H. W. Bush ended the ground campaign when the preconflict status quo had been reestablished, resisting the temptation to “finish the job” by occupying Baghdad and ending Baath party control of Iraq.

Finally, a nation resorting to war must have a reasonable *hope of success*. This test was originally intended to discourage weak principalities from defending themselves against stronger neighbors

if the near-certain result would be national defeat and unnecessary suffering for their subjects. While this no longer appears to be a meaningful consideration, a second interpretation of hope of success emerged during the U.S. counterinsurgencies in Afghanistan and Iraq. As emphasized in the work of Carl von Clausewitz, statesmen and soldiers must understand the unique elements of the war on which they embark to know if their aims can actually be achieved within the total national means and at a bearable cost in time, wealth, and lives, including the lives of civilians, which is a critical concern of the proportionality test discussed below. Reasonable hope of success would thus seem to caution great powers against launching “nation-building” counterinsurgency campaigns unless they possess an accurate understanding of the cultures in which their militaries will operate.

Jus in Bello: Tests That Apply to the Conduct of War

The two tests of *jus in bello* mark a transition from the realm of statesmen and national leaders to the working world of the soldier in contact with enemy combatants and civilians. While proportionality and discrimination are analytically distinct, they become intertwined “on the ground.” If equal concern is given to both, they are mutually reinforcing. The reverse is also true: When one principle erodes, the other is damaged.

The just war tradition is a *rights-based*, as opposed to a utilitarian, moral calculus. Innocents possess a special immunity that cannot be traded off against any other consideration in any set of circumstances. A nation can easily transform what began as a just war into an unjust war through poorly regulated violence, and the *jus in bello* tests are intended to prevent this depressingly common outcome. A nation may not mitigate disproportionate or indiscriminate actions over the duration of a war with a surplus of right in the conflict’s outbreak: *jus ad bellum* and *jus in bello* tests must be separately satisfied throughout the length of the conflict.

War must be waged with *proportionality*: The good must outweigh the bad; unregulated violence must not be permitted to subvert just ends. *Macro proportionality* involves weighing the universal goods and evils likely to result from different strategic and operational courses of action to avoid

erosion of the right intention. *Micro proportionality* operates at the tactical level of war and requires military chains of command to rule out excessively lethal (against people) or destructive (against essential infrastructure) weapons or tactical practices not necessary to the defeat of the enemy's military.

War must also be waged with *discrimination*: There must be no avoidable killing of innocents; noncombatants are *morally immune* from attack. However, the doctrine of *double effect* permits actions that result in civilian deaths if the action was not intended as a means of defeating or terrorizing the enemy. Similarly, the structures of civil society are not legitimate military targets. However, a *dual use* target, such as a city's electrical power grid, may be struck if, for example, it supports both a hospital and a military antiaircraft radar system. The burden of proof lies on the military commanders to demonstrate that the military value of the dual use target exceeded the primary or secondary risks to noncombatants.

A corollary to the principle of discrimination extends protections to prisoners of war and soldiers who attempt to surrender in good faith: All soldiers who fight under sovereign authority are morally equal, even those whose nation is prosecuting an unjust war. Thus, German soldiers who were members of antipartisan units operating in Eastern Europe, Greece, and Yugoslavia had a right to expect their surrenders to be accepted at the close of hostilities, even those who were later subjected to prosecution for individually committed war crimes. However, soldiers and civilians constitute separate moral categories: Soldiers are expected to risk their lives; civilians have a right to expect theirs will not be taken or casually risked, no matter how attractive a specific utilitarian calculus may appear at the moment. The just war theorist thus cannot justify either the 1945 incendiary attacks on Tokyo or the atomic bombing of Hiroshima and Nagasaki with elements distilled from the just war tradition. Even if recent studies of probable American combat casualties during an invasion of the Japanese home islands are correct, it is impermissible for a nation at war

to avoid 250,000 or 500,000 combatant casualties by intentionally killing noncombatants, as civilian workers in military industries do not forfeit their noncombatant status.

Conclusion

Just war thinking does not *require* any sovereign state to initiate military action in any given situation. War is always a *choice* regardless of how constrained any nation's options may appear to be. Some contemporary security specialists have argued that classical just war imperatives have been rendered obsolete by the terrorists attacks of September 11, 2001, a view subsequently reinforced by a steady proliferation of "weak," "failed," and "rogue" states and violent nonstate actors. However, as developed nations struggle to deal with these emerging threats, the seven tests of the just war tradition remain the best tools available to maintain appropriate limits on *state* violence in international relations.

John S. Reed

See also Crimes, War; Ethics; Geneva Conventions; Hague Conventions; Laws of War; Realism in International Relations

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KEEGAN, JOHN

Born in Clapham, England, Sir John Desmond Patrick Keegan (1934–2012) was the son of a World War I veteran. Although he never served in the military, growing up during World War II, as well as being the son of a veteran, sparked his interest in war and conflict. When he was 13, orthopedic tuberculosis caused a disruption in his education, but he did not allow his illness to delay him for long. Educated at King's College, Taunton, and Wimbledon College, London, Keegan entered Balliol College, Oxford, in 1953, where he completed his studies before beginning work at the American Embassy in London. He remained at that post for 3 years, and in 1960, he joined the academic staff at the Royal Military Academy at Sandhurst as a lecturer in military history and served a tenure of 25 years. During this time, he had been a visiting professor at Princeton University, New Jersey, and the Delmas Distinguished Professor of History at Vassar College, New York, and had firmly established himself in the profession through his numerous publications on a wide range of topics related to military history. In 1986, Keegan's career took him in a new direction, and he left Sandhurst and became a defense correspondent for the *Daily Telegraph*. Keegan's list of honors included Fellow of the Royal Society of Literature, Officer of the British Empire, and a Knight Bachelor in 1999 for services to military history. Keegan passed away at the age of 78 in 2012, and on his death, his achievements were acknowledged in the form of an obituary in the

New York Times. This entry discusses the works and influence of John Keegan.

The Face of Battle

A prolific writer, Keegan has been influencing students of military history, both civilian and military, since he began lecturing at the Royal Military Academy, and Keegan often relied on case studies to facilitate his examination of the evolution of tactics, strategies, and commanders. Among his most widely read books are *The Face of Battle* and *The Mask of Command*. In *The Face of Battle*, Keegan examines three pivotal battles—(1) Agincourt, (2) Waterloo, and (3) the Somme—to make broader generalizations about the evolution of infantry fighting and to predict the future of battle. He explains how the fog of war isolated both the ranks and the officers, as a result of the vast expansion of the killing fields and improvements in weaponry, communication, and logistics. In contrast to Agincourt, which was fought in a day and where senior leaders could personally survey the battlefield, the Somme unfolded over several weeks in a battlefield that stretched for miles. In many respects, Keegan's *The Face of Battle* has been his most influential book and has been instrumental in shaping scholarship that focuses on the social history of battle. In *The Face of Battle*, Keegan set, as well as raised, the bar for military historians, who eagerly accepted the call to examine the battle from the perspective of the rank and file. The result has been a body of scholarship that investigates the social history of battle and of war and includes,

among others, Fred Anderson's *A People's Army: Massachusetts Soldiers and Society in the Seven Years' War* (1984), Jason Phillips's *Diehard Rebels: The Confederate Culture of Invincibility* (2007), Carol Reardon's *Pickett's Charge in History and Memory* (1992), and Stephen E. Ambrose's *Band of Brothers* (1992).

Other Scholarship

Keegan set the standard with his seminal work, and critics, noting the prolific number of books he wrote since the 1970s, suggest that none of his later work quite met that standard. Despite that suggestion, his books still rightfully garner much attention, foster debate among military historians, and continue to be influential. Though they received mixed reviews from historians, particularly military historians, some of these works still require mention.

In *The Mask of Command*, Keegan assessed the leadership qualities of famous commanders—specifically, Alexander the Great, the Duke of Wellington, Ulysses S. Grant, and Adolf Hitler—to illustrate the nature of generalship, which he divided into two types—(1) heroic and (2) directorial. In evaluating these four commanders, he demonstrates the ways in which they are both similar and different and what worked for them and what did not. Keegan (1988) argued in *The Mask of Command* that

the leader of men in warfare can show himself to his followers only through a mask, a mask that he must make for himself, but a mask made in such form as will mark him to men of his time and place as the leader they want and need. (p. 11)

In *The Price of Admiralty: The Evolution of Naval Warfare*, Keegan examines naval combat and uses a case study approach to examine the battles at Trafalgar, Jutland, Midway, and the Atlantic. In this study, he demonstrates the ways in which naval combat changed during the 19th century and the first half of the 20th century and the technologies and commanders that fostered change. As Peter Paret aptly noted in his *Journal of Military History* review, Keegan, in *The Price of Admiralty*, provides a reinterpretation of “known” facts, not a new assessment of these naval battles. Using an approach that worked in *The Face of Battle*, however, Keegan's discussions of individuals in extreme

danger stand out. Although he gives Keegan credit for his efforts to discuss all aspects of these battles, including his assessments of technological, social, and economic changes, as well as the impact of personalities, Paret ultimately provides a mixed review of *The Price of Admiralty*. Although he suggests that it does not quite meet the standard set by the earlier, more influential work—*The Face of Battle*—Paret argues that it still makes a contribution to military history and sparks naval history discussions.

Keegan wrote on a wide range of topics. Like other leading military historians, he focused on both national and world conflicts. His work in these areas include *Fields of Battle: The Wars for North America*, *The American Civil War: A Military History*, *The First World War*, *Six Armies in Normandy: From D-Day to the Liberation of Paris*, *The Second World War*, *The Battle for History: Re-Fighting World War Two*, and *Who Was Who in World War II*. Not one to shy away from broad or current topics, Keegan continued to make contributions to military history with monographs, such as *Intelligence in War: Knowledge of the Enemy From Napoleon to Al-Qaeda*, *A History of Warfare*, *The Battle for History*, and *The Iraq War*.

In some respects, Keegan took a different approach in *A History of Warfare* than in his earlier works. Focusing on the anthropology of war, he examines war as a “cultural formation.” Keegan bravely challenges Carl von Clausewitz's theory that “war is the continuation of policy by other means,” and he suggests that, according to Clausewitz, war should replace policy. In addition, he argues that Clausewitz did not account for warfare by nonstate actors, such as that employed by al Qaeda. Not willing to analyze only one aspect of warfare, Keegan uses a discussion of intelligence to present another history of war. With skillful writing, he again demonstrates the breadth of his understanding of military history. Drawing on the template that has worked so well for him in the past, Keegan uses seven case studies to weave his story. Keegan stated how useful intelligence was in war. However, he ultimately concluded “that intelligence in war, however good, does not point out unerringly the path to victory” and stressed the supporting role it played in achieving military success (Keegan, 2003, p. 6).

Keegan was an influential scholar and teacher of military history. His books are read by civilian

and military students and have broadened their understanding of the nature of war. As one of the leading authorities on military history, his scholarship has sparked debate and challenged students to emulate him. In his job as defense editor at the *Daily Telegraph*, Keegan was in a position to influence a broad public audience and policymakers, as well as combat commanders. For instance, Keegan briefed President Bill Clinton prior to his journey to Normandy, France, in 1994, to commemorate the 50th anniversary of the D-Day invasion.

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See also Battleships; Clausewitz, Carl von; Communication; History, Military: Approaches to; History, Naval: Approaches to; Logistics; Strategy, Ground War; Strategy, Naval

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KOREA, NORTH

North Korea is one of the world's most reclusive societies. Although its leadership recently transitioned, the small Asian country has been a security concern for the United States since the end of World War II and has been at war with the United States since the Korean War Armistice was signed in 1953. North Korea continues to cause tension in the Far East, building nuclear and other weapons and threatening war with South Korea and its allies. This entry examines the history and economy of North Korea, the influence of controlling leaders such as Kim Il Sung and his progeny, North Korea's relationship with South Korea and other countries, and its nuclear program.

General Information

The state of the Democratic People's Republic of Korea (DPRK or North Korea) gained its independence from Japan following World War II and officially established its government on September 9, 1948. The capital of North Korea is Pyongyang, located in the southwest of the country.

North Korea lies directly north of the Republic of Korea (South Korea) on the Korean Peninsula and is slightly larger than its southern counterpart. North Korea is bordered by China and Russia in the north. The Yellow Sea (also known as the West Sea by Koreans) lies to its west and the Sea of Japan (also known as the East Sea) to its east. Approximately 80% of land in the DPRK is mountainous. Recent estimates calculate the amount of arable land between 20.7% and 22.4%.

History

Pre-World War II

Up to the 1st century CE, the Korean Peninsula was the site of the Old Chosŏn civilization. As the Chinese gained more power, the Old Chosŏn

federation declined, and three new states emerged. One state, Koguryŏ, was located in the northern part of the peninsula. Koguryŏ developed during the 1st century CE and continued to expand until its defeat in 313 CE. North Korean historians claim Koguryŏ as the most important period in their history. Two other states, Paekche and Silla, also grew in power. This period (246–668 CE) is known in Korean history as the Three Kingdoms period. By 676 CE, the Silla emerged as the sole power and prospered for more than two centuries before declining.

A new state known as the Koryŏ grew in strength, which is where the name Korea originated. The Koryŏ Dynasty lasted until 1392 and established an aristocratic hierarchy on the peninsula. Korean society was highly influenced by Chinese civilization during this period.

After a series of Mongol invasions, the Koryŏ court fractured. One group emerged victorious and established the Chosŏn Dynasty. The new state lasted from 1392 to 1910 and established its capital at Seoul. A new Korean culture developed during this period, highly influenced by Confucianism. An alphabet, *hangul*, was also developed during the Chosŏn Dynasty by a king in the 15th century. *Hangul* is still used today in North Korea.

During the Chosŏn Dynasty, Korea faced several invasions from the Japanese. The Chosŏn were able to defeat the Japanese in the 16th century and establish a relationship with the Qing Dynasty in China. As the Chinese declined in power, the Japanese became powerful and eventually forced an unbalanced treaty on the Koreans, affecting trade and land rights. Russia and Japan struggled to claim the Korean Peninsula for their own, splitting Chosŏn at the 38th parallel.

Japan ultimately claimed Korea as its own colony in 1910 following victory in the Russo-Japanese War. The Japanese installed a new government on the peninsula, changing the official language to Japanese. Feeling defeated and dishonored, the Korean people began to fight back in the 1920s by establishing nationalist and communist parties. North Koreans trace their ideology and leadership to the Japanese resistance fighters, specifically in Manchuria. One fighter turned leader in Manchuria was Kim Il Sung.

World War II to Korean War Armistice

Despite Korean hopes for a unified and independent country, an agreement between the Soviet

Union and the United States brought Soviet troops north of the 38th parallel in August 1945, and American troops occupied the peninsula south of the 38th parallel that September. The first government created was the Interim People's Committee in February 1946, led by Kim Il Sung. The Korean Communist Party and other groups combined in August 1946 to form the new dominant political group called the Korean Worker's Party, which still survives today. Kim continued to be the commanding voice of North Korea. Shortly after the Republic of Korea was founded, Kim announced the birth of the Democratic People's Republic of Korea on September 9, 1948. The new state's capital would be at Pyongyang.

American troops in South Korea had helped suppress communist and other guerrilla movements but were unprepared for total war. On June 25, 1950, Kim ordered North Korean troops to move into South Korea. After war had consumed the entire peninsula, an armistice was signed, and the demilitarized zone (DMZ) was established at the 38th parallel on July 27, 1953. Both the armistice and the DMZ still exist.

Kim Il Sung and Juch'e

Kim Il Sung and the Korean Worker's Party established a socialist command economy in North Korea. The new state's agriculture would be communal, and the economy would mainly focus on industrialization. Kim's model of communism was called *juch'e* and permeated all walks of life. *Juch'e* meant independence in politics, economic self-reliance, and self-defense.

Kim was unchallenged in his rise to become leader of the Korean Worker's Party. By 1956, he controlled all facets of North Korean government and life. While South Koreans have been influenced by a number of cultures and religions, North Korean society is strictly influenced by Kim Il Sung. The "Great Leader" was and still is greatly revered in North Korea and gained an almost godlike status.

After the Korean War, a period of obstinacy ensued for both North Korea and South Korea. A series of meetings between the two states finally led to the announcement in 1976 that they would seek peaceful reunification. In 1979, however, the United States revealed its intention to keep troops on the Korean Peninsula. North Korea then began to improve its military capabilities and build tunnels under the DMZ. The next few years brought

about talks between the United States, North Korea, and South Korea, as well as direct talks between the United States and North Korea, sponsored by the Chinese. Small advances were made through North-South family visitations and Seoul investment in North Korea, but Pyongyang continued to cause concern through its nuclear program, weapons sales, and drug trafficking.

Kim Jong Il

The “Great Leader” suddenly died on July 8, 1994. Kim’s son, Kim Jong Il, had been prepped to take over his father’s position since the 1980s and became the chairman of the National Defense Commission and commander in chief of the military in April 1993. Despite being the heir apparent, Kim Jong Il was not declared the general secretary of the Korean Worker’s Party until 1997. Nicknamed the “Dear Leader,” Kim continued his father’s dictatorial rule. Severe economic downturn and famine pushed the reclusive society further into danger of collapse.

Kim was known for his eccentricities. His attempts to disguise his height (5 feet 3 inches) by wearing platform shoes and a bouffant hairstyle made him recognizable throughout the world. He was also known to spend extravagantly on luxuries. He possessed expensive cars and luxurious vacation houses, and brought in liquor and food from all over the world. He had a movie library into the tens of thousands and kidnapped a South Korean filmmaker and his actress girlfriend in the 1970s and forced them to produce films for him. North Korean official reports even attempted to create a divine status for the “Dear Leader,” changing his birth date and birth story to a more mythical tale.

Kim reportedly suffered a stroke in 2008. While he tried to maintain a visible presence in North Korea, he was becoming conspicuously weaker. Kim died on December 17, 2011, at the age of 69.

Kim Jong Un

Kim Jong Un was born in 1983 or 1984 to Kim Jong Il’s third wife. He was educated in Switzerland but reportedly resisted Western influences. He returned to North Korea frequently and attended Kim Il Sung Military University on his final move home. As early as 2009, South Korean intelligence reported that the “Dear Leader” named his youngest son, Kim Jong Un, as his heir. Kim Jong Un was given progressively higher political posts over several years, and

he attended many high-profile events with his father after his father’s stroke in 2008.

After his father’s death, Kim Jong Un was declared the “great successor” and was named head of the party, state, and military. A few months after his succession, North Korea launched a rocket, claiming it was meant to put a satellite into orbit. The rocket failed but set off international concerns as a breach of the ban on long-range missile technology. As with Kim Jong Il, the North Korean media has spent months building up Kim Jong Un’s personality. It was revealed in 2012 that Kim was married to Ri Sol Ju. They may have been married as early as 2009, and not much is known about the dictator’s wife. She always appears well dressed in public, with designer clothes and accessories.

Society and Economy

North Korea’s population was estimated to be 23.3 million in 2007, and 60% of its citizens live in urban areas. Traditionally, the agricultural areas had been unable to feed the entire population, and this led the North Korean government to import food with the finances provided from exports of industrial products.

Due to a series of droughts and floods in the mid-1990s, arable land dramatically diminished, and the need for more imported foods rose. A further decline in industry left Pyongyang unable to finance more imports. North Korea suffered the worst famine in the late 20th century, and the only famine to hit a country not at war. The famine lasted through the mid- to late 1990s and left more than 1 million people dead. Most of the deaths occurred from diseases related to malnutrition and poor water supply, affecting mainly the elderly and very young.

North Korea is still facing major food shortages. The crisis was recently made worse by widespread flooding in June and July of 2012. Hope of international aid was dampened when the United States refused to send further food supplies after North Korea’s failed rocket launch. It is reported that the government has decreased individual food rations to 700 calories a day (an average, healthy adult should get around 2,000 calories a day).

Life for the politically elite is markedly different from that of an average North Korean’s life. Pyongyang, rebuilt after the Korean War, boasts clean streets and spacious living for those allowed to live there. Services in the capital are far beyond what the rest of the country has, providing new hospitals

and a state-of-the-art Children's Palace, where children of the privileged can learn various arts and sports.

Any opposition, real or perceived, to the North Korean government or leadership is met with swift retribution. An extensive system of work and prison camps is run by the government to house political prisoners, criminals, and their family members. Human rights organizations report severe conditions, and large numbers of prisoners die from starvation, exhaustion, and torture. The North Korean government denies the allegations of human rights violations.

International Relations

Russia and China

Without support from China and the Soviet Union, North Korea would probably not have established its own state. Until the end of the Cold War, both China and the Soviet Union provided markets for North Korean goods and supplied the country with oil and other needs. The former Soviet state established relations with South Korea in 1990, and China followed in 1992. While the Soviets abandoned North Korea in search of larger markets in South Korea, the Chinese have tried to balance relations with both Koreas. China has established extensive economic ties with South Korea since the early 1990s, but it continues to support the North Korean economy, most likely for historical reasons as well as for prevention of regional destabilization and mass population migration across the Chinese border if North Korea collapses.

Japan

North Korea's ties with Japan have been strained since World War II. Although North Korea professed a desire to have diplomatic and economic ties with Japan, support among the Japanese people deteriorated. Japanese citizens were kidnapped by North Korea and never found, Japanese visitors to North Korea were prevented from communicating with family in Japan, North Korea granted safe haven to a Japanese terrorist group in 1970, and Pyongyang consistently failed to pay debts to Japanese businesses. Although a series of diplomatic talks was initiated in the 1990s, a stalemate ensued over North Korea's demand for colonial reparation payments and Japan's precondition of information on its

abducted nationals. Eventually, Kim Jong Il admitted that the Japanese nationals were abducted, and Japan refused to return the captives to Pyongyang after visits to Japan were granted. Tensions between the two countries are also marked by North Korea's testing of a ballistic missile over Japan in 1998 and several incidents involving North Korean ships.

The United States

The United States and North Korea have had a long history of distrust since the end of World War II. North Korea views the United States as evil and the largest imperialist nation in the world. The United States sees North Korea as a rogue state and a continuing security risk. Several events since the Armistice in 1953 have perpetuated U.S. distrust: North Korea's seizing of the USS *Pueblo* in 1968, shooting down a U.S. reconnaissance plane in 1969, killing two U.S. officers at the DMZ in 1976, assassinating South Korean cabinet officials in 1983, and the terrorist bombing of a South Korean civilian airliner off the coast of Myanmar in 1987.

Toward the end of the 1980s, relations began to thaw between the United States and North Korea. Many cultural and educational exchanges took place during this time. Both Koreas were admitted into the United Nations in 1991, which the United States supported. After North Korea agreed to sign a nuclear safeguard agreement with the International Atomic Energy Agency in 1992 and allow inspectors into nuclear facilities, the United States and South Korea canceled the annual Team Spirit exercises. Further discussions between the two countries led to a joint statement in 1993.

The temporary turn of good relations did not last long. North Korea refused to stop its nuclear program and allow inspectors into the country in 1994. Although the United States was prepared to go to war, former president Jimmy Carter was able to step in and enable last-minute negotiations between the United States and North Korea. A new agreement was reached by the end of the year for the denuclearization of the Korean Peninsula. The agreement allowed for each country to take small steps to show their cooperation. Although the United States met its obligations of shipping fuel to Pyongyang, North Korea continued to inflame U.S. allies by testing ballistic missiles and allegedly building other weapons of mass destruction. Further negotiations took place

throughout the 1990s, and U.S. Secretary of State Madeleine Albright even made a visit to Pyongyang in 2000 to meet with Kim Jong Il.

Despite what appeared to be a nuclear stalemate, President George W. Bush declared in October 2002 that North Korea was violating the 1994 agreement by secretly working on a nuclear program. Pyongyang claimed it was their right to build weapons if the United States continued to be hostile, and subsequently, North Korea broke from the 1994 agreement, expelling inspectors from the country.

South Korea

Above all other countries, South Korea has most aggressively pursued engagement with North Korea in the 21st century. In 1998, the newly elected South Korean president Kim Dae Jung formed and pursued the Sunshine Policy, created to end hostilities with Pyongyang and develop economic and cultural ties through various channels. The popular program resulted in a rapid rise of trade between the two countries and numerous South Korean companies opening businesses in North Korea. Hundreds of thousands of South Koreans were also permitted to visit North Korea in the early 2000s, and tourism to North Korea has steadily increased since that time. A significant trip by Kim Dae Jung to North Korea in June 2000 further underscored joint principles of peaceful reunification.

Despite working toward a stable relationship, South Korea is still cautious about its security. U.S. troops remain in South Korea, and nuclear threats/testing done by Pyongyang have balanced public opinion that was beginning to push for a withdrawal of troops.

Nuclear and Other Weapons

North Korea currently has a nuclear program in progress and has tested two nuclear devices. It has tested short- and medium-range missiles and appears to have active chemical and biological programs. North Korea is not a party to the Chemical Weapons Convention or the Comprehensive Test Ban Treaty, and it withdrew from the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 2003. The DPRK is also an exporter of missiles and missile technology to countries like Egypt, Iran, Libya, Pakistan, Syria, and Yemen, and it is not a member of the Missile Technology Control Regime.

Nuclear

North Korea's nuclear program began in the 1950s, and its first research complex was built by 1964 at Yongbyon-kun. The nuclear program expanded with Soviet help, and Pyongyang built a plutonium reprocessing plant. Although North Korea became a party in 1985 to the NPT, it did not allow International Atomic Energy Agency inspectors access to facilities until 1992. When inspectors were unable to inspect all the nuclear sites, the United Nations authorized special inspections. In response, North Korea threatened to withdraw from the treaty.

Special bilateral negotiations with the United States led North Korea to agree to suspend its withdrawal from the NPT. An Agreed Framework was reached in 1994, whereby North Korea would agree to halt its nuclear program in exchange for a light-water reactor and oil shipments from the United States, Japan, and South Korea. This agreement stabilized the situation for almost a decade.

In December 2002, a crisis began to take shape in North Korea. Pyongyang announced its intention to restart a nuclear program, expelled inspectors, and, less than a month later, withdrew from the NPT. North Korea officially announced that it possessed nuclear weapons in 2005. It first tested a nuclear explosion device in October 2006.

After the nuclear test, countries with interests in the Far East scrambled to restart negotiations with North Korea. China continued to apply pressure, and Pyongyang returned to six-party talks. In 2007, the talks produced an agreement for North Korea to shut down the facilities at Yongbyon, again in exchange for heavy fuel oil.

North Korea finally submitted a nuclear declaration and destroyed a cooling tower at Yongbyon in June 2008 to show its commitment to the process. However, six-party talks continued to cause a rift between North Korea and the other states, culminating in a North Korean missile test in April 2009. The UN Security Council condemned the move, and Pyongyang subsequently tested another missile and another nuclear weapon in April and May 2009, respectively.

Chemical and Biological

North Korea is suspected of a continuing biological weapons program, despite being a party to the

Biological and Toxin Weapons Convention. Details of Pyongyang's capabilities are sketchy, but a report by South Korea published in 2006 estimated 2,500 to 5,000 metric tons of biological agents in the DPRK's possession, including cholera, smallpox, and anthrax.

Pyongyang is not a party to the Chemical Weapons Convention and is reported to have about 12 facilities that produce or store chemical agents. North Korea can allegedly produce 4,500 metric tons of chemical agents per year, and the military purportedly already possesses several chemicals, including sarin, mustard, and phosgene gas, among others.

Summary

Although leadership has recently transitioned in North Korea, it is unclear if any changes will be forthcoming. Kim Jong Un appears more laid back than his father in public, but approving a rocket launch seemed to be business as usual for the government. The North Korean people still face food shortages and repression, and the future of North Korea is uncertain. In the meantime, the world will continue to keep a careful eye on "The Hermit Kingdom."

Lindsey Chamness Maguigan

See also Korean War (1950–1953); Strategy, Nuclear; U.S. Pacific Command; Weapons, Nuclear

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KOREAN WAR (1950–1953)

In the early months of 1950, Korea seemed a rather insignificant place to most Americans. Crisscrossed by rough dirt roads and characterized by little other than poverty and illiteracy, the peninsula had been divided at the 38th parallel at the end of World War II, when the United States and the Soviet Union reached a gentleman's agreement on the matter. Since then, various schemes to reunify the "Hermit Kingdom" had found favor in either Moscow or Washington, but no plan had yet satisfied both. With neither Russia nor the United States inclined to press the issue at the risk of war with the other superpower, Korea appeared destined to remain divided between a communist state in the north and a pro-American country in the south without much of a future in world politics or American foreign policy. In fact, when Secretary of State Dean Acheson described the U.S. "defense perimeter" to the National Press Club in Washington, D.C., in January 1950, he did not even mention Korea.

However, after communist North Korean forces crossed the border in the early-morning hours of June 25, 1950, threatening the very existence of Syngman Rhee's U.S.-supported South Korea, the Harry S. Truman administration took note. Much maligned for being "soft on communism" and accused of losing China, Truman politically could ill afford to ignore the events taking place on the small peninsula half a world away, and suddenly, the fate of Korea took on the utmost importance. Convinced of the need to draw a line in the sand and contain communism, Truman quickly ordered the U.S. military to aid in the defense of South Korea and, in the name of "collective security," asked the United Nations to join the effort as well. Within days and without congressional approval, U.S. armed forces began operations in Korea in what the president termed a *police action*. Expected to be a quick holding maneuver, the conflict in Korea soon metamorphosed into an old-fashioned ground war, one that lasted from June 1950 to July 1953. Before its conclusion, the Korean War pulled in not only 1.5 million American troops; the whole of the South Korean army (ROK) and North Korean People's Army (*Inmun Gun*), approximately 95,000 and 135,000 strong, respectively; and millions of

Chinese “volunteers,” but also the combat forces from resources of other countries. Australia, Canada, New Zealand, the United Kingdom, Belgium, Luxembourg, Colombia, Ethiopia, France, Greece, the Netherlands, the Philippines, Thailand, and Turkey all sent soldiers, sailors, or airmen to aid in the United Nations effort, collectively totaling more than 150,000. In addition, India, Italy, Norway, Denmark, and Sweden contributed medical staff and supplies. From these participating nations, the Korean War exacted a steep price. By the time representatives from China, North Korea, and the United Nations gathered at Panmunjom on July 27, 1953, to sign the armistice ending the Korean War, nearly 34,000 Americans, 3,400 UN troops, 415,000 South Korean soldiers, approximately 1.5 million Chinese and North Korean military personnel, and millions of Korean civilians lay dead, and casualties spiraled to even greater heights. This entry traces the course of the war and discusses controversies and the war’s impact.

June to September 1950

During the war’s first phase, from June 25 to September 15, 1950, the North Korean military overran South Korean and American forces, coming close to winning the war and unifying the peninsula under the leadership of Pyongyang. After World War II, the United States, fearful of what actions South Korean president Syngman Rhee might take against the North, deliberately declined to supply South Korea with a powerful or even adequate arsenal of weapons. Conversely, the Soviet Union spent those same years filling the military storehouses of Kim Il Sung’s North Korea. Thus, by June 1950, South Korea had less than a week’s reserve of ammunition, virtually no antitank weapons, and no artillery heavier than 105 mm, while North Korea possessed a 2:1 numerical advantage over its southern counterpart in manpower, overwhelming advantages in armor and artillery, and an equally decisive superiority in the air.

Unsurprisingly, the South Korean capital, Seoul, fell within days of North Korea’s attack, and the defeated ROK army retreated steadily southward. American forces, meanwhile, hastily shipped from occupied Japan, fared no better. The first American ground force to enter Korea, Task Force Smith, met with disaster. Understrength and equipped

with only two 75-mm recoilless rifles, two 4.2-inch mortars, six bazooka rocket launchers, four 60-mm mortars, outdated and worn communications gear, and only a few rounds of armor-piercing ammunition, Task Force Smith proved no match for a column of North Korean T-34 tanks. Sustaining 150 casualties out of 406 soldiers and officers, Task Force Smith suffered the first American combat deaths of the war and, unable to permanently hold the line, delayed the enemy for only about 7 hours. Further south, other U.S. units met with a similar fate, and by the end of August, ROK and American forces claimed control of only a fraction of South Korea—the coastal city of Pusan and its surrounding hinterland.

Pusan, however, served as a valuable port from which noncommunist forces regrouped and augmented their strength until mid-September, when the war’s second phase began with the spectacularly successful American-led Inchon Landing. Conceived of by General Douglas MacArthur and carried out by a force largely composed of U.S. Marines, the seaborne invasion at Inchon turned the tide of the war. The American landing force quickly overwhelmed North Korean resistance and subsequently began an advance on Seoul, which fell to them on September 25. By this time, U.S. and ROK troops, augmented by UN forces, had also broken out from the so-called Pusan Perimeter and begun advancing steadily north. By the last week of November, with UN forces pursuing the remnants of the defeated North Korean army to the Chinese border, almost everyone had reason to believe that this would be the war’s last major offensive.

October 1950 to May 1951

Unbeknownst to the men on the front, Communist Chinese officials decided in early October, following the Inchon Landing and recapture of Seoul, to intervene in Korea should UN forces continue their advance north. Though perhaps willing to tolerate a South Korean presence up to the Yalu River, China would resist an American one on its border. Peking first attempted to deter Washington by having India’s ambassador to China, K. M. Pannikar, deliver a note warning the United States not to cross the 38th parallel. When this attempt at diplomatic deterrence failed, the Chinese People’s Liberation Army began hit-and-run attacks on UN forces,

which, undaunted, continued to advance north toward the Chinese border.

While fully aware of the possibility of Chinese intervention, U.S. policymakers and leaders dismissed the threat for myriad reasons. MacArthur, for example, remembering an older and very different China, personally assured President Harry S. Truman at their October 15 Wake Island meeting that the lack of air cover made effective Chinese intervention impossible. Secretary of State Dean Acheson concluded that China would not risk dependency on the Soviet Union and a potential seat at the United Nations over Korea. Others, recalling China's lackluster performance during World War II, doubted its ability to fight the forces of the United States, much less those of the United Nations. Some insiders, such as Edmund Clubb, director of the State Department's Office of Chinese Affairs, argued that the Chinese threat should be taken seriously, but for the most part, their arguments fell on deaf ears. The president and the State Department simply did not believe that China would enter the war.

In late November, however, China made good on its word, sending as many as 300,000 "volunteers" into the war zone. No longer a peasant army, the war-hardened Chinese People's Liberation Army soon had UN troops on the defensive and retreating south. The Eighth Army was in trouble, but at Chosin Reservoir, the marines and soldiers of the U.S. X Corps, under Major General Edward Almond, were desperate. Encircled by 67,000 Chinese troops, their survival depended on the success of a 14-mile retreat under fire in bitterly cold conditions. Largely due to marine Major General Oliver Smith's caution and planning, the men did break out, but suffered heavy casualties. By New Year's 1951, UN forces had retreated as far south as the 38th parallel, and Seoul again fell to the communists on January 7, not to be retaken by UN forces until March 14. Locked out of North Korea entirely, the situation once again looked grim for the UN effort in Korea.

During the harrowing retreat south, the commander of the Eighth Army, General Walton Walker, died when his jeep collided with a truck north of Seoul, and he was succeeded by General Matthew Ridgway. Ridgway immediately set about trying to boost morale in the war zone, but he barely had time to acclimate to his new position before being elevated further. On April 11, 1951, after conferring with Secretary of State Dean Acheson and the Joint

Chiefs of Staff, President Harry Truman relieved MacArthur of his commands, naming Ridgway as his replacement. By the time Ridgway found himself firmly settled in as supreme commander, UN forces under his command already had slowed the Chinese advance. Operations Killer and Ripper, carried out between February and April 1951, served to close the line south of the Han River, drive the Chinese back with heavy casualties, and win back Seoul. By late March, ROK troops crossed the 38th parallel, followed by UN forces. In the spring, the Chinese People's Liberation Army mounted a 700,000-man-strong offensive, pushing the Eighth Army 18 to 20 miles south, and by the end of May 1951, UN troops again stood at the 38th parallel.

June 1951 to July 1953

Although the Korean War continued for another 25 months, neither side advanced far, and a stalemate prevailed on the front for the conflict's remaining 2 years. Military activity, in fact, focused more on supporting a breakthrough in the peace talks that began on July 10, 1951, at Kaesong and later resumed at Panmunjom than on breaking through the enemy's lines. Rather than unleash all of the conventional and nuclear forces at their disposal, UN leaders pursued a limited war strategy to achieve limited results, namely, a return to the June 1950 status quo.

At the time, men on the front lines bitterly resented both the unwillingness on the part of policymakers to strive for total victory and the constraints placed on them as a result of the decision to work toward a negotiated peace. Soldiers complained that they could not get the ammunition and weaponry they needed because of cost-cutting measures when peace talks seemed about to bear fruit, and pilots balked at orders preventing them from pursuing attacking MiGs across the Yalu River. Generally, combatants felt that limited war denied them even the opportunity for victory. Many Americans on the home front, however, having slipped into apathy toward Korea and the men fighting there after the first few months of the conflict, readily accepted the limited nature of the war. Still, then, as now, scholars wrestled with the implications of this new American way of waging war. G. W. Hudson, for example, argued in his 1951 *Twentieth Century* article, "The Privileged Sanctuary," that U.S. policies with regard to the Korean War amounted to nothing less than

a political defeat for the United States. Later, others pointed out that had the United Nations followed MacArthur's lead, the Cold War might have ended far sooner and with less cost. Many other works, though, take a different approach, lauding the Truman administration for wisely navigating a course to prevent a wider war with China and the Soviet Union.

Despite the limitations placed on units and commanders in Korea, fighting continued until the final hours of the war, with appalling casualties. In the 2-month-long offensive to capture "Bloody Ridge," a string of fortified Chinese positions in the hills overlooking UN forces, fought between July and September 1951, the United Nations suffered 2,000 casualties, while communist losses topped 15,000. A follow-up operation during September and October aimed at dislodging the Chinese from "Heartbreak Ridge," located just north of the 38th parallel, proved even more costly to UN forces, with nearly 3,700 UN and 5,000 communist casualties. The following month, UN forces assumed a defensive posture as peace talks resumed at Panmunjom. During the winter of 1951–1952, UN casualties subsided, yet still averaged 3,000 per month.

With the return of campaign season in the spring of 1952, negotiators at Panmunjom reached an impasse, causing military operations to escalate. By this time, both sides had constructed formidable trench lines reminiscent of World War I, and while the UN forces had greater firepower, the communists, who held a 9:7 advantage in manpower, had significantly augmented their artillery and constructed more elaborate defenses. Accordingly, while 1952 lacked the major engagements that typified 1951 and 1953, artillery duels in which opposing armies expended tens of thousands of shells per day proved common.

As the war continued, the peace talks lagged, breaking down altogether at one point. Thus, for more than a year, negotiators failed to reach an armistice agreement acceptable to both sides. Attempting to explain this long delay, historians have scrutinized the nature of the military officers representing the United Nations and blamed cultural misunderstandings, but ultimately, the heart of the problem lay with the issue of prisoner repatriation. The UN Command, screening the prisoners of war (POWs) under its control, found that as few as 50% wished to be repatriated to North Korea or

the People's Republic of China. Aware of just how that might look to the outside world, China insisted that the POWs be repatriated, whether voluntarily or not. President Truman, however, without regard for international law or the Chinese desire to save face, resolved that no forced repatriation would take place. An increase in fighting and a decrease in talking resulted.

Negotiations at Panmunjom might have remained stalled except that the world outside of Korea changed. From January to March 1953, Dwight David Eisenhower replaced Harry Truman as president of the United States, Soviet leader Joseph Stalin died, and the United States tested artillery-sized nuclear devices. Quite unexpectedly, on March 28, the Chinese and North Koreans announced their agreement to a plan to trade sick POWs in what would become Operation Little Switch from April 20 to May 3. From that point forward, events moved quickly. Full UN and communist delegations returned to the peace table for the first time in half a year to work on hammering out a full-repatriation plan, and sensing the end of the struggle, both sides tried to press their advantage in the war. General Mark Clark requested and received permission to strike at the enemy's food supply by bombing dams in North Korea, and Secretary of State John Foster Dulles intimated that if peace did not come quickly, the United States might begin to bomb north of the Yalu River. Seeking one final victory, the communists launched a series of offensives against UN forces in the "Iron Triangle," north of the 38th parallel in what became the postwar demilitarized zone. At best, these proved only modestly successful, but they resulted in 50,000 UN and 100,000 North Korean and Chinese casualties.

Finally, on June 8, the peace talks bore fruit as participants agreed on a plan to repatriate the POWs. POWs voluntarily repatriating would return home, while those unwilling to repatriate would remain in Korea for 90 days in the custody of a neutral commission, during which time officials from each side would have access to them. This arrangement satisfied the United States, North Korea, and China, paving the way for peace. One last major hurdle remained. South Korean president Syngman Rhee wanted no part of a truce that left Korea divided and refused to sign off on the deal. Pressured by the United States and unable to continue the war unilaterally, Rhee attempted to derail the armistice

by ordering the release of 27,000 noncommunist POWs near Pusan who then melted into the countryside. The gambit failed as China directed its ire at Rhee rather than at the United States, and the talks moved forward. Against Rhee's wishes, but with his forced acquiescence, representatives from the United States, China, and North Korea signed the Korean armistice on July 27, 1953, just 16 days after the fight for Pork Chop Hill, the last major battle of the war.

Although the fighting in Korea ended at 10:00 p.m. on July 27, 1953, the armistice only provided for a cease-fire and did not mark an official end to the war. The UN Command still exists, and American troops continue to be stationed in Korea. Since 1953, several incidents have occurred along the Korean demilitarized zone, and in January 1968, a major crisis occurred when North Korea seized the USS *Pueblo* and its crew, claiming they had strayed into North Korean territorial waters. North Korea released the last crew members in December 1968, but the *Pueblo* remains in their possession.

Continuing Controversies

Although the American public gave the Korean War little thought after 1953, earning it the moniker the “forgotten war,” the conflict has provided much fuel for historical controversy. Since the war's outbreak, for example, the origins of the war have attracted much scholarly debate. Many historians single out Secretary of State Dean Acheson, arguing that by omitting Korea from his definition of the U.S. defense perimeter he encouraged the North Korean attack on South Korea. Indeed, Acheson's speech did make a few headlines at the time, and contemporaries on the right criticized the secretary shortly after the war began. However, as many other accounts of the war suggest, Acheson's speech might have emboldened Kim Il Sung and convinced Stalin that the United States would not intervene, but it was only a fragment of the body of information that led North Korea to invade the south.

Right after the war, attention focused on returning the POWs. Present at Operation Little Switch, army psychiatrist William Mayer determined that many of the POWs had succumbed to brainwashing in North Korea. The army decided that most also had collaborated while in captivity and court-martialed several of its own. Thereafter, a flurry of both

popular and academic writings began to address the topic of what went wrong with the Korean War generation. Cultural icons such as pediatrician Dr. Benjamin Spock and feminist Betty Friedan suggested that coddling mothers or weak characters made these men “soft,” leading to their susceptibility to enemy propaganda. Since then, experts and academics alike have argued over everything from the treatment that the American POWs received from the communists to the honor of the POWs themselves, with the balance slightly tilting toward those seeking to rehabilitate the reputation of men who endured the camps. Lewis Carlson's *Remembered Prisoners of a Forgotten War: An Oral History of Korean War POWs* (2002) and Raymond B. Lech's *Broken Soldiers: American Prisoners of War in North Korea* (2000), taking different approaches to POW collaboration, aptly illustrate these lingering debates.

Another continuing controversy concerns Communist China's intervention in Korea in late 1950. The effects of China's involvement—terrible setbacks for UN troops and a rejuvenation of the war—are well documented, but culpability for Chinese intervention remains elusive. Still, MacArthur stands out as the person primarily responsible for the debacle. Early November 1950 communications between MacArthur and civilian and military authorities in Washington, as well as increased U.S. air attacks against communist targets on the Yalu River, reveal that officials in both South Korea and the United States recognized the growing possibility that China might intervene in force. Despite this evidence, MacArthur envisioned a best-case scenario regarding the size, capabilities, and intentions of the Chinese and urged Pentagon war planners to allow him to press northward. On the eve of China's massive intervention, MacArthur still believed that his envelopment of remaining communist forces would bring final victory. Clearly, the military setbacks of November and December 1950 were not MacArthur's alone; yet had the hero of Inchon urged moderation, his superiors in Washington likely would have pursued a very different course than the one they ultimately took.

Despite the disasters following China's entrance into the war, MacArthur's command survived until April 1951, when, in one of the war's most controversial moments, President Truman dismissed him. Truman stopped short of accusing MacArthur of

insubordination, but clearly, the general had shown a serious lack of regard for Washington's policies when he unilaterally issued an ultimatum to China in March 1951 and then later revealed to Congressman Joseph W. Martin (R-MA) that he opposed Truman's Eurocentric foreign policy and wanted to use Chinese nationalist forces from Formosa on the Chinese mainland to open a second front. European allies of the United States generally greeted the news of MacArthur's firing with relief, but Americans on the home front expressed outrage. Senator Robert Taft (R-OH) and other conservatives even called for impeachment. Eventually, in large part because Truman had first secured the backing of the Joint Chiefs of Staff and both Secretary of State Acheson and Secretary of Defense George C. Marshall before dismissing MacArthur, a Senate Foreign Relations Committee inquiry cleared President Truman of wrongdoing in the matter. Still, for years afterward, historians squabbled over the incident, with hard-liners and anticommunists siding with MacArthur. After the Vietnam War, however, most historians came to agree with President Truman about the dangers of widening the Korean War, and more recent works, such as Russell Buhite's *Douglas MacArthur: Statecraft and Stagecraft in America's East Asian Policy* (2008), Stanley Weintraub's *MacArthur's War: Korea and the Undoing of an American Hero* (2000), and David Halberstam's *The Coldest Winter: America and the Korean War* (2007) cast Truman's decision in a more favorable light.

Recently, controversy has centered on a group of American soldiers and their actions near the South Korean village of No Gun Ri. There, American troops allegedly massacred South Korean civilians during the early chaotic weeks of the war. Though reported at the time in major U.S. newspapers, the incident received little attention until a team of Associated Press reporters reexamined events nearly half a century later. Their 1999 investigation produced a series of articles, a Pulitzer Prize, and the publication of a book, *The Bridge at No Gun Ri*, that, like the earlier stories, alleges that U.S. forces killed some 300 civilians. Subsequent investigations conducted by both the United States and Korean authorities indicate that the massacre did take place, but they differ on the number of people killed. Thorough examination also revealed that American forces knew that North Korean troops were infiltrating the south disguised as refugees,

that the U.S. Army had asked the air force to strafe civilians headed for U.S. lines, and that the U.S. ground forces were authorized to prevent refugees from crossing through their lines. These factors, combined with the inexperience of both the officers and enlisted men at No Gun Ri, led to tragedy, the scale of which continues to be contested. A haunting reminder of some of the Korean War's darkest days, and of the underside of war itself, No Gun Ri has attracted a considerable amount of attention, but it rightly has done little to diminish the contributions of the nearly 2 million Americans who served in the theater during the Korean War.

Conclusions

After the Korean War ended in July 1953, most Americans promptly forgot about it. Unlike World War II, the little war over Korea's barren hills had required little by way of sacrifice, except for those who fought it, and seemed to have left no enduring legacies. The Korean Peninsula remained divided along the 38th parallel, just as it had been before the war and before nearly 40,000 American deaths. From the perspective of those on the home front, no great triumph had been won and no great foe had been vanquished.

Yet at the time, Korea did have a profound, if unacknowledged, impact. The first war of its kind for the United States, a limited war waged for something other than total victory, Korea signaled a shift not only in American policy but also in the American way of war. Just a few years later, in another seemingly insignificant Asian country, Vietnam, American soldiers would have cause to look back to Korea and, perhaps, to the lessons of that war. Even if limited war became the fashion of the times, however, policymakers saw the Korean War as a warning. America could never again allow itself to become so militarily unprepared. Thus, while debates over how best to secure the United States dominated much of the Cold War dialogue, presidents sought to build up American strength and credibility rather than to trim the military and the budget as Truman did. President Dwight Eisenhower focused on avoiding another Korea, stressing defense treaties and a nuclear shield, while President John F. Kennedy worked to build up conventional forces and exhibited a willingness to intervene in Third World affairs.

Certainly, the Korean War cast a much longer shadow than anyone at the time could have envisioned, and only today, more than 60 years after the war began, have Americans begun to recognize the true significance of the conflict. As North Korea, unyielding and unfriendly, continues to attempt to build a viable nuclear program, there is little doubt that a united Korea under the leadership of Kim Il Sung and his descendants would have provided an even graver danger to the West. Additionally, as a result of American and UN efforts in Korea, the once impoverished and backward nation of South Korea today stands out as a modern democracy and possesses one of the world's strongest economies. Its capital, Seoul, is characterized by modern skyscrapers and business centers. Looking at the modern world, it is impossible to deny the significance of the Korean War or of the efforts of those men and women who served there from June 25, 1950, to July 27, 1953.

Melinda Pash

See also Asia; History, Military: Approaches to; Korea, North; Marshall, S. L. A.; Prisoners of War; United Nations

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KOSOVO INTERVENTION

The dissolution of Yugoslavia in the early 1990s produced five new states: (1) Slovenia, (2) Croatia, (3) Bosnia and Herzegovina, (4) Macedonia, and (5) the Federal Republic of Yugoslavia—made up of Serbia and Montenegro. Interethnic tensions in Croatia and Bosnia led these countries to civil war. As the European Community and the United Nations searched for ways to settle these wars, the Federal Republic of Yugoslavia provided military and economic support to Serb militias. This not only escalated the fighting but also created an environment where combatants, from all sides, executed military strategies that targeted civilian populations and caused severe humanitarian crises. The goal of these wars was to “cleanse” towns and neighborhoods of different ethnic groups to create ethnically homogeneous areas.

During the early 1990s, tensions were also high in Kosovo, one of Serbia's provinces, between ethnic Albanians, who comprised 90% of the province's total population, and the Serb minority, who only represented around 7% of the population. Even though leaders of Kosovo's Albanian community declared the province's independence on September 22, 1991, most countries did not recognize the territory's independence. But as the fighting in Croatia and Bosnia escalated in 1992, the United States warned Serb authorities that it would take military action if they provoked the Kosovar Albanians. Washington feared that civil war in Kosovo could spread to Macedonia, where ethnic Albanians made up 22% of the population, and entice Albania to intervene militarily in these countries to support Albanian nationalists' dreams of establishing a Greater Albania.

Roots of the Civil War

Civil war in Kosovo did not erupt for another reason. Whereas nationalist leaders in Bosnia and Croatia had decided to use force to accomplish their interests, Kosovo's most prominent leader, Ibrahim Rugova, and his Democratic League of Kosovo favored a nonviolent approach. The Kosovar Albanian community rallied behind Rugova and the Democratic League of Kosovo after the events of 1989 (when there was heightened tension between

the Serbs and Kosovar Albanians), rather than other political organizations, such as the People's Movement of Kosovo, which supported the liberation of the province via armed struggle.

While many historians have traced the roots of the conflict in Kosovo between Serbs and ethnic Albanians to the 1300s, the contemporary roots can be found in the founding of communist Yugoslavia after the Second World War. Although Yugoslavia's founder, Josip Broz Tito, promised Kosovar Albanian leaders that Kosovo would become a republic of Yugoslavia, the 1946 constitution demoted the territory to the status of a province within the Socialist Republic of Serbia, the most powerful of the country's six federal units. Tito was forced to break his promise to convince Serbs to embrace the 1946 constitution. For many Serbs, Kosovo was the cradle of their nation, home to some of the oldest and most revered Serb Orthodox monasteries and churches.

Tito's broken promise angered ethnic Albanians, and many joined armed groups, fighting for the territory's secession and eventual annexation to Albania. Even though Yugoslav forces put down these rebellions, resistance to Yugoslav and Serb authorities continued throughout the 1950s and 1960s. Although ethnic Albanians made up 68% of the population and Serbs represented 24%, Serbs controlled the province's political institutions, security forces, and state-owned industries. Higher levels of unemployment among ethnic Albanians forced many to protest Kosovo's apartheid-like system, forcing the federal authorities to address their concerns. During the late 1960s, as Croat and Slovene leaders expressed discontent with Serbs' control over the federal institutions, Tito agreed to pass a set of reforms that would decentralize power from the federal structures to the republics' institutions. To appease Kosovar Albanians, the federal government fired thousands of Serbs in various positions of power. Federal officials also allowed the creation of the University of Pristina, where Albanian became the main language of instruction. With the adoption of the 1974 constitution, Kosovo was not upgraded to republic status, but it was given representation in the federal legislature and the collective presidency, an executive body with a representative from each federal republic and autonomous province, headed by Josip Broz Tito.

While these reforms were welcomed by Kosovar Albanian leaders and derided by the Serb community, they did not calm ethnic Albanians' demands for equality at the federal level. During the early 1980s, students protested the University of Pristina's living conditions. But what started as a student protest quickly became a mass political uprising. In the streets of Kosovo's capital, Pristina, thousands of Kosovar Albanians marched and chanted phrases like "Kosovo Republic" and "Unification with Albania." A fringe element in the ethnic Albanian community also took the opportunity to call for the "cleansing" of the province, and some Albanians targeted Serbs and their cultural institutions. Due to growing interethnic tensions, federal forces entered Kosovo, suppressed the demonstrations, arrested thousands of ethnic Albanians, and purged members of the local communist party.

Although the federal authorities quickly stabilized the situation, the demands of the Kosovar Albanians angered many Serbs in the province and the Serbian authorities. This feeling was captured in a memorandum penned in 1986 by the Serbian Academy of Science and Arts, which called for the reorganization of the Yugoslav federal system to correct the Serbs' discrimination in Kosovo and other parts of Yugoslavia and to balance against rising secessionist claims. While Serb communist leaders condemned the report, the views shaped Serb public opinion. In Kosovo, leaders of the Serb community, which represented around 13% of the population, voiced their dissatisfaction with Kosovo's authority, claiming that Serbs were victims of an organized campaign of discrimination.

Slobodan Milosevic, who at the time was an influential member of the Serbian League of Communists and eventually became president of Serbia in 1989 and then of Yugoslavia in 1997, traveled to Kosovo to assess the situation. After meeting with Serb leaders, Milosevic concluded that Kosovo's autonomy status had not only violated Serbs' rights but also incubated Albanian nationalist attitudes, challenging Yugoslav values. His views forced the League of Communists of Yugoslavia to debate the province's status, triggering a wave of protests throughout Kosovo. A few months later, the Serbian government amended the republic's constitution, stripping Kosovo's autonomy and firmly placing it under Serbian rule.

On June 28, 1989, Serbs commemorated the 600th anniversary of the Battle of Kosovo. During the event, Milosevic addressed the crowd, emphasizing Kosovo's cultural importance to the Serb nation. Milosevic's speech culminated his transformation from a loyal communist leader to Serbia's first nationalist leader since the Second World War. Milosevic's rise was matched by Rugova's growing popularity. Whereas the Serb leader was a provocateur, unafraid to use force to expand his influence, Rugova proved to be a stabilizing force, convincing his followers to embrace a strategy of nonviolence.

Not all Kosovar Albanians approved of Rugova's strategy. For instance, Bujar Bukoshi, who was one of the founders of the Armed Forces of the Republic of Kosovo, argued that an armed struggle was necessary if Kosovo was to achieve its independence. While Bukoshi failed to persuade many ethnic Albanians, the Democratic League of Kosovo partnered with the group in the establishment of a parallel government, financed by the Albanian diaspora. Bukoshi's forces were integrated into the new "shadow" government as a self-defense force. Rugova's strategy was to develop the Kosovar Albanians' capacity to rule themselves. He hoped that by not engaging Serb forces, he could develop these institutions and convince the international community that ethnic Albanians were ready for statehood. Many ethnic Albanians, seeing the viciousness of the fighting in Croatia and Bosnia, were convinced that they would lose their struggle to the Yugoslav army, Serb forces, and affiliated paramilitaries. Thus, they supported Rugova's strategy, not because they believed in pacifism, but because it was the most pragmatic position.

Rugova's strategy eventually failed. While the United States and its European allies were worried about the possible outbreak of violence in Kosovo, they did not support the idea of an independent Kosovo. Instead, they saw the conflict as an internal matter. Western negotiators wanted Serbia to reinstate Kosovo's autonomy. It took time for ethnic Albanians to understand this reality, but two events made it clear that Western powers did not support their hopes for independence. The first was American negotiators' decision not to address the Kosovo conflict during the Dayton peace talks, which settled the wars in Croatia and Bosnia. The second event was the European Union's (EU's) recognition of the Federal Republic of Yugoslavia, established in 1992

as the union of Montenegro, Serbia, and the two Serb provinces of Kosovo and Vojvodina.

Although fighting between Kosovar Albanian groups and Serb forces increased after the signing of the Dayton Peace Agreements at the end of 1995, these groups did not challenge Rugova's authority. This started to change in 1997 with the growth of the Kosovo Liberation Army (KLA), an organization once designated by the Clinton administration as a terrorist body. At the beginning of 1998, the KLA had 500 active members, growing to 20,000 by mid-June 1999. The KLA's popularity increased once Serb forces reacted to its attacks on police patrols, police stations, and army bases. Planning to crush the movement, Milosevic approved a counterinsurgency strategy eerily reminiscent of the "ethnic cleansing" campaigns used by Serb militias in Croatia and Bosnia during the wars. By the end of the year, more than 40,000 Serb forces were involved in this operation. During the summer of 1998, more than 300,000 people were displaced by the fighting, setting off a humanitarian crisis.

In March 1998, the Contact Group, which included the participation of the United States, the United Kingdom, France, Russia, Italy, and Germany, started to meet regularly to discuss the crisis. Although they could not agree on a strategy to settle the conflict, they decided not to recognize Kosovo's independence. Building on the success of the Dayton peace talks, they hoped that Milosevic would be willing to work with Rugova to first reinstate Kosovo's autonomy and then to find a long-term solution to the conflict. By the end of the summer, the Contact Group, concerned by the increasing levels of violence and Serb forces' tactics, started to consider new ways to pressure Serb authorities and Kosovar leaders to end the fighting.

Outside Intervention

On September 23, 1998, the UN Security Council unanimously passed Resolution 1199 requiring all parties to the conflict to stop the fighting and maintain a cease-fire. At this time, the U.S. ambassador to Macedonia, Christopher Hill, and the U.S. envoy to the Balkans, Richard Holbrooke, met with Milosevic, Rugova, and the KLA's leaders. To support these efforts, the North Atlantic Treaty Organization (NATO) warned that it was ready to use force if the parties failed to live up to Resolution

1199's obligations. The threat of force convinced Milosevic to sign a cease-fire agreement in mid-October 1998 and to accede to the establishment of the Kosovo Verification Mission (KVM).

To verify that the parties to the conflict were complying with Resolution 1199, the KVM asked the Organization for Security and Cooperation in Europe (OSCE) to dispatch a force of 2,000 unarmed observers to establish a physical international presence in Kosovo. NATO also agreed to execute an aerial surveillance campaign. As part of this agreement, Serb leaders agreed to meet with representatives of the Kosovar Albanian community to negotiate Kosovo's political status and to allow the OSCE to organize elections for the province's new institutions. Serb authorities also consented to decrease the number of their soldiers and Ministry of the Interior units. Although Serb commanders expressed concern about the KLA, American negotiators, NATO officials, and OSCE diplomats assured them that the KVM had the resources to ensure the KLA's compliance with the agreement.

The cease-fire lasted less than 2 months. As Serb authorities pulled back their forces from Kosovo, KLA fighters took the opportunity to advance their interests. The KVM's inability to force the KLA to accept the guidelines of the cease-fire raised important questions regarding the international community's willingness to keep the peace and to resolve the crisis. In reaction, Serb forces retaliated with impunity. In early January 1999, KLA forces attacked a police station in Racak, killing four Serb policemen. Serb forces surrounded the town and prevented KVM observers from entering the town. By the end of the battle, international observers found evidence of crimes against humanity. According to a forensic investigation, Serb forces killed 45 civilians, including 3 women and 1 child. The incident was described by journalists as a massacre, and it forced the international community to reconsider the KVM's efficacy.

At the end of January, the Contact Group issued a statement supporting the terms of the original cease-fire agreement and requiring Serb and Kosovar Albanian leaders to meet international negotiators at Rambouillet, France. To support the Contact Group's efforts, NATO stated its readiness to use force to compel the parties to settle the conflict. The Rambouillet talks started on February 6 and ended on March 15. The talks were based on a set

of documents drafted by the Contact Group's representative, which were based on the principles that informed the cease-fire agreement of October 1998.

The peace talks failed because the agreement did not meet the interests of the parties. The draft agreement included two controversial provisions. For the Kosovar delegation, which was headed by Rugova but included members of the opposition parties, including Hashim Tachi of the KLA, the document did not recognize the territory's independence. Instead, it established an internationally supervised political process that would have reestablished the province's autonomy, while including a complicated process that would have enabled Kosovo to gain its independence. As for the Serbs, they could not accept a provision that gave NATO forces access to Serb territory to secure the agreement's implementation.

At the end of the process, the United States pressured the Albanian Kosovar delegation to accept the terms of the agreement, but Milosevic refused to sign the document. Nine days later, NATO fighter jets attacked Serb positions. These attacks were not sanctioned by the UN Security Council as the Russian Federation did not support NATO's actions. The aerial bombing campaign ended 77 days later after the EU and Russian special envoys negotiated a settlement based on a set of principles developed by the G-7 nations at the beginning of May. The war formally ended with the passage of UN Security Council Resolution 1244.

The air campaign against Yugoslav forces in Kosovo played a key role in forcing Milosevic to the negotiating table, and it offers one of the few examples of a victory won strictly through the use of air power. Operation Allied Force, the air operations against Yugoslav forces, commenced on March 23, 1999. Significantly, the air campaign was focused on the use of graduated pressure, with Allied forces steadily increasing the tempo and size of their attacks to achieve a political objective. This strategy flew in the face of prevailing U.S. doctrine but proved necessary as a reflection of the at times uneasy alliance of NATO forces. Initially, the multinational effort focused on attacking purely military targets, including Yugoslav air defense installations, armored vehicles, and military infrastructure. As Operation Allied Force progressed, however, Allied forces expanded their target lists to include bridges and other civilian infrastructure. This change in focus reflected the failure of initial attacks to dissuade Milosevic and

his forces from engaging in ethnic cleansing, but it also signaled the continuing development of allied strategy and the realization that attacks against fixed targets had a much higher probability of success.

In general, the air campaign was remarkably successful—the widespread use of precision munitions and careful planning limited civilian casualties and maximized the effects of the bombing. There were mistakes in the air campaign, however, most notably the destruction of the Chinese Embassy in Belgrade on May 7. Air operations continued until June 10, when observers documented the withdrawal of Yugoslav forces from Kosovo. Ultimately, it appears that Operation Allied Force played a decisive role in forcing Milosevic to the negotiating table, perhaps the only historical example of a conflict being won using air power alone.

Postconflict Resolution

Resolution 1244 required the withdrawal of all Serb forces, the deployment of a 50,000 NATO peacekeeping force in Kosovo, and the institution of a transnational civilian mission, called the United Nation Mission in Kosovo (UNMIK), directed by a special representative of the UN secretary general. It also called for the safe return of all refugees and the KLA's demilitarization. The civilian mission was divided into different pillars. Each pillar dealt with an element of the postwar stabilization effort, and each was headed by an intergovernmental organization. Early on, the UN High Commission for Refugees played an important role in peacebuilding, but over time, the EU and the OSCE have led Kosovo's political and economic liberalization.

One controversy regarding the wording of Resolution 1244 is whether it established a path toward independence for Kosovo. In November 2005, the United Nations commenced a process to investigate Kosovo's final status led by former Finnish president Marti Ahtisaari, who at the time was the UN Special Envoy for Kosovo. While his plan, the Comprehensive Proposal for the Kosovo Status Settlement, failed to get Russian approval in the UN Security Council, it established a political process for Kosovo's independence. The failure of the Ahtisaari mission did not prevent the Kosovo Assembly's unilateral declaration of independence

on February 17, 2008. To reassure the international community and to further strengthen its institutional capacity, Kosovo leaders agreed to implement the Ahtisaari plan's guidelines.

The declaration of independence worsened relations between the Serb minority in Kosovo and the province's institutions and Albanian community. The UN Security Council directed UNMIK to alter its responsibilities. Although the UN secretary general is still responsible for Kosovo's transition, the Security Council has allowed the EU's Rule of Law Mission in Kosovo to play a bigger role within UNMIK's efforts. By agreeing to follow Ahtisaari's Comprehensive Proposal, a new ad hoc organization known as the International Steering Group, composed of many states that support Kosovo's independence, was established to monitor the implementation of this plan. The International Steering Group established a new transnational civilian administration, the International Civilian Office (ICO), but not within UNMIK's authority. Coordination between UNMIK and ICO was commonplace, especially given that until April 2011 the head of the ICO was also the EU Special Representative. Cooperation between the ICO and UNMIK was hampered by the interests that inform each mission. Whereas UNMIK is a neutral interlocutor, trying to find a way of healing relations between Serbs and Kosovar Albanians and between Kosovo and Serbia, the ICO was helping Kosovo's institutions carry out a set of economic, legal, and political reforms to gain the territory's full independence.

As of September 2012, the ICO has ended its mission, declaring Kosovo's full implementation of the comprehensive proposal's provisions. UNMIK, NATO, the EU, and the OSCE still play important roles in Kosovo as Resolution 1244 is still in effect, although Kosovo's government institutions are in control over many of its functions. Kosovo's status is still a contentious issue. Although the United States and more than 90 countries, including most of the EU's members, have recognized Kosovo's independence, Serbia, Russia, and China have not. The international community's intervention in Kosovo, while ending the fighting, has not been able to address the reasons that motivated the conflict.

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See also Bosnia Intervention; Europe; Humanitarian Intervention, Foreign; Nation-Building; North Atlantic Treaty Organization

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LANGUAGE, MILITARY

Every occupation develops its own specialized language that serves to designate people, objects, processes, and situations that are specific to the field but unfamiliar to people outside it. The military is no exception. The differences between military and civilian life create differences between military and civilian language that are remarkable in terms of their variety and scope. Military language serves many purposes: It facilitates communication in the complex, unpredictable, and emotionally stressful military environment; it reinforces social hierarchies within the service; it helps create a sense of shared identity among military personnel; it allows soldiers and sailors to describe shared experiences with specificity and detail; and it allows soldiers and sailors to clearly and directly communicate specific, and sometimes disturbing, information with a minimum of emotion. This entry discusses the key features of military language and some of the more important sources of it.

Key Features of Military Language

Military language includes a wide range of linguistic phenomena, from highly rationalized bureaucratic jargon to colorful military slang full of emotional content. The distinctive characteristics of military language tend to reflect the widely disparate communicative goals of military personnel and the wide variety of communications environments they find themselves in. *Abbreviations* and *acronyms* reflect

the need for precision and brevity in military communications; *euphemisms* and *bureaucratic jargon* often reflect the need to handle unpredictable and highly emotional situations in a routinized and unemotional manner; *slang* reflects the group identity and sense of unity shared by military personnel. In addition, the standardized procedures used in radio communications; the specialized terminology that describes tactics, techniques, and procedures; and the alphanumeric designations used for military equipment, all contribute greatly to the distinctiveness of military speech and writing.

Sources of Military Language

Acronyms like MIA, for *missing in action*, and abbreviations like *hazmat*, for *hazardous materials*, are common in military speech. Most abbreviations and acronyms are terms for frequently used words or phrases that might otherwise become unwieldy because of their length or complexity. In many cases, they serve to clarify meaning for military personnel, although they may be confusing to outsiders or newcomers. For example, terms like UA and AWOL (for *unauthorized absence* and *absent without leave*) make it clear that the absentee is not ill, not on vacation, or not on an authorized assignment, as opposed to *absent*, which is less specific.

Another source of military jargon is the bureaucratic designation for equipment. Because the military works with many kinds of specialized equipment and because military equipments are constantly being modified and replaced, systems have been developed to identify and categorize each

item, which is designated by a combination of letters and numbers depending on its intended location. For example, a TA-312 refers to a specific model of field telephone, while an F/A-18 is a specific type of jet aircraft. Although these designations may sound overly bureaucratic to civilian ears, they are quite common in military circles.

Military jargon also derives from the specialized radio and communications procedures. Because voices over radios and other communication systems can become distorted or unclear, specialized radio procedures and a specialized vocabulary have evolved to improve communications, including the International Phonetic Alphabet system (e.g., *Bravo* for the letter *b*) and specialized procedural words (e.g., *roger* for “I understand”).

Military Slang and Group Identity

Operating in tandem with these official sources of military language is the creativity displayed by individual soldiers and sailors in developing the language to describe their social reality. Slang may originate in the foreign environments in which soldiers and sailors often operate (*gung ho*) or from the strong sense of group identity that is often expressed in the nicknames service members have for themselves and members of other branches (*grunts* for infantry, *squids* for sailors, and *jarheads* for marines). Other important distinctions are often made between enlisted personnel and officers (*the brass*), frontline troops and headquarters installations (*the head shed*), and hard workers and malingerers (*sick call rangers*, *sick bay commandos*, or *clinic ninjas*). A clear picture of the operating environments military personnel find themselves in emerges from the slang that describes each new military action (the trenches of World War I were described as *funk holes*; the desert environments of Kuwait and Iraq in 2003 were described as *the sandbox*). Other terms are slight variations, often ironic, on actual words or acronyms: rear-echelon personnel on the forward operating bases of the Iraq War were described as *fobbits* in clear reference to the *hobbits* of J. R. R. Tolkien’s novel *The Hobbit*. Similarly, the American military rations called Meals Ready to Eat were given the ironic moniker *Meals Refused by Everyone* by soldiers. Another key distinction is made between friendly and enemy combatants. During times of war, names are created to

put the enemy in a negative light or to dehumanize him in order to make fighting easier. During World War II, American soldiers called their German opponents *krauts* and *jerries*. In Vietnam, American soldiers referred to their opponents as *gooks* or as *Charlie* (from *Victor Charlie*, the phonetic alphabet pronunciation of VC, for Viet Cong).

Military Influence on Civilian Language

Due to the steady flow of personnel into and out of the military, and extensive reporting from the field by the media, many words that used to be exclusively military have become a part of civilian language. Indeed, some words have become so common that their military roots have been all but forgotten—*walkie-talkie* for *hand-held radio*, or *gung ho* for being *highly motivated*.

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LATINOS

The U.S. military response to the attacks of September 11, 2001, has expanded interest in the role U.S. soldiers of Latino descent have played in the U.S. armed forces. The historical record shows that Latinos, including noncitizens, took up arms in the U.S. struggle for independence, in efforts to defeat fascism and communism, and they have been playing an important role in confronting terrorism in Afghanistan and Iraq. Despite these contributions and their participation in key military conflicts that have defined U.S. history, there has been a lack of popular and scholarly attention given to their military service. This oversight has become increasingly noteworthy given how Latinos are not only the fastest growing minority group but are also enlisting in the military in larger numbers than other ethnic and racial groups.

Latino willingness to enlist in times of war, the sacrifices and heroism of noncitizen soldiers, and enduring patriotism are all factors that have defined Latinos' experience in uniform and continue to shape their experiences today. Their military record, which includes countless accommodations, including 12 Medals of Honor, has earned them a reputation for self-sacrifice, bravery, and fidelity.

Like other minority soldiers who have fought for the United States, the Latino military experience is linked to the domestic front as much as it is to the foreign. Latinos have used military service not only to defend American ideals of liberty and equality but also to confront its shortcomings. Latino veterans have relied on their exemplary military record and skills learned in uniform to confront racism, poverty, and demand civil rights. More contemporary issues like citizenship status and immigration have also become integral features of the Latino military experience. As more noncitizens take the oath and as increased federal legislation offers citizenship in exchange for military service, these issues are sure to become more prominent features of the Latino military narrative.

This entry provides a historical narrative of Latinos' prior military service, draws attention to key themes that have contextualized their service, outlines controversies that have arisen, and provides a current assessment of their military engagement.

Historical Context

U.S. military history would likely have been very different without Latino participation. Many of the heroes of these military engagements, battles that have defined the past and present of the United States, have been overlooked or ignored in the historical record.

The American War of Independence, 1775–1783, which is arguably the single most important military event in U.S. history, saw significant participation from Latinos. Spain, a nation from which Latinos trace their lineage, also committed troops, financing, and supplies. Bernardo de Galvez, a Spanish officer, worked alongside figures such as Thomas Jefferson and Patrick Henry and provided strategic planning in efforts to thwart British military advances. In commemoration of his military record and his role in helping the United States become independent, July 23, in some U.S. cities, is known as “Galvez

Day.” In 1980, marking the 200th anniversary of his victory over British troops, a postage stamp bearing his likeness was issued.

Galvez's participation in the American Revolutionary War highlighted not only what many consider to be the origins of Latino military service but also the commitment and self-sacrifice of noncitizens on behalf of the U.S. nation.

This notion was also displayed during the Texas Revolution and the Mexican-American War when Tejanos, Americans of Mexican descent, played pivotal roles in both helping Texas acquire statehood and in the United States expanding its borders from coast to coast. To cite one example, Juan Seguin, born in San Antonio when Texas was still a Mexican territory, fought alongside Anglo-Texans during the Texas Revolution. After helping Texas acquire statehood, Seguin went on to help found the Democratic Party of San Antonio and was elected mayor. Despite having his loyalties questioned because he was a Mexican by birth yet fought for the United States, Seguin remained committed to the ideas of the United States and its democratic principles.

Perhaps in no other time in U.S. history were these ideas put to test as in the Civil War. In this conflict, in which the very existence of the nation was in jeopardy, it is estimated that 2,500 Mexican Americans fought on the side of the Confederacy, and 950 joined the Union Army in Texas. By 1865, approximately 10,000 Mexican Americans were serving in regular and volunteer units on both sides. It was during this conflict that President Abraham Lincoln commissioned the Medal of Honor, the highest award for valor, given to soldiers who displayed bravery beyond the call of duty and acted in a manner that preserved life. It was during the Civil War that the first two Latinos were awarded this highest honor, and a Latino, David Farragut, rose to the rank of full admiral of the U.S. Navy.

As in previous military conflicts, the right to fight was used as an opportunity not only to demonstrate one's belief in the ideological promise of freedom and equality on which the United States was founded but to prove, via the battlefield, one's desire for full membership. Although academic studies and popular narratives and films such as 1989's *Glory* shed light on the role that African Americans played in the Civil War and how war was used to demand that the United States lives up to its cherished ideals,



Wash drawing (reverse of printed versions) shows an explosion at a British magazine during the siege of Pensacola, killing or wounding many British soldiers. In the foreground, Spanish troops, possibly under the command of Bernardo de Galvez, take advantage of the opportunity to attack and force the surrender of the British garrison.

Source: Nicolas Ponce (1784). Courtesy of the Library of Congress.

a lot less is written about Latino contributions in the effort to preserve the country.

Geopolitical differences among competing ideologies were defining hallmarks of World War I and World War II. In these wars, fascism and later communism, especially during the Korean War, posed a monumental challenge to democracy around the world. It was in these wars that Latino military participation received more scholarly and popular attention. In addition, these conflicts most amply demonstrated the imbalance between fighting for democracy abroad while being denied civil rights at home. World War I mobilized an estimated 200,000 Latinos, who served in all branches of the armed forces.

Fighting for equality and freedom abroad did not allow Latino soldiers to escape or ignore prejudice at home. David Barkley Cantu, who dropped his mother's maiden surname and used Barkley to avoid discrimination, lost his life in battle and was posthumously awarded the Medal of Honor. Other narratives, like Marcelino Serna's, echo the continual service and sacrifice of noncitizen soldiers. Born in Mexico, Serna enlisted in the U.S. Army at the outset of World War I despite his Mexican citizenship.

Latino commitment to the principles on which the United States was founded can be seen in every war the United States has fought. Countless commendations, including the Medal of Honor, and boundless tales of heroism illustrate their loyalty and



World War II army veteran Ignacio Servin says that he volunteered for a dangerous mission to prove to his commander and fellow soldiers that Hispanics are brave and are willing to die for the United States of America. Servin attended a Pentagon ceremony honoring Hispanic World War II veterans on September 15, 2004, to kick off Hispanic American Heritage Month.

Source: Photo by Sergeant Adam R. Mancini.

love for the United States. An undeniable parallel to this history, however, is the service by Latinos who fought on behalf of the United States without being its citizens. Guy Gabaldon was one of the 500,000 Latinos who served during World War II. Honored with the Navy Cross and a Purple Heart, Gabaldon felt obligated, in the face of increased discrimination against Mexican Americans at home, to return the medals.

Gabaldon's protest along with the case of Felix Longoria served to highlight Latino veterans' refusal to accept second-class citizenship at home while risking their lives for democracy abroad. Felix Longoria lost his life fighting in the Pacific theater. When Longoria's body was returned to the United States, draped with an American flag, a funeral home in his native Texas refused to accept the body—citing persistent anti-Mexican attitudes of the surrounding community. After a great deal of lobbying, and the intervention of future president Lyndon B. Johnson, Longoria was eventually buried with full military honors. The Felix Longoria incident was also the

catalyst in the founding of the American G.I. Forum, established in 1948, by a group dedicated to advancing the civil rights of Latino veterans.

As the United States entered Vietnam, Latinos continued to distinguish themselves in the armed forces. As in previous conflicts, Latino soldiers committed themselves to all aspects of military service. In helping stop the spread of communism in Southeast Asia, U.S. soldiers of Latino descent were awarded additional Medals of Honors, enhanced their reputation for bravery in the face of adversity, and continued to prove their admiration for the United States. They did this in the face of intense antiwar activism at home that charged that the U.S. foreign policy was increasingly relying on racial minorities to man the front lines of U.S. wars.

Current Debates and Controversies

In the U.S. involvement in Iraq in 1991, Bosnia and Herzegovina in 1992, and again in Iraq following the terrorist attacks on New York and Washington,

D.C., Latinos illustrated how critical and steadfast their participation in U.S. armed forces had become since the founding of the country. In the aftermath of Saddam Hussein's removal, as an ethnically divided Iraq teetered on the verge of civil war, Latino recruits became the most reliable pool of manpower of the United States. In the immediate aftermath of the Iraq conflict in 2003, some journalists, policymakers, and researchers estimated that Latinos constituted as much as 25% of new U.S. Marine Corps recruits. Given this increase, the theme of military service by noncitizen Latinos again emerged, just after U.S.-led forces entered Iraq, when the first U.S. casualty—a native of Guatemala who had only been in the United States for a few years prior to his military enlistment—lost his life in an attempt to neutralize the threat posed by Iraq in the Middle East.

U.S. military history, irrespective of the conflict, its ideological origins, or its popularity at home or abroad, is replete with examples of Latino heroism, love of country, and sacrifice. Their willingness to confront the contradictions of war and their demand for civil rights, all the while preserving their patriotism, make their military participation in the U.S. armed forces both unique and historical.

Today, U.S. soldiers with Spanish surnames can be found in every branch of the armed forces, especially in the U.S. Army and the U.S. Marine Corps. Recent studies and polls have shown an increase in Latino enlistment following the events of 9/11. Though it is difficult to pinpoint the exact causes of this trend, their patriotism and willingness to sacrifice for the common good has been a recurring theme of their military service. As in prior conflicts, moreover, foreign and domestic issues have intersected. Domestic debates regarding terrorism, illegal immigration, assimilation, and citizenship promise to remain linked to the discussion of Latino military service.

In addition to this, military service has facilitated the class mobility of Latino veterans. The opportunity to attend college, own a house, or acquire skill sets that are transferable to the civilian world have been made possible by government grants and initiatives aimed at improving the educational and financial needs of veterans. In this regard, discipline, teamwork, and self-sacrifice—standard mantras of military service—are coupled with skill sets such as vocational training, leadership development, and language skills that seek to give veterans a

competitive edge in the civilian world. Thus, military service has offered not only an opportunity for citizenship or full membership in American society but also a financial stake in the United States.

The notion of military service by noncitizens, a theme highlighted and rooted in Galvez's efforts in the American War of Independence, has received a great deal of attention in recent years. In 2003, President George W. Bush, as a means to acknowledge the contributions of noncitizens in uniform and to increase the pool of potential recruits, signed legislation expediting the process by which they could become full-fledged citizens. Through this process, many Latinos, already proud and patriotic, became citizens of the nation they had already committed to defend. This issue also reemerged as policymakers looked for ways to address what many considered a broken immigration system. The Dream Act, a piece of legislation that sought to provide a path to citizenship for undocumented youth who had grown up in the United States provided that they attend college or enroll in the military, reintroduced the nexus between Latino military service, domestic policy, citizenship, and civil rights.

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See also Diversity

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LAWS OF WAR

The laws of war pertain to both national and international laws that dictate what constitutes a just war, what constitutes acceptable behavior in war, and the modes of prosecuting accused war criminals, as either individuals, states, or organizations. Laws of war exist as customary or codified laws, and they exist to circumscribe what weapons are allowed in combat, to define crimes against humanity, to identify protected groups such as prisoners of war (POWs) and noncombatants (particularly children), and to prevent the destruction of cultural heritage. International cooperation in determining the laws of war, as well as their codification, became a prominent issue in Europe in the late 19th century with the First Geneva and Hague Conventions in 1864 and 1899, respectively, and reached high points following the First and Second World Wars. In the later decades of the 20th century and into the 21st century, international law was expanded on a number of issues, including the Nuclear Test Ban Treaty, the banning of land mines, and the 2002 establishment of the International Criminal Court, which was monumental in establishing a permanent international institution for prosecuting war criminals. This entry discusses the evolution of international laws pertaining to wartime conduct and the prosecution of war criminals and looks at current issues.

Background

While standards of acceptable wartime conduct can be seen in texts dating back to the Hebrew Bible, ancient Greece, and the Koran, the codification of the laws of war is a relatively modern phenomenon. *Jus ad bellum* and *jus in bello* are the underlying modern standards of determining what is a war crime. *Jus ad bellum* refers to the criteria set forth

to establish whether or not a war is just, while *jus in bello* refers to the standards of behavior during wartime. Many modern conceptions of these standards arose in the mid- to late 17th century, having grown out of the constant bloodshed and the politics of Early Modern Europe that would prompt a similar change in the laws of war in the mid-20th century. The first modern conference regarding acceptable wartime behavior came in the 1856 Paris Declaration Respecting Maritime Law, signaling the start of a period of codification of the laws of war that is the basis for our understanding of them today.

Development of International Law

Most modern laws of war refer to international humanitarian law (IHL) and see their more direct origins in the early Geneva and Hague Conventions. While rules regarding *jus in bello* were more or less customary law by the time of their codification, the Geneva and Hague Conventions were the first to codify these laws as such. The foundation of the International Committee of the Red Cross by Henry Dunant in 1863 and the adoption of the Lieber Code by the Union forces of the United States during the Civil War were the first major events in the system of international conferences and conventions that constitute today's body of laws of war.

The First Geneva Convention in 1864 was directly related to the establishment of the International Committee of the Red Cross, and signatory parties recognized the neutrality of the Red Cross as an aid organization for the sick and the wounded in battle. While the First Geneva Convention provided for the treatment of combatants who had been removed from battle due to illness or injury, as well as the protection of aid workers, the Second Geneva Convention in 1906 extends all the protections of the First to combatants in a naval war.

The two Hague Conventions in 1899 and 1907 serve as the basis for the types of warfare and weaponry that are legally allowed, whereas the Geneva Conventions define legal conduct and treatment of individuals during wartime. The First Hague Convention, called in 1899 by Czar Nicholas II of Russia, established the Permanent Court of Arbitration (which seeks the pacific settlement of international disputes) and specifically banned the launching of projectiles or explosives from balloons (or, more generally, aerial bombing), hollow point

bullets, and chemical warfare. The basic principles of the First Hague Convention are still in effect today in international law.

The 1907 Hague Convention, called by President Theodore Roosevelt, expanded on the laws created during the 1899 conference but was more concerned with the laws of naval warfare than the first convention. The Second Hague Convention established laws regarding submarine contact mines, the rights of neutral powers in a naval war, and attempted to establish an International Prize Court to arbitrate property seized during wartime, though the Prize Court was never ratified.

The push for stronger international laws of war increased dramatically following the worldwide experience of horror and atrocities that came with World War I. The failure of the League of Nations is the best known example of attempts to regulate international conduct and conflict following the First World War, and it was accompanied by a number of other laws and conventions aimed at further shaping the laws of war. Many of these new laws were created in the widespread trend toward arms limitation or disarmament in the interwar period. The 1922 Washington Naval Treaty, which was signed by the United States, Japan, Great Britain, France, and Italy, instituted a building holiday on new capital vessels and set tonnage limits for battleships and aircraft carriers. Pacifism, a popular sentiment after World War I, was visible in many international efforts of the time, notably the 1928 Kellogg-Briand Pact, which outlawed war among signatory parties.

International conventions also saw the need for updates and additions following World War I. The 1925 Geneva Protocol to the Hague Convention banned all use of biological or chemical weaponry in combat, while a third Geneva Convention was called in 1929 to address shortfalls in the treatment of POWs that had not been addressed by the Hague Conventions. The Third Geneva Convention (which would be updated after the Second World War in 1949 along with the other Geneva Conventions) addressed labor performed by POWs, as well as internment of civilians.

While the post-World War I era saw diligent efforts to improve the standards of acceptable conduct during wartime, World War II presented entirely new problems to the nations involved. POWs were, in many cases, denied access to the privileges granted to them by the Geneva and the Hague Conventions

(especially those POWs held by German or Japanese forces). Atrocities against civilians were committed at unprecedented levels, resulting, in some cases, in the creation of new language to describe them. Further problems resulted from bombing of civilian centers and cultural landmarks, which took place on an enormous scale, both by Axis and Allied powers, as well as the destruction of enormous amounts of cultural heritage in the countries affected by the war.

International Law After 1945

Current international laws of war are largely a result of the postwar establishment of the United Nations and the postwar military tribunals in Nuremberg and Tokyo at the end of World War II. The 1945 UN Charter, ratified that same year, established a permanent justice organ and international court in its International Court of Justice. The most significant change to international standards following World War II came in the establishment of laws regarding crimes against humanity. In the indictment of major war criminals at Nuremberg, the three main counts presented were the waging of an aggressive war, war crimes, and for the first time in history, crimes against humanity.

In a major step for IHL, Article 6 of the Constitution of the International Military Tribunal at Nuremberg defined crimes against humanity as

murder, extermination, enslavement, deportation, and other inhumane acts committed against any civilian population, before or during the war; or persecutions on political, racial or religious grounds in execution of or in connection with any crime within the jurisdiction of the Tribunal, whether or not in violation of the domestic law of the country where perpetrated.

While the first two charges were issued in accordance with international law and treaty at the time, the addition of this article marked a change in the way the laws of war would be enforced. Nuremberg signified that national sovereignty must defer to international law in instances of crimes against humanity, but it was not without flaws. The *ex post facto* nature of the new code was used in the defense of the Nuremberg defendants, but the inherent evil in the crimes committed by the Nazi regime was felt to be in violation of customary international law,

even if it had not yet been codified as such. Furthermore, the Nuremberg Trials legally established that a “superior orders” defense (the claim that war crimes were committed based on obedient execution of superior orders) was not a viable defense in international law.

The Japanese war crimes trials presented another set of challenges to IHL and its enforcement. Accused Japanese war criminals at Tokyo and elsewhere were tried on a much smaller scale than in Germany, and the exoneration of Emperor Hirohito from responsibility for Japanese aggression has been widely criticized as a failing of postwar justice. However, the vicious war’s culmination in Hiroshima and Nagasaki generated enough controversy for many to question the legitimacy of U.S.-sanctioned justice in Japan. One of the major war crimes trials for a Japanese officer was that of the former commander of Japanese forces in the Philippines, General Tomoyuki Yamashita, who had been found responsible for war crimes committed by his men and sentenced to death by a military commission in the Philippines. After appealing his case to the U.S. Supreme Court, his conviction was narrowly upheld on the ground that as commanding officer, he should have been able to exercise control over his troops’ actions. This concept would become known as the Yamashita Precedent.

A number of new conventions on the laws of war arose after the postwar tribunals. Following the 1945 UN Charter, the United Nations subsequently established the legal definition of genocide through the adoption of the Convention on the Prevention and Punishment of the Crime of Genocide in 1948, which 142 nations have ratified thus far. In 1949, the three original Geneva Conventions were updated, and a fourth treaty was added, changing the First Geneva Convention to reflect shifting international attitudes about warfare.

Apart from the definition of and legal precedent of prosecuting crimes against humanity, World War II also gave rise to a variety of other protocols, including the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, the culmination of a decades-long attempt to protect European cultural heritage that began after the First World War. Laws relating to the use of certain types of weaponry were also further defined or discussed in the post-1945 era. The UN Convention on Certain Conventional Weapons, which entered into

force in 1983, later expanded bans on arms such as laser weapons, land mines, and booby traps. The 1997 Convention on Anti-Personnel Mines (Ottawa Land Mine Treaty) further restricted the use of land mines. The 1925 Geneva Protocol was also updated in 1972 and 1993 to further enhance its efficacy in modern combat. The legality of the use of nuclear weapons remains open to question. Although UN General Assembly resolutions have declared them unlawful, they have not been expressly prohibited by either treaty or legal opinion. In an advisory opinion, the International Court of Justice was divided on whether nuclear weapons could categorically be banned and whether their use could be justified by a nation in the interest of self-defense.

While international parties have worked diligently to define and promote just laws of war, the issue of prosecuting offenders has been somewhat more challenging. The International Court of Justice aims to operate as a body to settle disputes between member states, whereas the International Criminal Court (ICC), formally established in 2002 and located in The Hague, Netherlands, prosecutes war crimes, crimes against humanity, and genocide. The ICC was designed to complement national prosecution of war criminals or to take cases recommended by the UN Security Council and (as of August 2012) had recently completed its first case, that of Thomas Lubanga Dyilo of the Democratic Republic of the Congo.

Before the establishment of the ICC, however, most crimes against humanity were prosecuted through the prompting of the United Nations at ad hoc tribunals at or The Hague. The Hague witnessed several tribunals in recent decades, including the International Criminal Tribunal for the Former Yugoslavia, the International Criminal Tribunal for Rwanda, as well as courts related to Lebanon, Cambodia, and Sierra Leone. The International Criminal Tribunal for the Former Yugoslavia, established in 1993 to prosecute crimes committed since 1991, has dealt with a number of major war criminals involved in genocide, Geneva Convention violations, and crimes against humanity, including Slobodan Milosevic, Radovan Karadzic, Boris Tadic, and others. The International Criminal Tribunal for Rwanda located in Tanzania was established in 1994 to deal with those who committed the Rwandan genocide that same year, and it marked a major milestone in international law in the definition of mass rape as part of the crime of genocide.

As of July 2012, the International Criminal Tribunal for Rwanda was transferring cases to International Residual Mechanism for Criminal Tribunals in anticipation of the tribunal's completion in 2014.

Complicating the international laws of war, particularly in the United States, is the question of national sovereignty versus international law. Most nations prosecute war criminals themselves unless the cases are on an extreme scale, as in the former Yugoslavia or Rwanda. The Federal Republic of Germany held a series of trials for accused Nazi war criminals through the 1970s, and countries such as Israel held their own trials of war criminals, most notably in the Eichmann trial of the early 1960s. While the Supremacy Clause of the U.S. Constitution states that treaties are part of the "supreme law of the land," the U.S. willingness to participate in the activities or to abide by the standards of certain international bodies has been the source of some international discomfort.

In the United States

Domestically, the United States established the basic definitions of its laws of war in the 1863 Lieber Code, which was signed by President Abraham Lincoln, to dictate army conduct during the Civil War. In the modern era, the 1996 War Crimes Act (in 18 U.S.C. § 2441) of the United States defines a war crime as a "grave breach" of the Geneva Conventions, actions prohibited by the 1907 Hague Convention, the willful harm or murder of civilians with mines or other weapons prohibited by the 1996 Geneva Convention related to banned weaponry, or engaging in "prohibited conduct." Prohibited conduct is defined as torture, cruel or inhuman treatment, performing biological experiments, murder, maiming or mutilation, and intentionally causing serious bodily injury, rape, sexual assault, and the taking of hostages. War crimes resulting in the death of a victim are also punishable by the death penalty in the United States.

In the past decade, the Global War on Terrorism has created a number of questions regarding the legality of U.S. government policy, particularly as it relates to extraordinary rendition and the classification and detention of individuals deemed "unlawful combatants" by the U.S. government. The United States has declared itself exempt from compulsory jurisdiction by the International Court of Justice; that is, it only accepts rulings on a case-by-case basis,

so that many current international rulings against the United States have little actual legal recourse.

A major legal example of the issues facing the United States in this arena is *Hamdan v. Rumsfeld*, a 2006 U.S. Supreme Court case brought by the former driver of Osama bin Laden, arrested in 2004 and set to be tried before a military commission at Guantanamo Bay. The Supreme Court decision maintained that the Bush administration's military commissions at Guantanamo were illegal under international law and specifically violated the Geneva Conventions. The case sprung open a number of illegal activities being carried out by the U.S. government at home and abroad and revealed knowing, willful violations of Geneva Conventions and other international standards. While *Hamdan* resulted in an expansion of executive requests to Congress to establish military commissions (in order to establish a stronger legal footing for the commissions), it has had little practical effect on the behavior of the U.S. government in relation to enemy combatants.

Future Issues

Moving forward, the relationship of the United States to bodies of international justice will be explored further and will surely see more coverage internationally. The use of torture and other inhumane activities in the War on Terrorism is part of an ongoing debate, both domestically and abroad, and the resolution of these issues is fundamental to any ending of the conflicts involved. Internationally, the use of the relatively new ICC will be a major factor in deciding cases related to the laws of war in upcoming years, and issues over its jurisdiction in sovereign countries will further contribute to the basis of knowledge and understanding of these laws.

Hillary Jean Sebeny

See also Crimes, War; Geneva Conventions; Hague Conventions; International Criminal Court; Nuremberg War Crimes Trials; Ottawa Land Mine Treaty; Tokyo War Crimes Tribunal; Torture; U.S. Supreme Court; Yamashita Precedent

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LEADERSHIP

Leadership in today's world matters, and it will continue to matter since we live in a world of rapidly growing volatility, uncertainty, complexity, and ambiguity (VUCA). This VUCA world is the rule that defines the context in which the military operates. In times of uncertainty and unpredictability, leadership matters even more, since it serves as an essential compass to navigate in this uncertain world, where effective maps do not exist. In this context, the U.S. military practices a unique and valuable form of leadership, built around a personal self-concept, identity perspective, and the importance and power of authentic, transformational leadership. This entry addresses the nature of military leadership and military leader qualities that have emerged to fit the VUCA operational context.

Leadership in the military, as in other organizations, matters. In the military, however, it is the “sine qua non” of military effectiveness, and creating

leaders is at the core of the military profession and one of the key points of focus for military leaders. Military leaders need to get this leadership business right since the stakes are high and the impact of getting it wrong is significant; our national security is compromised, and people are placed at risk of serious injury and even death when leadership is ineffective. The contextual considerations, the necessity for leaders to ask of followers to do something that is completely against their self-interests, to potentially die for their country, the mission, and their fellow service members, requires a distinctive form of leadership. This form is a self-concept generated sense of what it means to *be* a leader, the first of several core differentiators of military leadership.

The second differentiator is that military leadership must be authentic, transformational, and relationally driven. The military is a relational business, built around trust, where the concept of WE must be preeminent over I, since military members, when all is said and done, fight for each other. A commitment to an overriding collective purpose is the hallmark of the military and a core focus of military leadership. The final differentiator is the critical nature of a robust developmental culture that is required to produce the leaders who embrace this distinctive identity and way of being in the world and who are capable of operating effectively in a very difficult context. And, because of this context, and the culture that emerges, the military must “grow” their replacements. So military leadership and the context in which it is applied must be characterized by a very robust leader development system, essential to enabling the profession to sustain itself over time.

Military leaders must not only embrace a self-concept and master the process of transformational leadership but must also be engaged in a relentless focus on the development of other leaders as a critical and essential aspect of their professional responsibility.

The Framework

Two ways of thinking about leadership provide a useful framework for examining the core of what makes military leadership a distinctive contribution to the study of leadership. First, the act of leading is generally a function of an understanding of three variables: (1) the leader, (2) the led, and (3) the situation. In any context in which leadership occurs, these

three variables are always present and interact to define the nature of the leadership practiced, with the situational demands being most defining for the military. Thus, the foundation of effective leadership rests in three important domains: personal (the leader), relational (the led), and contextual (the situation), with the personal and contextual domains serving as the cornerstones for the framework. According to Sim Sitkin and Allan Lind, the contextual domain is characterized by two important types of leadership action: building team identity and simplifying and clarifying the complex situations, the tasks and environments, in which leadership is practiced.

In many respects, the situation, or contextual domain, dictates the type of leadership that is practiced because of how it shapes the nature of the personal (leader) and relational (the led) requirements essential for leadership effectiveness. In the military, the context is uniquely and distinctively different from all other pursuits and drives the nature of what it means to be a leader and the kind of leadership that is practiced.

The Military Context

There are several very distinct elements of the military contextual domain that the military leader must understand, simplify, and clarify for military members, and they directly affect who military leaders *are* and *how* they lead. The first, most important element is that the military's central function is preparing for and executing combat operations in fighting the nation's wars. Military leaders must lead in the most extreme conditions, entirely dependent on the willingness of members to go into harm's way whenever and wherever asked. Very few organizations require this from their leadership or sacrifice from their organizational members. According to Colonel (Ret.) Don Snider, a recognized expert in the military professions, the military service is ultimately about two things: Military members must be prepared to kill and kill when ordered, and be prepared to die and die if required to successfully complete assigned missions in service to the nation. Few organizational pursuits exact this measure of commitment and potential sacrifice from their members and leaders; it is total, absolute, and unrelenting.

Leading in combat is a specific instantiation of leading in extremis. Leading in extremis, "at the point of death," is when leaders willingly and

intentionally place themselves in circumstances of extreme danger or threat and lead others in such circumstances. This context provides individuals with purpose, motivation, and direction in the presence of physical danger and leads others in such circumstances. In the military, it is situations of extreme danger and threat that military leaders must continuously prepare for and that require a distinctive style of leadership and a unique sense of what it means to *be* a leader.

The second contextual feature of the military is that it is characterized as a *true profession*, a classification that has significant meaning and a powerful place and role in our society. As a profession, it places some unique requirements on the leaders and members of the profession and on the nature of leadership practiced, particularly in terms of the relational requirements between the leader and the society, the leader and the profession, and the leader and the led. Military leaders have a unique relationship with the society in which they serve. Military members are required to take an oath, which creates an obligation to provide to society that which it cannot provide for itself—security. This obligation is a *moral one*, to fight and die when called on by fellow citizens and, thus, creates a powerful *duty requirement* that necessitates an unlimited liability for the military member, the leader, and the leadership that is practiced.

The professional context also creates the conditions that military leaders are morally and ethically bound to a duty placing the needs of the nation and others ahead of needs to self. They are required to live in accordance with a clear set of moral obligations, and live in consonance with a specified set of ethical principles and virtues. Military leaders are required to be leaders of courage, character, and integrity. In this profession, the potential for death or injury is very real; surrounded by the demands of a professional ethic of service, military leaders must, as an organizational imperative, lead in a *values-based manner*.

The military context is also characterized by a very high degree of VUCA that places a significant amount of pressure on the military leader and the application of leadership. The "terrain" (context) in which the military is operating is continuously changing. This complexity and uncertainty will continue to place inordinate demands on the military leader, particularly for ethical and moral behavior

based on the stakes on which military leadership is exercised. For the military leader, there must be no hedging of bets—it is “all in.”

Military leaders must be compasses in a world of uncertainty, and the core of the inner workings of the compass of the military leader is a distinctive self-concept or professional identity that allows for effective navigation, even in the most uncertain terrain. This self-concept as a military leader generates an absolute commitment to the craft of leading others and to a form of leader-follower relationship that must be authentic and transformational in nature.

Personal Leadership: A Unique Self-Concept or Identity

Military leaders must have a significant measure of credibility with those they intend to lead. Warren Bennis, in his book *On Becoming a Leader*, argues that people begin to become leaders at that moment when they decide for themselves how to be. Be is what drives your response when you are asked “Who are you?” Be is what drives behavior when we are not thinking but acting under the demands of the context. Be is really about our self-concept, which is made up of identities that serve as the lenses through which we view ourselves, and provides significant influence over our behavior.

Very simply, a self-concept is an integrated system of beliefs about the self that are derived from experiences. It is a continuous process of construction, as the self-concept is continuously refined and elaborated to meet the changing demands of the organization and the environment in which it is embedded. A self-concept affects motivation, emotion, and thinking and drives our behavior in many powerful ways. It is a dynamic system consisting of personal, social, and collective identities that “come to mind” and actively influence thinking and behavior. If you want to know how a person will behave, you need to understand the person’s self-concept and the identities that form this sense of self. The most powerful identity is that which is most practiced, rehearsed, and thought about. This identity becomes salient, and “comes to mind” at any given time to drive behavior.

Leadership in the military services must be built around a distinctive self-concept. It is the core of what makes military leadership special. One of the most powerful frameworks that characterizes

this self-concept comes from the U.S. Army. Army officers practice *officership*, which a Spring 2003 United States Military Academy Officership concept paper defines as

the professional practice of being a commissioned Army leader. An essential part of officership is a shared professional identity or self-concept, shaped by what an officer must KNOW and DO, but most important, inspired by a deeply held personal understanding and internalization of what an officer must BE. This self-concept, consisting of four interrelated identities—warrior, servant of our nation, member of the army profession, and leader of character, inspires and shapes the officer’s behavior on and off-duty, 24 hours a day, 7 days a week.

This self-concept is conceived to be a powerful driver of officer behavior in all aspects of life, both on and off duty, for the officer-leader. Development of such a powerful self-concept necessitates that commissioned officers conceive of themselves in terms of four overlapping identities: warrior, servant to the nation, member of a profession, and leader of character. This is an important exemplar of this notion of a military self-concept that is very illustrative of the perspective shared by all services.

Warrior

Being a warrior is much more than merely pulling a trigger or executing combat operations. Being a warrior is really an attitude, a mind-set that guides behavior. Being a warrior means having an aggressive “fighting spirit,” associated with being a winner and winning.

A winning spirit requires a *warrior ethos*. In the recent study of the noncommissioned officers for the Army Chief of Staff (the army’s Chief Executive Officer), the study group defined the warrior ethos as compelling

soldiers to fight through all conditions to victory, no matter how long it takes and no matter how much effort is required. It is the soldier’s selfless commitment to the Nation, mission, unit and fellow soldiers. . . . The warrior ethos is grounded in refusal to accept failure. It is developed and sustained through discipline, example, commitment to Army values and pride in the Army’s heritage. (United States Military Academy Concept Paper, 2003, p. 4)

Servant of the Nation

Military leaders take an oath of service, which includes that they support and defend our Constitution. This creates a particular responsibility to live a life of duty and service. Military personnel are the ultimate American citizens, with the willingness to go into harm's way for the safety and well-being of others, the body politic. Being a servant means being dutiful. The military leader as a servant is characterized as one who understands and has a great sense of duty—to God, to country, to organization, to mission, to work, and to others—before self. As illustrated in Elbert Hubbard's great short story, a true servant to his or her nation delivers the message to Garcia.

Member of a Profession

Professions are important to our society and provide a unique service in that they do for society what society cannot do for itself. America has three military professions: army, maritime, and aerospace. The military officer is a member of a time-honored profession. This professional membership is one that is truly a “calling” that the military leader must embrace not only intellectually but also emotionally and spiritually. Brigadier General (Ret.) Malham Wakin suggests that professionals become completely and absolutely identified with their work; it becomes who they are and what they stand for. A calling demands attention 24/7 and exacts its full measure of commitment from the professional member to maintain the most expert knowledge and to organize in a self-policing, self-sustaining manner based on high standards of ethical and moral behavior.

Because of this professional membership, military leaders are given great authority and autonomy to act and direct others to act in service to the nation and, particularly, to mortal combat if required. As a result, the military leader is morally obligated to be competent in the vocation, must be adept at developing expertise in others, must set the standard for right behavior in the profession, must be a professional, and must be a person of character.

Leader of Character

Finally, military leaders must *be* leaders of character. Of all the things that they must be, this is probably the most important. Character is everything; effective leadership is the unconscious expression of

the character and personality of the leader and is the leader's identity. Character is who we are when we are not thinking about who we are. It is the essence of our behavior at the most stressful times in our lives. It is the lifelong habits that we practice, and for the military leader, these must be good habits to ensure effectiveness in the missions that these leaders will be asked to accomplish. It is ultimately what officership and military leadership is all about—it is about *being* a leader of character and a person of integrity. These identity constructs, part of a larger self-concept, generate a very unique set of relationships that create the conditions that allow subordinates to be willing to make the ultimate sacrifice to fight and die for country, for mission, and for others. The mechanism for generating these relationships is value-based, authentic leadership.

Values Matter

At the core of military leadership, across all services, are values. The values of the armed forces matter, not only based on their professional requirements and the need to wage war if asked, but also because these values can either support or subvert democratic institutions. Values are the principles that help guide our behavior. Although the services have different sets of values, they all share a common core: courage, honor, integrity, and selfless service.

Several of these values—integrity and courage, along with character (which could be considered a metavalue)—are referred to as high core values, the “highest principles.” For the military, they are the gold standard of right behavior, and they dictate the behavior required of military leaders and are the rock on which military success rests. They are nonnegotiable, apply to all, and lie at the heart of the military identity—the mechanism of the leadership compass. It is under the intense pressure associated with military leadership that these values are manifested. They are the fuel that drives the profession and the professional military ethic.

Military Leaders Must Be Authentic

Because of what military leaders are asked to do, and what they must ask their followers to do, they must be authentic. Authenticity is one of the key areas of personal leadership and is at the heart of what it means to identify oneself as a leader. Authentic leaders are genuine people who are true

to themselves—their rhetoric and their behavior match. Authentic leaders desire to serve others, and organizations, through their leadership. Authentic leaders are clearly passionate about who they are and what they are about; they practice their values as a matter of principle under all conditions, and they recognize the absolute necessity of meaningful, genuine relationships as essential to effective performance. This is clearly the mantra associated with what it means to *be* a military leader. They practice solid values, lead through their character, are extremely disciplined in the congruence of word and behavior, and recognize the importance and power of connected relationships.

The Power of Relationships

Military leaders must create powerful relationships with their subordinates, such that they will fight and die for each other. It is all about interpersonal connections. It is all about creating a sense of “We” before “I.” Military leaders must show a high level of concern, consideration, and respect for the needs of others. In other words, they must not only be personally authentic, driven by a powerful set of values, but must be transformational in their behavior and leading in a manner that shifts the relational behavior in military organizations from “I” to “We.”

Military leaders must share the same hardships as the led, set the example in all things, and demonstrate the courage to not ask subordinates to do what they are *not* willing to do themselves. In effect, they must be *transformational* in their leadership. In the psychological sense of the Gestalt, military leaders must create the conditions for “We” versus “I” in which collective activity is the figure, and all other personal, self-based considerations are the ground. Ultimately, it is the commitment to others that creates the conditions in which soldiers are willing to give their lives in service of a greater good. Military leaders understand that it is not about them, but it is about others.

Military leaders are transformational agents and do not see their subordinates as transactions. Soldiers will not give up their lives because a superior orders them to, provides rewards, or threatens with punishment; they will do so because they trust their leaders, respect their leadership, and know that their leaders truly care about them as human beings. Transformational leaders demonstrate behaviors

that create relationships and stimulate followers to go beyond expected levels of performance and to achieve true excellence. They see themselves through the lens of We and not I; place the needs of the team, the organization, and the mission first; and will sacrifice self for others. This involves the internalization of a set of values and beliefs and a way of living.

Transformational leaders generate a process where subordinates personally identify with the leader, link their sense of self to the values of the group to which they belong, and internalize the values of the leader, group, and organization and represent them as their own. These values and the identity they engender guide behavior under all conditions, particularly in the extremes of combat. This is the ultimate outcome of the military leader—to get subordinates to transcend their own self-interest and desire for self-preservation through a commitment to transformational values; to put We before I and demonstrate a willingness to give up their lives for others.

Achieving this level of value-based, identity-driven behavior is difficult and time-consuming. It cannot be purchased from outside the military but must be developed from within. Military leaders, at all levels, must be committed as an important aspect of their professional ethic, to developing others, ultimately their replacements. Thus, the military is characterized by a unique, sophisticated, and systematic leader development program embedded in a powerful developmental culture.

Developmental Culture as the Engine of Military Leadership

Effective leadership in the extreme conditions of combat is a moral imperative, and each of the armed services has a professional mandate to continuously and systematically develop its leaders over the life course of their service. Talent in the military cannot be purchased, as in many other organizational contexts—it must be grown internally. Recently, the commanding general of the army’s Training and Doctrine Command stated that if he has to prioritize all that his command is doing to enhance soldier capability, “leader development is job #1” (Dempsey, 2009). All the services have codified this development through elaborate doctrinal statements. At the core of these statements, the military services

provide powerful experiences, the appropriate education and training to maximize the benefit from these experiences, and a supportive culture that embraces development as central to organizational effectiveness and sustainment.

The leader development process of the U.S. Army is illustrative of service leadership development. It is based on the Be, Know, and Do conceptual framework initially developed by Lieutenant Colonel Boyd M. Harris in the early 1980s and first published in the 1983 version of the army's Field Manual FM 22-100, *Army Leadership*. This conceptual framework suggests that leadership at every level in the military organization (from the lowest level team leader or manager to the corporate chief executive officer) is characterized by three aspects: Who you are inside, *the Be*; what you need to know and understand about your work, *the Know*; and how you should behave, *the Do*. To develop the Be, Know, and Do, the military's leadership culture is characterized by a commitment to three core pillars of development: multiple and varied challenging and "stretching" experiences, a robust educational system across the leader's life course in the profession (the Know), and the most sophisticated training environment in the world (the Do).

Wrapped around these pillars is a focus on developing leaders of character who embrace a value-based, ethical, and moral way of living and leading, referred to as the professional military ethic (the Be). The military services have elaborate and structured performance management systems that focus on developing leader identity through an emphasis on values. At the core of this process lies an institutionalized commitment to continuous self-development. It is these commitments that make up a developmental culture that ensures that the military has leaders who Be, Know, and Do across all levels of the military organization.

The Way Ahead

America's military will continue to be challenged and to be stretched and stressed by a world that is becoming more and more complex, uncertain, and unpredictable. Trying to determine what military leaders need to know and do will be consistently problematic based on the "certainty of uncertainty" and how rapidly knowledge and skill demands will change. The military will be in a constant state of transformation, morphing to meet emerging

demands placed on it by America's evolving security landscape. The military must develop leaders who clearly understand that context matters, and this context will shape the military leader's self-concept and significantly influence the nature of the leadership that is practiced.

The only real anchor, or compass, in this volatile, uncertain, complex, and ambiguous world is the military leader, who is driven by a unique, professional identity; embraces a transformational, authentic relationship with followers; and is not only committed to continuous self-development but also willingly invests considerable time, talent, and resources to develop others, to develop his or her own replacement, and to create a culture of development. It is these characteristics that make military leadership a *distinctive* and valued contribution to the important topic of leadership.

Joseph N. G. LeBoeuf

See also Commissioned Officers; Professionalism; Rank; Small Unit Cohesion; Squad Leadership; Warrior Culture

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LEAVES AND FURLOUGHs

Military leaves and furloughs are critical to the sustenance of America's fighting force during both peacetime and times of war. The health and welfare of America's military servicemen and servicewomen is a priority at all levels of command. Department of Defense (DOD) leaders recognize that it is the individual soldier, sailor, airman, and marine who fights and wins the nation's wars. The leave policies within in the Department of Defense are for the most part standardized across the services. The regulations regarding passes and furloughs are unique to specific commands within each branch of service. This entry looks at types of leaves and furloughs and their policies.

Annual Leave

Active-duty service members earn 2.5 days of annual leave for each month of service for a total of 30 days of leave per year. Service members can bank up to 75 days of leave. Any additional days above 75 that are not used are forfeited at the beginning of the fiscal year (October 1).

Special Leave Accrual

Service members serving in hostile fire or imminent danger pay areas (combat zones) for 120 days or more can accumulate up to 120 days of leave and retain it for up to 2 fiscal years. At the end of the 2 years, any amount accrued more than 75 days will be lost.

Rest and Recuperation or Environmental Morale Leave

Rest and Recuperation (R&R) or Environmental Morale Leave (EML) are programs that provide service members who are deployed for extended periods leave away from hostile fire and imminent danger areas. R&R and EML programs make use of space-available travel on military aircraft in conjunction with commercial transportation to move service members to and from combat zones. Typically, a service member who is deployed to a combat zone for 12 months will be granted 15 days of R&R or EML. Service members deployed to combat zones for periods greater than 12 months are often granted 18 to 20 days of R&R or EML.

Holidays

Active-duty service members are entitled to the same national holidays observed by those employees in the federal government. There are currently 10 recognized holidays:

1. New Year's Day, January 1
2. Birthday of Martin Luther King Jr., the third Monday in January
3. Presidents Day, the third Monday in February
4. Memorial Day, the last Monday in May
5. Independence Day, July 4
6. Labor Day, the first Monday in September
7. Columbus Day, the second Monday in October
8. Veterans Day, November 11

9. Thanksgiving Day, the fourth Thursday in November
10. Christmas Day, December 25

Training Holidays, Passes, and Liberty

Training holidays are days off that are built into a unit's training schedule. Active-duty units usually plan for one training holiday a month. If there is a national holiday in a given month that creates a 3-day weekend, commanders will often schedule a training holiday to coincide with that weekend in order to give service members a 4-day weekend. This practice creates several long weekends throughout the year in which service members are given opportunities to travel.

Pass and liberty policies are unique to individual units. Commanders establish a mileage radius around duty stations. Service members are free to travel within the established radius. The range is often 150 miles, but it is at the commander's discretion. Travels outside of the established radius for the purposes that are not official duty require leave or a pass.

Passes and liberty are granted at the commander's discretion to service members, often as a reward and incentive for outstanding performance. These are also issued to service members who sacrifice personal time due to unforeseen mission requirements. For example, if a load of equipment arrives at a port and service members must work on Saturday and Sunday to unload the equipment, they will often be issued a pass for 2 business days (Monday–Friday) during a subsequent week.

Sick Leave

Soldiers who fall ill for a short period and are expected to return to duty within 72 hours are classified as Sick-in-Quarters. During this period, the soldier may be excused from duty for treatment or medically directed self-treatment. For periods longer than 72 hours or an illness that requires hospitalization, the soldier is classified as Sick-in-Hospital. As with Sick-in-Quarters, the soldier is excused from duty during the period of hospitalization. Soldiers who are sick during periods of leave may not be charged leave for that period. Convalescent Leave is nonchargeable absence from duty granted to

expedite the soldier's return to full duty after illness, injury, or childbirth.

Terminal Leave/Unused Leave

Terminal or transition leave is a chargeable leave granted together with transition from the service, including retirement. Soldiers with a positive leave balance of 60 days or less at the time of discharge or reenlistment may be entitled to sell back leave. The leave is paid at the same rate as the soldiers' basic pay. Each day of leave is worth a day of pay. A soldier may not sell back any leave that is carried over to a new enlistment but may receive payment for any leave not carried over to a new enlistment. Unused leave may not be sold back if a soldier is discharged for the purpose of accepting a commission or a warrant in any uniformed service.

Jonathan R. Martin

See also Air Force, U.S.; All-Volunteer Force; Army, U.S.; Iraq War (2003); Navy, U.S.; War in Afghanistan

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LEBANON, U.S. INTERVENTION IN (1982)

In 1982, the United States of America once again found itself committed to a military intervention to restore peace in Lebanon. The latest eruption of violence began in June when Israeli Defense Forces launched Operation Peace of Galilee, invaded Lebanon, and besieged Beirut. In July, President Ronald Reagan committed U.S. Marines in a multinational force (MNF) of roughly 2,000 peacekeepers that also included French, Italian, and English forces. In stark contrast to the 1958 U.S. intervention, the MNF found itself in an ill-defined mission, caught in the middle of a conflict that entangled Palestinians, Israeli and Syrian armies, and warring Lebanese factions. This entry discusses the challenges and events that shaped the 1982 international military intervention in Lebanon.

Intervention, Disaster, and Re-intervention

The Western intervention began in August as the siege and Israeli bombing of Beirut worsened. The U.S. special envoy and distinguished diplomat Phil Habib brokered the first failed cease-fire and remained to negotiate a second deal with the Israelis that August. The arrangement called for the MNF to bolster Lebanese Armed Forces in support of a mission to peacefully withdraw Palestine Liberation Organization militants from Beirut: their recent base for attacks against Israel. On August 25, 800 U.S. Marines joined 800 French paratroopers and 400 Italian soldiers to oversee the withdrawal and successful restoration of authority to the government of Lebanon. After the Palestine Liberation Organization militants left Beirut on September 10, the MNF redeployed to their ships, but renewed violence dashed any hopes for a short-term involvement.

Optimistic of an initial success and new solution to the Israeli-Palestinian conflict, the Reagan administration was shaken by a disaster that upended hopes for progress in Lebanon. On September 1, 1982, President Reagan announced the "Reagan Plan," which called for Palestinian self-government, under the supervision of King Hussein of Jordan, in the West Bank and Gaza. Much of the conflict and violence in Lebanon stemmed from the regional conflict that had spilled across its borders and involved numerous neighbors including Israel, Syria, Iran, and by extension the Soviet Union and the United States. While the superpowers remained largely out of the fight, securing peace in Lebanon depended on fractious regional interests. On September 14, a bomb killed Lebanon's newly elected Christian president, Bashir Gemayel, less than a month after his election and triggered a cascade into renewed violence. The next day, Israel abandoned the cease-fire and resumed its bombardment and siege of West Beirut as forces loyal to Christian Phalangist and military leader Sa'ad Haddad entered Palestinian refugee camps at Sabra and Shatila. Under the complacent watch of Israeli troops, the militias murdered nearly 800 men, women, and children no longer protected by Palestine Liberation Organization combatants or the departed MNF. The resultant outcry led to an uproar in Israel and the Reagan administration's redeployment of MNF soldiers to Beirut.

When roughly 1,600 marines rejoined the MNF in Lebanon on September 20, their mission lacked

clarity and left them in a dangerous predicament. The MNF resembled a peacekeeping force, the French considered it such, but the White House declared the marines a noncombatant neutral force—not peacekeepers. The Reagan administration further defined the marines as a deterrent to prevent violence, but rules of engagement tightly bound their own use of force outside of self-defense. In fact, they could not return fire until they identified the enemy target, and further restrictions prevented them loading their weapons without approval. Nevertheless, Reagan's administration hoped that the marine presence would help reestablish the Lebanese government's authority and speed diplomatic progress toward the withdrawal of Israeli and Syrian armies.

Deteriorating Conditions and Departure of MNF

As the intervention dragged on, little progress in Lebanon amid worsening violence exposed the complexities of the conflict and difficulties the White House faced justifying its involvement. The marines were initially welcomed by the Lebanese and conducted numerous humanitarian missions throughout the winter, but their neutral perception drastically changed during the summer of 1983. The situation in Lebanon worsened, particularly in the spring when the Reagan Plan collapsed and a terrorist bomb killed 60 people at the U.S. embassy in Beirut on April 18. As fighting swelled around the marines, the division in Reagan's cabinet between Secretary of State George Shultz and Defense Secretary Caspar Weinberger only worsened the administration's ability to respond to events and adjust policy accordingly. Vicious battles between Lebanese factions also erupted over land previously controlled by the Israel Defense Forces as Israel prepared for full-scale withdrawal in September. By mid-August, the United States made a major deviation from its plan to remain neutral in order to support the embattled Lebanese army with U.S. artillery and resupply efforts. What the administration hoped would be perceived as defensive retaliation for marine positions was instead interpreted by Lebanese militias as the MNF taking the side of Christian government forces. No longer considered neutral, the marines faced mounting casualties with outdated mission parameters in a hostile situation they were neither prepared nor permitted to take part in.

On October 23, 1983, a van loaded with the equivalent of 12,000 pounds of TNT exploded at the foot of a Beirut U.S. Marine barracks, killing 241 marines and diminishing the Reagan administration's hopes in Lebanon. Shortly after the first bombing, a similar attack struck a French base and killed 56 French soldiers. The terrorist bombs that day claimed the lives of half as many soldiers as Israel lost in its entire 16-month incursion. The United States and France retaliated against Syrian and Iranian forces after the implication of both nations' involvement, but mixed results exposed the reality that both powers could wait out the Western intervention.

In the aftermath of the bombings, the Reagan administration remained committed but the U.S. Congress proved less certain about the marines' deployment. Despite the disastrous losses, Reagan and key cabinet officials steadfastly defended the deployment as if to avoid accusations of an intention to cut and run. The bombing prompted an already impatient U.S. Congress to launch a House of Representatives Armed Services Committee investigation while the Defense Department ordered its own, chaired by retired U.S. Navy admiral Robert L. J. Long. The congressional and Long Commission investigations criticized nearly every facet of the mission, from rules of engagement to inadequate defenses and poor leadership. But most important, the commission's clarion call signaled the need for decisive political and military policy to prepare the country for future dynamic state-sponsored terrorist attacks that lay ahead.

Although the invasion of Grenada in October temporarily distracted American media and public attention, the poor conditions in Lebanon persisted. On February 7, 1984, President Reagan announced the end of the U.S. MNF deployment, and on February 26, the last remaining marines redeployed to nearby ships amid thundering U.S. naval artillery support.

Alex S. Kasper

See also Middle East Conflict

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LEVELS OF WAR

The levels of war are a particularly Western concept, or at least particularly the focus of Western military thinkers, and for most of Western military history until the modern age there were two levels of war: strategy and tactics. Both terms are derived from Greek words, but neither has ever achieved a universally agreed-on complete definition. In simple terms, strategy is a framework for the distribution and application of military means to fulfill the ends of policy for war. Tactics describes the activities in combat on the battlefield—the techniques used in fighting by military forces in contact with the enemy. This entry discusses the evolution of the levels of war and how their focus has changed.

Of the two initial levels, tactics was always the more concrete. In the most basic sense, tactics emerged with the realization that a group of armed combatants is more effective in combat if they are organized to work together in some fashion. As warfare grew in scale and more technologies came to be applied to war, the imperative to arrange the various arms, including artillery and cavalry, to work together in battle only grew. Tactics, whether on land or sea, required an individual or group of individuals to do the organization and arrangement of forces before and during battle, and therefore the practice of tactics was always tied to issues of leadership.

Likewise, the strategic level also required leadership, only the task for strategic leaders was always different in kind from tactics. Strategy serves policy, and therefore, a strategist must develop a clear understanding of the policy objectives for the war

and set appropriate military objectives to meet that policy, all the while accounting for available resources, tactical and technological capabilities, and enemy intentions and abilities. In premodern terms, strategy primarily concerned the thinking and processes that got armies and navies to battle and was primarily the task of the heads of the armies or navies (who were often also the heads of state).

In the modern era, especially after the American and French Revolutions, both levels underwent significant changes. Tactics still focused on the techniques for using forces in battle, but as forces grew in size, the techniques needed to grow too. The advent of large units of command, especially corps, armies, and army groups, all of which could be engaged in battle but outside the overall commander's vision and control, led to grand tactics for governing such forces. As the name implied, grand tactics were tactics on a larger scale and, thus, still focused on techniques to gain advantages in battle.

At the same time, strategy changed even more dramatically. Industrialization and nationalism allowed for the fuller mobilization of all of a society's resources to support the war. Strategy, which had been focused almost exclusively on the application of military means—armies and navies—to war, now had to account for political, diplomatic, economic, moral, and psychological means and ways. As a result, what was once just strategy became known as military strategy, and the new task of applying all of a society's resources to war took on the title grand or national strategy. Grand strategy became the responsibility of heads of state, while military strategy remained largely in the purview of generals and admirals. Due to the large size of forces and the increased scale of wars, military strategy could also be broken down into theater military strategy, the definition of ends and coordination of ways and means for a geographically distinct area, all in support of the grand and military strategies and overall policy objectives for the war.

The 20th century and the further modernization of war led to two significant changes in the levels of war. The first was the further expansion of the meaning of strategy. The mobilization requirements and pace of war created by mass industrialization led to a necessity to craft contingency military strategies in advance of the actual outbreak of war. At the same time, with civilian leaders and

academics increasingly thinking about grand strategy, strategy making became more of a peacetime activity. During the Cold War, which by its very name blurred the line between war and peace, the meaning of strategy at higher levels began to mix with policy, rather than be derived from policy. The word *strategy* in the civilian world became synonymous with planning or any kind of forward thinking and, thus, became less and less understood as the activity of defining and coordinating military ends, ways, and means for war. If there is still a strategic level of war, it now has to be understood as something very different in meaning from the so-called strategies for diplomacy, businesses, political campaigns, sporting events, economic policy, public affairs, and so on, unless those activities are part of a grand strategy in wartime.

The second change to the levels of war in the 20th century was the insertion of a third level between military strategy and tactics: operational. Again, as the scale of warfare grew, as large forces could not be destroyed in single tactical battles, the fighting season went year-round, and as strategy drifted closer to policy, it became more important to military commanders to be able to organize and coordinate potentially prolonged campaigns to meet the military strategic objectives. The operational level of war, first developed by the Germans and especially the Soviets in the interwar period, became the level at which campaigns linking strategy and tactics were planned and executed. In the 1970s and 1980s, most of the rest of the world's militaries, including the United States, added the operational level to their military thinking, replacing grand tactics.

The fluctuation in the meanings of the levels of war over the years begs the question of the utility of the categorization. But as long as humans continue to go to war, and as long as civilian public officials and military service members have the task of leading people into violent conflict, the levels of war, however artificial, provide ways of thinking and understanding the dimensions and responsibilities of command in war.

Thomas Bruscino

See also Leadership; Plans, Operational; Plans, War; Strategy, Air Power; Strategy, Ground War; Strategy, Naval; Strategy, Nuclear; Tactics, Air; Tactics, Covert; Tactics, Ground Forces; Tactics, Naval

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LIBERIA

Liberia is an important study in post-1989 warfare and in the history of U.S. relations with Africa. The natural resources of this heavily forested West African country—timber, gems, rubber, iron ore—are key to both U.S. involvement with Liberia and to a war that lasted almost two decades. This entry discusses the relationship between Liberia and the United States, and the war in Liberia.

Some 3.5 million people live in Liberia. The largest city is the capital, Monrovia. Liberia's government is modeled on the U.S. system: an executive headed by a president (who is also commander in chief), a bicameral legislature, and a judiciary led by a supreme court. In 2005, Liberia elected Africa's first female president, Ellen Johnson Sirleaf. English is the official language, though most Liberians speak the language of one of 16 ethnic groups.

The U.S.-Liberia Relationship

The relationship between the United States and Liberia is rooted in the 1822 resettlement of former slaves and free blacks from North America to Africa. Many Liberians today have familial and financial ties with the United States, and most Liberians regard the connection between the two as pivotal to Liberia's fate.

Throughout Liberia's history, the U.S. economic and security presence has been highly visible. U.S. companies were given wide access to Liberian resources. This included an agreement granting the Firestone rubber corporation exclusive access to 10% of Liberia's arable land for 99 years. In the Second World War, Liberia hosted U.S. bases and was the chief rubber supplier for military hardware. During the Cold War, the Liberian government allowed a Voice of America transmitter to broadcast

around Africa, and a naval monitoring station facilitated surveillance of global sea traffic. Liberia also supported the United States diplomatically, including during the Vietnam War.

Such arrangements helped Liberia's small ruling class maintain authoritarian control. U.S. advisors trained the Armed Forces of Liberia, and when the military overthrew the government in 1980, the United States continued to support the state financially and militarily. Even so, the United States largely avoided direct intervention during the two decades of instability that began in 1989.

The Liberian War

In December 1989, a group of dissidents and mercenaries invaded Liberia. The best known of the National Patriotic Front of Liberia (NPFL) rebels was its eventual leader, Charles Taylor. A former government bureaucrat and U.S. college student, Taylor was alleged at his subsequent war crimes trial to have backing from West African leaders, a network of French, American, and Lebanese businessmen, and U.S. security services. Taylor also received training in camps established by Libya's Muammar Qaddafi to further his pan-African revolution.

The NPFL was initially welcomed in northern Liberia, but its popularity was eroded by its brutality. Even without popular support, however, the group soon advanced to Monrovia. Only the intervention of a regional force led by Nigeria prevented the NPFL from seizing the capital. ECOMOG (Economic Community of West African States [ECOWAS] Monitoring Group) was the first force of its kind in Africa, though its mandate under ECOWAS defense pacts and international law was unclear. In theory, ECOMOG was to monitor a cease-fire. In practice, ECOMOG was another belligerent party, changing roles in response to shifting Nigerian interests. Much of ECOMOG's funding and logistical support came from the United States, which refused to deploy troops despite pleas from Liberia's government and civil society. Until mid-1996, the NPFL controlled much of Liberia, though ECOMOG denied Taylor a victory in the capital.

What Taylor could not do militarily, he did electorally in 1997. The NPFL won control of the legislature, and Taylor overwhelmingly won the presidency. The vote was free and fair, though fear of continued war rather than popular support was

key to Taylor's victory. The NPFL ran the government as a business enterprise. Services were nonexistent or were outsourced to private entities controlled by Taylor's associates. Paramilitaries like the Anti-Terrorist Unit operated outside the control of the defense ministry and were funded through profiteering from forest resources.

In 1999, fighting resumed with an anti-Taylor insurgency. The second phase of the war again saw dissidents, mercenaries, and business interests arrayed against the government. Liberians United for Reconciliation and Democracy (LURD) reached Monrovia by mid-2003. Again the United States refused to intervene militarily despite calls from both sides for the United States to ensure a ceasefire, sending only a small Marine Corps force to evacuate the embassy. After fighting in the capital, Taylor agreed to exile, and another Nigerian force was deployed. This was replaced in 2003 by the UN Mission in Liberia that was authorized by the UN Security Council to include 15,000 military personnel and 1,115 police officers. In November 2011, the UN Mission in Liberia maintained 7,769 military personnel, 131 military observers, and 1,283 police officers in Liberia who continued to assist in maintaining order and bolstering civil society. Postconflict, U.S. military personnel and security contractors helped restructure the state security sector.

Liberia's conflict has been called Africa's first resource war and the first postmodern war. With the fall of the Berlin Wall and the end of Cold War proxy wars, the reasons for the Liberian war were not immediately clear. The brutality of fighting, poorly trained fighters (including children), and the war's ethnic dimensions led some to conclude that a resurgent tribalism was sweeping West Africa.

In the years since Taylor's overthrow, a different conclusion about the war has circulated among scholars and policymakers. The web of business interests, political dissidents, criminal organizations, and state security services that supported various factions illustrates the importance of transnational networks hoping to profit from the natural resources in African conflict zones. For example, al Qaeda operatives were among those who trafficked in West African conflict diamonds, and transnational outfits transited both arms and drugs in exchange for timber and gems. The Liberian war now appears to have less to do with tribal hostilities than with how

violence in Africa since 1989 blurs the line between criminality and warfare, civilians and combatants, war and peace.

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See also Africa, Sub-Saharan; Peacekeeping; U.S. Africa Command

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LIBYA

Libya is a country in North Africa bordered by the Mediterranean Sea to the north, Egypt to the east, and Tunisia and Algeria to the west. As part of the arid Maghreb region, more than 90% of Libya's 1,775,500 square kilometers (679,000 square miles) is desert. Major cities in Libya span the northern coast, including the capital in Tripoli. The majority of the 6.5 million Libyans share an Arab lineage and practice Sunni Islam. Smaller minorities include Berbers and immigrants from northern and sub-Saharan African states as well as a very small Italian population. This entry discusses the history of Libya under the regime of Muammar Qaddafi, including Libya's relationship with the United States and the international community as well as the civil war that led to his ouster in 2011.

In the spring of 2011, a civil war led by the National Transitional Council defeated the long-time government of Qaddafi, who ruled Libya since 1969. Cautious optimism about the future contrasts four decades under the turbulent rule of Colonel Qaddafi, notorious for his political vicissitude. Despite having the 10th-largest oil reserves in the world, Qaddafi squandered Libya's wealth on weapons and terrorism, grew a state bureaucracy that squelched free enterprise, and denied any hope

of true democratic privileges in a system he called direct democracy.

The Libyan Arab Jamahiriya and Qaddafi Regime

After World War II and 19 years of monarchy, Muammar Qaddafi took control of Libya in a bloodless coup d'état in 1969. Colonel Qaddafi, a military officer at the time of the coup, admired and modeled himself after the Egyptian Arab nationalist leader Gamal Abdel Nasser. Qaddafi's rhetoric originally championed Arab nationalism and the Third Universal Theory, which sought to defy the limitations of capitalism and communism. Later Qaddafi's Green Book described a system of direct democracy and popular committees that he used to shape the country, renamed the Libyan Arab Jamahiriya, in 1977. By rhetorically placing himself outside the governing committees, Qaddafi railed against the government's failures and argued for a degree of statelessness that contradicted the bureaucratic takeover of nearly every element of Libyan society.

Throughout the 1980s, Qaddafi estranged himself from the West through a foreign policy that supported contentious leaders and militant organizations around the world. These tyrants included Ugandan President Idi Amin, Liberian President Charles Taylor, Yugoslavian President Slobodan Milosevic, and Ethiopian dictator Mengistu Haile Mariam. He also spent lavishly in support of militant organizations around the world, including the Palestine Liberation Organization, Basque ETA, the Irish Liberation Army, Revolutionary United Front, Central and South American paramilitaries, and Muslim militants in South Asia. Some of these relationships also led to Libyan military operations in Egypt, Uganda, and Chad, where the Libyan military faced embarrassing and costly defeats time and again.

The defeat of Libya's Revolutionary Armed Forces in Chad exemplified Qaddafi's careful efforts to prevent professional identity and politicization of the Libyan armed forces. By 1985, Libya's military had grown to 85,000 men from a paltry 7,000 in 1969. Flush with cash from high oil prices in the 1970s and early 1980s, Qaddafi spent nearly \$3 billion annually on arms primarily supplied by the Soviet Union. The regime used weapons acquisitions to keep the military elite loyal and rotated leadership to prevent any potential uprising. Despite high spending, the armed forces intentionally remained

disorganized and ill disciplined. The regime never relied on the military for protection, so it primarily served as an outlet for employment with advancement potential greater than other government bureaucracies and government-controlled businesses. As sanctions accumulated and the Soviet Union fell, Libya's arms purchases shrank to record lows near \$10 million annually, with no purchases in 1993 or 1995.

Qaddafi's pursuit of weapons of mass destruction only worsened his reputation. In the earlier years of his rule, Qaddafi acquired and developed chemical and biological weapons. In fact, the Chadian government claimed that Qaddafi used chemical weapons including mustard gas during Libya's intervention in Chad. He did not stop with chemical weapons and continually sought expertise and components for nuclear weapons development. Qaddafi's relationship with the A. Q. Khan Network during the 1990s became a significant concern to many countries, including the United States. Eventually, his stockpiles proved to be an effective bargaining chip by the early 2000s as Libya's isolation and subsequent economic malaise grew intolerable.

To protect the Jamahiriya, Qaddafi relied on formal and informal security and justice organizations that ensured his complete control. The Intelligence Bureau of the Leader oversaw numerous security organizations that repressed dissent and doled out punishments that instilled a common fear of even uttering the leader's name. Additionally, informal groups, including the Free Unionist Officers Movement, Forum of Companions of Qaddafi, and the People's Social Leadership Committees, provided strategic links to Libya's tribes and clans that further ensured stability. Qaddafi's cunning vertical integration of the government and security apparatuses immensely helped prolong his survival and nurtured a political hopelessness among Libyans.

Qaddafi's support of militant causes and global terrorism solidified Libya's political isolation as a pariah state. Assassinations of Libyan dissidents living abroad and the 1985 attacks on the Rome and Vienna airports increased international frustration with Qaddafi's regime. On April 5, 1986, Libyan agents bombed a West Berlin nightclub popular among U.S. servicemen and worsened Libya's relationship with the United States. President Ronald Reagan publicly referred to him as "this mad dog of the Middle East." As the European Union considered sanctions, the U.S. led an air raid named Operation

El Dorado Canyon against military targets, including one of Qaddafi's residences at the Bab al-Aziziya compound. In addition to destroyed military facilities, Qaddafi's adopted daughter was killed while surface-to-air missiles shot down one F-111 fighter, killing two U.S. airmen. Qaddafi's decreased public profile demonstrated the impact of the raid in spite of international disagreement over the propriety of the operation.

Sanctions and Limited Change in Libya

The Lockerbie and French UTA flight bombings finally shifted European interests and the United Nations toward a unified policy of isolation. In December 1988, Pan Am flight 103 exploded over Lockerbie, Scotland, killing 270 people and outraging the U.S. government. Less than a year later, the bombing of the French UTA 772 airliner over Niger in September 1989 sent similar shocks through Europe. The United States had long declared Libya a state sponsor of terrorism and levied sanctions as early as 1979 only to strengthen them after the 1986 nightclub bombing. When Qaddafi refused to turn over the Lockerbie suspects or admit fault, the UN Security Council issued sanctions in 1993 that achieved a multilateral embargo with the support of Europe and neighboring Middle Eastern states. Additional measures including the Iran and Libya Sanctions Act (ILSA) pursued by U.S. president Bill Clinton's administration increased the effectiveness of the sanctions and slowed Libyan oil exports to a trickle.

The collective pressure of multiple sanctions inflicted serious economic pain on Libya throughout the 1990s. Initially, U.S. sanctions failed to significantly affect Libya as oil exports simply shifted to Europe, but the Iran and Libya Sanctions Act threatened U.S. sanctions on foreign companies that invested more than \$40 million in Libya's oil industry. Oil accounted for 95% of Libya's exports and 80% of its gross domestic product (GDP), but without foreign partners, Libya could barely operate at 1.5 million barrels a day, essentially half its previous capacity.

In the 1970s, Qaddafi used Libya's oil to provide welfare programs that subsidized housing, food, gasoline, education, and health care. The literacy rate rose from 20% to 82%, and life expectancy increased from 44 to 74 years. Additionally, the UN Human Development Index ranking and gross

domestic product per capita surpassed most African nations. Unfortunately, two decades later, critics blamed welfare excesses for the stagnant economy, with unemployment at 30% and migrant workers filling most jobs deemed undesirable. Green Book policy further squelched private enterprise, and many of the available jobs only existed in government bureaucracy, with civil service employing 20% of Libyans workers. Despite improvements in health care, malnutrition and anemia remained prevalent, and many who could afford better care traveled to neighboring countries.

Exiled from the international community and with an economy in shambles, Qaddafi shifted his tone in hopes of relief and reintegration, to find only partial success. Qaddafi attempted an Infitah economic reform in 1987 and 1990, hoping to reduce subsidies, cut government domination of the economy, and incentivize private enterprise and foreign investment. His Western-educated son Seif al-Islam also became a symbol of Western reforms that championed such measures, but neither held much promise. Qaddafi's championing of Pan-Africanism won him support from many African leaders including Nelson Mandela, who favored Libya's reintegration. An agreement to turn over Lockerbie suspects proved to be the most significant and accomplished a reduction of UN sanctions in 1999. Qaddafi finally won over the United States in 2003 when he agreed to pay Lockerbie victims \$2.7 billion and surrendered weapons of mass destruction stockpiles, including 23 tons of mustard gas and a reported 4,000 centrifuges. His support for the U.S. Global War on Terrorism and denouncement of Muslim extremism also won him praise, although U.S. President George W. Bush's administration did not remove Libya from the list of state sponsors of terror until 2006. Qaddafi appeared to return from the cold, but cynics and the future 2011 civil war proved that much of his transformation lacked sincerity.

Civil War and Future Libyan Republic

Demonstrations and protests across the Middle East during the 2011 Arab Spring eventually inspired Libyans to take to the streets as well. On February 16, frustrated Libyans massed in towns across Libya to protest the recent detention of a human rights advocate in a Day of Rage. As protests continued, riot police with tear gas and rubber bullets gave way



Muammar Qaddafi, the Libyan chief of state, attends the 12th African Union Summit in Addis Ababa, Ethiopia, February 2, 2009. Qaddafi was elected chairman of the organization.

Source: U.S. Navy photo by Mass Communication Specialist 2nd Class Jesse B. Awalt (released).

to mercenaries and soldiers shooting and killing civilians. The unrest evoked international demands for an end to the violence backed by threats of renewed sanctions. Qaddafi attempted to cover up the unrest with footage of loyal demonstrators and manipulated body counts at hospitals. By the end of February, numerous Libyan officials and military personnel defected to a budding rebellion, including Libya's UN representatives.

In the following days, a rebel body was born and called itself the National Transitional Council (NTC). Initial committees formed behind groups of lawyers, academics, businessmen, and young Libyans who set out to manage cities and relations

with the international community. The rebel military force grew out of militias of untrained young Libyans who after the initial days of fighting were joined by Libyan military and police defectors. Some concerns arose over individuals with pro-Qaddafi pasts, but many in the NTC had government backgrounds, including NTC interim President Mustafa Mohamed Abd al-Jalil, formerly the minister of justice.

The military remained unchanged as Qaddafi kept his smaller 50,000-member army intentionally weak to prevent the possibility of a coup. When the civil war began, his best forces included four special brigades, the presidential guard, and paramilitary forces. Estimates placed foreign mercenaries, called the Islamic Pan-African Brigade, nearly 2,500 men assembled from countries throughout Northern Africa. Some African mercenaries had been migrants beholden to Qaddafi after he opened Libya to sub-Saharan immigrants and championed Pan-Africanism. His son, Khamis, controlled one of the most feared elite units, the 32nd Armored Brigade, said to number between 4,000 and 5,000 well-trained soldiers. Many loyalists from the leader's Gadhadhfa tribe filled the ranks of the air force and elite units. Nevertheless, many regular army units owed their allegiance to other tribes and served because of conscription, neither being reasons to fight for Qaddafi.

At the outbreak of the civil war, Qaddafi's unclear arms capabilities reflected the little available knowledge of actual military inventories. Since the conclusion of the arms embargo in 2004, Qaddafi purchased more than €800 million in defense equipment from Europe and an additional \$1.8 billion in arms from Russia, including attack helicopters, jets, tanks, and numerous other weapons. Rumors also suggested that he defiantly used personal funds taken from Libyan oil revenue to purchase \$1.1 billion in Belorussian arms during the embargo from 1996 to 2006. Analysts cautioned that many of these deals only existed on paper and that the majority of Qaddafi's armaments were in fact unusable and remained in storage. Chemical weapons also remained, albeit in small amounts, but they could not be used as Qaddafi no longer possessed the launching equipment. The heavy armament left with Qaddafi's forces that did not defect was soon destroyed by the North Atlantic Treaty Organization (NATO) air strikes.

Stunned by Qaddafi's violent suppression of protests, the international community moved toward sanctions in late February 2011. The U.S. president Barack Obama issued the toughest warning yet when he condemned the actions and demanded Qaddafi to step down. As Qaddafi's forces pushed back toward the rebel capital at Benghazi, Western powers began talks to establish a no-fly zone for fear of a massacre. Concerns swirled around the U.S. insistence on Arab League participation to avoid the appearance of a Western invasion. On March 17, the UN Security Council approved Resolution 1973, which gained Arab League support and allowed the United States, Great Britain, and France to intervene militarily in order to protect civilians and undermine the Qaddafi regime.

On March 19, 2011, the U.S.-led Operation Odyssey Dawn launched 110 Tomahawk missiles along with respective air strike operations by France and Great Britain. Within 1 week, the coalition established a no-fly zone that destroyed Qaddafi's air force and steadily eviscerated heavy armored units over the following weeks. The intervention routed Qaddafi's forces and saved the rebels' Benghazi stronghold, although indecisive battles continued for months. On March 31, the no-fly zone enforcement transferred from individual states to complete NATO control under Operation Unified Protector. For weeks, NATO fighter jets bombed Qaddafi's forces as European insistence on increased involvement shifted the appearance of the operation to one of close air support from the initial no-fly zone enforcement.



The guided missile destroyer USS Barry (DDG 52) launches a Tomahawk cruise missile on March 29, 2011, in the Mediterranean Sea while operating in support of Operation Odyssey Dawn. Fourteen nations have partnered to enforce UN Security Council Resolution 1973, which authorizes all necessary measures to protect Libyan civilians under threat of attack by Libyan leader Colonel Muammar Qaddafi's forces.

Source: Department of Defense photo by Mass Communication Specialist 3rd Class Jonathan Sunderman, U.S. Navy (released).

During the summer months, NATO air strikes increased in support of NTC forces as the NTC gained recognition from the international community. Rebel forces had struggled to consolidate gains and required heavy NATO air support to maintain their positions in the face of an aggressive pro-Qaddafi counteroffensive. NATO commanders faced criticism from rebels as they often canceled strikes to minimize civilian casualties when Qaddafi forces intentionally mixed with civilians. By July, many UN member states, including the United States, recognized the NTC as Libya's legitimate governing authority. The International Criminal Court at The Hague also issued warrants for Qaddafi, his son Seif al-Islam, and his chief of intelligence. One month later, the NTC's August draft constitution outlined a future Libyan government based on Sharia law with liberal Western provisions, including freedom of religious practice, a democratic multiparty system, and equality before the law.

In August, rebels finally captured Tripoli and raided Qaddafi's Bab al-Aziziya compound before setting out in search of him. Aided by U.S. drones and NATO air strikes, the rebels captured their former leader, who they found hiding in a drainage pipe near his home town of Sirte. Cell phone videos of Qaddafi that spread throughout Libya and the world media showed him bloodied and weak. During the initial hours of his captivity, Qaddafi died under what many considered suspicious circumstances. The international community called for an investigation, and the NTC complied but insisted he died from wounds inflicted during his capture. Qaddafi's body was quickly moved to a commercial freezer in Misrata for 4 days of public viewing prior to a secret burial. Shortly after Qaddafi's capture, the NTC declared Libya liberated and the interim prime minister Mahmoud Jibril resigned, fulfilling his promise to leave on the cessation of hostilities. His replacement, Abdurrahim al-Keib, entered office after he won an internal election with 26 out of 51 votes from members of the NTC. He planned to lead the interim government until the proposed election of a national assembly in the summer of 2012.

On October 31, 2011, NATO operations ended as the UN Security Council mandate was finally fulfilled after Qaddafi's capture. Commanders declared Operation Unified Protector a success and

noted that NATO may return under a different mandate of defense and security reform. Additionally, European and Canadian forces were commended for their successful role in leading the campaign. By October, the NATO force flew a total of 10,000 strike mission and accounted for 17 of the 18 ships that enforced the arms embargo. Unfortunately, they fell short in some areas and required a last-minute resupply of precision-guided bombs and intelligence assistance.

The U.S. role in Libya, estimated near \$1.1 billion, was billed as a success by the Obama administration, which was proud of the broad coalition and limited U.S. combat involvement. The president had pushed ahead despite an outcry in the U.S. Congress against entering a third war and threats over the legality of intervention without congressional approval. In an address to NATO, the outgoing U.S. defense secretary Robert Gates regretted that only 30% of UN members who voted on the Libyan resolution actually assisted with strike operations, mostly because they lacked the necessary military assets. He also commended the European leadership that allowed the United States to largely remain in the background for much of the campaign. In the end, the United States had launched 97% of the initial Tomahawk cruise missiles, conducted 75% of the refueling and reconnaissance missions, and provided intelligence capacity including unmanned drones.

Cautious optimism best describes predictions of Libya's future, given the enormous task of forming institutions, reining in militia forces, and jump-starting the economy. Both Qaddafi loyalists and returned moderate expatriates constitute the NTC and hope to unite the diverse tribes and interests in a new Libyan government. After the war, divisions emerged between previously united rebel militias, demonstrating the need for a succinct policy to fold rebel militias into a single national military body. Fortunately, the oil fields, left largely unscathed by fighting, reopened with the support of multinational oil companies that expect to restore and increase oil production beyond prewar levels.

Alex S. Kasper

See also Egypt; Middle East Conflict; North Atlantic Treaty Organization; Terrorism; United Nations



A boy holds his fingers up in a victory sign in front of a Qaddafi residence, as Libyan “revolution tourists” continue to celebrate the fall of Colonel Muammar Qaddafi by streaming into the Libyan dictator’s destroyed Bab al-Aziziya compound on September 5, 2011, in central Tripoli, Libya. Libyans remain in awe and hopeful of the future after the toppling of the Libyan leader who ruled for nearly 42 years.

Source: Photo by Scott Peterson/Getty Images.

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LIDDELL HART, BASIL

Sir Basil Liddell Hart (1895–1970) was a 20th-century English military theorist most famous for his work on mechanization and the influence of his thought on the German and Israeli blitzkrieg doctrine. This entry examines Liddell Hart’s career and his theories.

Liddell Hart was born on October 31, 1895, in Paris. He studied history at Corpus Christi College, Cambridge, England. His studies were cut short by the First World War when he joined the British army and served on the Western Front where he was wounded twice. Like many of his generation, he was deeply affected by what he saw and did during the conflict. While in the army, he contributed to an infantry tactics manual (1920), before retiring with the rank of captain in 1927. He worked as military correspondent for *The Daily Telegraph* (1925–1935) and *The Times* (1935–1939), using his journalistic outlets as a testing ground for many of his theories. He was widely respected as an interwar theorist and served as personal adviser to the British war minister Leslie Hore-Belisha, between 1937 and 1938, proposing a series of reforms that were half implemented. Among his numerous works are *Reputations 10 Years After* (1928), *Sherman: Soldier, Realist, American* (1929), *The Defence of Britain* (1939), *The German Generals Talk* (1948), *Deterrence or Defence* (1961), and *A History of the Second World War* (1970). He also edited *The Rommel Papers* (1953). He was knighted in 1966 and died on January 29, 1970, in Buckinghamshire, England.

The Man in the Dark

One of the first theories Liddell Hart developed was the “man in the dark” theory of war. He postulated that war was like two unarmed men fighting in the dark. For one man to be successful against the other, he must first find his foe, then reconnoiter to find his weakness, fix him in position so he cannot escape, launch a decisive attack to create paralysis, and exploit his enemy’s confusion. Thus, for Liddell Hart, success boiled down to five principles: find, reconnoiter, fix, attack, and exploit.

The Expanding Torrent

The man in the dark theory was a tactical doctrine more than a strategic plan. The strategic plan to accompany the small-scale movement of the man in the dark theory was the expanding torrent. The theory was that the forward unit that makes a break in the enemy’s line will press straight ahead as long as it was backed up by the body of the army. The forward units on the flanks of the breach should follow the first unit into the breach and attack the enemy’s flanks, widening the gap. The units in the rear press

through the gap expanding to take over the frontage of the held-up units. The held-up units, after mopping up the isolated enemy still facing them, would move on to act as maneuver units for the new forward units.

These early theories, in combination, bear a striking resemblance to those of the German blitzkrieg doctrine.

The Indirect Approach

The “indirect approach” is the idea for which Liddell Hart is most famous. It consisted of two main fundamentals: first, that direct attacks against a prepared enemy never succeed and should not be attempted, and second, an enemy is defeated by upsetting his equilibrium, and this should be done before the main attack. To many, the indirect approach can be seen in action during the German campaigns of the Second World War. Liddell Hart himself claimed that Rommel’s North Africa campaign was how he envisaged his approach in action. By the time the Second World War had arrived, however, he had become pessimistic about the chance of offensive success, predicting, incorrectly, that no side could win an offensive war. When the German successes in 1939–1940 occurred, Liddell Hart was eclipsed as a theorist and spent some time in the academic wilderness.

The Second World War and Redemption

After the end of the Second World War, Liddell Hart worked hard to redeem his tarnished reputation. He revisited his earlier theories and attempted to tie them in with the German blitzkrieg that made such an impact on the landscape of war. His work with the captured German generals helped make his case in this instance. There is much controversy surrounding his influence on Heinz Guderian’s memoirs *Panzer Leader*, with some historians suggesting that he planted a paragraph to suggest that Liddell Hart had more influence on German theories than had been the case. It is a debate that will continue among students of his work for many years. However, there is no doubt that after the Second World War, Liddell Hart once again was one of the most preeminent military theorists of his age.

Nuclear Theories

In the aftermath of the Second World War, Liddell Hart was one of a number of theorists who were grappling with the significance of the new nuclear

technologies. With very little information available to him, Liddell Hart led the way in the discussion of nuclear deterrence. His work especially in *Deterrence or Defence* shaped the debate for most theorists that followed him.

Significance of His Ideas and Continued Relevance

Liddell Hart is of interest to military theorists and students of military history primarily in his historical context. His work is a product of the First World War and fed a desire to reduce the brutality and destruction of war. However, the indirect approach, although not in itself revolutionary, returned mobility to the battlefield and has provided a basis of Israeli armor doctrine since the state of Israel's creation. His contribution to German and British policies in the run up to the Second World War is both the most interesting and controversial aspect of his work, and the debate about his impact will continue for many years to come.

Graeme Smith

See also Blitzkrieg Warfare; World War II

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LITERATURE AND WAR

War literature is a prolific, broad-ranging, and popular literary genre that resists categorization. What constitutes war literature? Firsthand portrayals of battle? Literature about the aftermath of war? Arguments about the limits of the definition abound. A traditionally narrow definition of war literature requires combat as the central concern; however, a more contemporary classification includes aftermath and postwar experiences as well as the

experiences of military support staff, journalists, civilians, women, children, and members of antiwar movements. Depending on the country of service, military women's war literature ranges from the perspective of military support staff, to nurses, to soldiers. Just as men without direct combat experience write of war, so too do women. Moreover, war literature does not exist in a literary vacuum. It signifies and reflects literary movements and forms of literary expression in addition to the sociohistorical and political climates out of which it is written. War literature—novels, memoirs, short stories, poems, and plays—engage war's impact on language, culture, countries, and individuals. This entry chronologically examines the multiplicity of themes in the literature of war, focusing on the major authors, fiction, and poetry concerned with American military conflicts of the 20th and 21st centuries in addition to addressing the importance of war literature in military training and professional development and among veterans writing groups.

Because soldiers and veterans of war are the largest group to write about war, the literature typically chronicles soldiers' experiences from innocence and excitement to dissolution and cynicism. Many war narratives commence as the new recruits' military life begins, with training, then group formation and bonding. Combat ensues, often accompanied by witnessing a comrade die. Sometimes the narratives also include the homecoming experience.

World War I

The prototype of modern war, World War I began for many civilians and soldiers with excitement and innocence, attitudes that quickly turned to horror. Exposure to the mass death and overwhelming destruction of World War I shaped the writers of the Lost Generation, among them American expatriates living in Europe. As the poet Philip Larkin wrote, "Never such innocence again," so too most World War I literature reflects the loss of the youthful ideals of honor, glory, courage, and patriotism. For example, many World War I novels address the futility of war, question war's purpose, address a loss of innocence, and critique military and bureaucratic incompetence and corruption. Such novels inspired by direct experiences in the war include John Dos Passos's *Three Soldiers* (1921), e. e. cummings's *The Enormous Room* (1922), Thomas Boyd's *Through*

the Wheat (1923), Maxwell Anderson's *What Price Glory?* (1924), Lawrence Stallings's *Plumes* (1924), Ernest Hemingway's *A Farewell to Arms* (1929), Erich Maria Remarque's *All Quiet on the Western Front* (1929), William March's *Company K* (1933), and Dalton Trumbo's *Johnny Got His Gun* (1939). William Faulkner, who did not directly experience combat but served in the British air force, wrote two novels addressing the war, *Soldier's Pay* (1926) and *A Fable* (1955). Some of the most famous novels by women writers exploring the effects of the war on women include Edith Wharton's *The Marne* (1918) and *A Son at the Front* (1923), Willa Cather's *One of Ours* (1922), Gertrude Atherton's *The Living Present* (1917), Ruth Dunbar's *The Swallow* (1919), and Anne Sedgwick's *Adrienne Toner* (1921).

World War I poetry shares common themes with novels of the war: loss of innocence, wanton violence, destruction of the pastoral, mourning the death of a comrade, and reaction against myths of sacrifice. Among the many World War I poets, some of the most famous include Rupert Brooke, Joyce Kilmer, Robert Graves, Alan Seeger, and Siegfried Sassoon. Wilfred Owen's *Dulce et Decorum Est* is among the most widely anthologized and John MacRae's *In Flanders Fields* is likely the most recited, often heard during Veteran's Day services.

World War II

Despite the changes in attitudes regarding war reflected in World War I literature, World War II literature exemplifies yet another shift toward recuperation of patriotic and heroic ideals. Common elements of the World War II narrative include a group of valiant soldiers under the command of a heroic, competent leader who engage the enemy and successfully accomplish significant military objectives. Despite occasional conflict within the group and the inevitable occurrence of death, the narratives often incorporate climactic battles and successful resolutions. Some of the better known novels that fall into this category include James Michener's *Tales of the South Pacific* (1947), James Gould Cozzens's *Guard of Honor* (1948), Leon Uris's *Battle Cry* (1953), Glenn Sire's *The Deathmakers* (1960), and Alistair McLean's *The Guns of Navarone* (1957). Still, some novels, such as Herman Wouk's *The Caine Mutiny* (1951) and James Jones's *The Thin Red Line* (1962) and *From Here to Eternity* (1951)

may implicitly sanction military hierarchy, yet eschew ideals of honor.

However, World War II literature does not entirely abandon the themes raised by World War I literature. For example, Saul Bellow's *The Dangling Man* (1944) addresses the anxiety of awaiting conscription and a soldier's desire to maintain individuality, while Norman Mailer's *The Naked and the Dead* (1948) critiques military authoritarianism. Still other novels of the war build on and exceed the modernist tendencies of World War I novels and trend toward postmodern representational modes. These novels include Joseph Heller's satirical *Catch-22* (1961), a novel that emphasizes the absurdity of war, while Kurt Vonnegut's *Slaughterhouse-Five* (1969), an antiwar science fiction novel, explores senseless death and destruction. Literature of the war continues through the decades with Thomas Pynchon's *Gravity's Rainbow* (1973) and Leslie Marmon Silko's *Ceremony* (1977). Other notable novels of the war include Harry Brown's *A Walk in the Sun* (1944), John Hersey's *A Bell for Adano* (1944), Thomas Heggen's *Mr. Roberts* (1946), John Horne Burns's *The Gallery* (1947), Irwin Shaw's *The Young Lions* (1948), Elizabeth Bowen's *The Heat of the Day* (1949), Stevie Smith's postwar novel *The Holiday* (1949), and Pierre Boulle's *Le Pont de la Rivière Kwai* (1952), translated in English as *The Bridge On the River Kwai*.

Poetry of World War II departed from the heroic tradition and demonstrated determinedly antifascist and intellectual commitments. Sinclair Lewis and Edmund Wilson serve as good examples of such poets. In addition, World War II poetry underscored the bleak realities of death and loss and imagistically engaged psychological disorientation. One of the most prolific poets of the war, Randall Jarrell, wrote in a curt style that came to represent much of World War II poetry. For example, Jarrell's brief, minimalist poem *The Death of the Ball Turret Gunner* best signifies this trend. Other poets engaged in writing of desolation and machination include Richard Wilbur, W. H. Auden, Louis Simpson, James Dickey, Karl Shapiro, and John Ciardi. Civilian poets, commonly writing antiwar poems, include John Berryman, Robert Lowell, Marianne Moore, and Allen Tate.

The Holocaust

Just as World War II produced countless literary representations, so too Holocaust literature demonstrates

an array of genres, languages of origin, and publication dates. Often written by survivors of the Holocaust, or children of survivors, the literature frequently blends memoir and fiction as a new means of representing trauma. Some of the most famous works include Elie Wiesel's *Night* (1958), Imre Kertész's fictional novel *Fatelessness* (1975), Cynthia Ozick's *The Shawl* (1980), Margarite Duras's *The War* (1985), Art Spiegelman's graphic novels *Maus: A Survivor's Tale* (1986) and *Maus II: A Survivor's Tale: And Here My Trouble Began* (1991), Martin Amis's *Time's Arrow: Or the Nature of the Offense* (1991) about a German doctor at Auschwitz, Primo Levi's *Survival in Auschwitz* (1958) also known as *If This Is a Man*, Charlotte Delbo's *Auschwitz and After* (1995), and Anne Frank's *The Diary of a Young Girl* (definitive edition, 1995).

Like memoirs and fiction, poetry of the Holocaust encompasses multicultural representation. Sonia Schrieber Weitz's poetic memoir *I Promised I Would Tell* (1993) creates a hybrid exploration of genres and memory. Holocaust poetry also signifies multicultural representation. Edited by Marguerite M. Striar, *Beyond Lament: Poets of the World Bearing Witness to the Holocaust* (1998) collects poetry by survivors, witnesses, and many other poets' meditations on and remembrances of the Holocaust. Charles Fishman's edited collection *Blood to Remember: American Poets on the Holocaust* (1991) presents American poetic responses to the Holocaust.

Korean War

Compared with other 20th-century wars, many consider the Korean War a forgotten war. So the literature on the Korean War is often overlooked. However, the Korean War produced more literature than commonly realized. Typically written by veterans of the war, these novels stress authenticity, historical accuracy, and realism. The most well-known novels include James Michener's *The Bridge at Toko-ri* (1953), William Styron's *The Long March* (1952), and Richard Condon's *The Manchurian Candidate* (1959). Darkly humorous novels of the war include James Salter's *The Hunters* (1956) and Richard Hooker's *MASH* (1968) better known for its cinematic and television adaptations. Still other novels of the war include MacKinlay Kantor's *Don't Touch Me* (1951), Curt Anders's *The Price of Courage* (1957), Francis Pollini's *Night* (1960),

Herbert Fairlie Wood's *The Private War of Jacket Coates* (1966), and Michael Lynch's *An American Soldier* (1967). The following contemporary novels of the war reflect newfound interest in the war: James Hickey's *Chrysanthemum in the Snow* (1990), Chaim Potok's *I Am the Clay* (1992), Susan Choi's *The Foreign Student* (1998), Edwin Simmons's *Dog Company Six* (2000), and Ha Jin's *War Trash* (2004).

While poetry of the war seems limited, this may be a matter of exposure. W. D. Ehrhart and Philip K. Jason respond to this lack of recognition with their edited collection of Korean War poetry *Retrieving Bones: Stories and Poems of the Korean War* (1999). Some author collections of poetry include William Childress's *Burning the Years* (1971) and *Lobo* (1972), Rolando Hinojosa's *Korean Love Songs* (1978), and Keith Wilson's *Graves Registry* (1992). As the preceding lists demonstrate, literature of the war significantly declined in the 1970s and 1980s, likely because attention turned to the Vietnam War.

Vietnam War

The earliest fictional work responding to the Vietnam War demonstrates a range of themes and foci: Graham Greene's *The Quiet American* (1955) about colonialism and American involvement in the French Indochina War; Eugene Burdick and William Lederer's *The Ugly American* (1958), a highly fictionalized account of American arrogance in Vietnam; Robin Moore's *Green Berets* (1965), an enthusiastic rendering of the war and the Special Forces; and David Halberstam's *One Very Hot Day* (1967), a realist novel concerning American advisors and combat in Vietnam. Like World War I novels, the early novels of the Vietnam War also recount soldiers' experiences from innocence to disillusionment, often within the chronological time frame of a 1-year tour of duty. Tim O'Brien's *If I Die in a Combat Zone* (1973), Ron Kovic's *Born on the Fourth of July* (1976), Philip Caputo's *A Rumor of War* (1977), and Tobias Wolff's *In Pharaoh's Army* (1994) are among the most renowned personal accounts of war. Larry Heinemann's *Close Quarters* (1974), John Del Vecchio's *The 13th Valley* (1982), and James Webb's *Fields of Fire* (1978) are also distinguished novels of the war.

Literary innovation is another hallmark of Vietnam War literature. For example, Norman

Mailer's *Armies of the Night* (1968) and Michael Herr's *Dispatches* (1974) exemplify the style of New Journalism—defined by its employment of literary techniques, self-reflexivity and subjectivity. William Eastlake's *The Bamboo Bed* (1969) eschews realism in favor of complex symbolism, and Tim O'Brien's surrealist *Going After Cacciato* (1978) creates a dreamlike world of confusion, flashbacks, and symbolism within the reality of war. In addition, O'Brien's *The Things They Carried* (1990) resists generic categorization. The stories in *The Things They Carried* are linked but not necessarily interdependent. O'Brien emphasizes the importance of the text as a "work of fiction" in an informal subtitle and by creating a fictional double referred to simply as "Tim." The novel forefronts common themes among Vietnam War fiction: the relationship between truth, memory, and the limits of writing about war. Like O'Brien, Caputo, Heinemann, and others, Robert Olen Butler and Gustav Hasford wrote several novels about the war, addressing a range of experiences. Larry Heinemann's *Paco's Story* (1986), Louise Erdrich's *Love Medicine* (1984), and Bobbie Ann Mason's *In Country* (1985) address postwar social consequences.

Van Tien Dung's *Our Great Spring Victory* (1977) typifies 20th-century Vietnamese novels about the war that endorse official, sanitized representations of honor and patriotism. However, dissident voices among the Vietnamese began to appear at the end of the 20th century. Two notable novels written by veterans of the North Vietnamese army critique the war and communism: Duong Thu Huong's *Novel Without a Name* (1991) and Bao Ninh's *The Sorrow of War* (1991). The novels, like their American counterparts, portray soldiers' evolution from idealism to disillusionment.

Poetry of the war began with the antiwar movement and poems by Robert Bly, Denise Levertov, and Allen Ginsberg, many of which can be found in Robert Bly and David Ray's collection, *A Poetry Reading Against the Vietnam War* (1966). With several collections each, the most prolific Vietnam veteran poets include John Balaban, W. D. Ehrhart, Yusef Komunyakaa, Walter McDonald, and Bruce Weigl. Poems by these authors, and many others, appear in the following anthologies: Larry Rottman, Jan Barry, and Basil T. Paquet's *Winning Hearts and Minds* (1972), Jan Barry and W. D. Ehrhart's *Demilitarized Zones* (1976), W. D. Ehrhart's

Carrying the Darkness (1985 and 1989), and Ehrhart's *Unaccustomed Mercy* (1989).

Persian Gulf War

The short-lived Persian Gulf War produced some literature, among which Anthony Swofford's *Jarhead: A Marine's Chronicle of the Persian Gulf War and Other Battles* (2003) is the most famous, likely because—like many World War II and Vietnam War novels—it was the basis of a Hollywood film. Joel Turnipseed's *Baghdad Express* (2003) is another notable memoir of the war. Fiction accounts of the war include James Chapman's *Glass: Pray the Electrons Back to Sand* (1994); Charles Sheehan-Miles's *Prayer at Rumayla: A Novel of the Gulf War* (2001), which encompasses the homecoming experience; Gabe Hudson's collection of stories *Dear Mr. President* (2002); James Blinn's *The Aardvark Is Ready for War* (2003); Tom Paine's *Pearl of Kuwait* (2003), wherein one of the two main characters is a Vietnamese American soldier; Andrew Huebner's *We Pierce* (2004); Kim Ponders's *Uncontrolled Flight* (2005) about a female combat pilot; and Neil MacFarquhar's *The Sand Café* (2006), a black comedy about embedded journalists. Interestingly, the vestiges of the Vietnam War appear in most of these Gulf War texts whose authors or characters have parents from the Vietnam generation. Poetry about the war is scarcer than fictional accounts; however, there are a few collections such as Tamar Segal's *War in the Gulf: A Diary in Poetry* (1991), Jay Meek and F. D. Reeve's *After the Storm: Poems on the Persian Gulf War* (1992), and William J. Simmons's *The Gulf War Anthology of Poetry* (1996).

Iraq and Afghanistan Wars

In the 21st century, memoirs about the wars in Afghanistan and Iraq frequently began as soldiers' blogs, for example, Colby Buzzell's *My War: Killing Time in Iraq* (2005) and Matt Gallagher's *Kaboom: Embracing the Suck in a Savage Little War* (2010). Memoir is the most common early form of Afghanistan and Iraq War literature. Often focusing on realist reportage rather than innovative literary interpretation of the war, these memoirs address political complications, successes and failures of technology, and counterinsurgency policies. The Arabic linguist and Iraq War veteran Kayla Williams's *Love My Rifle More Than You* (2005) focuses on the

sexual harassment women endure in the military and her Iraq War veteran husband's dreadful experiences with veteran's hospitals. Nathaniel C. Fick's *One Bullet Away* (2005) about military training, Afghanistan, and the 2003 invasion of Iraq provides a more positive, if suppressed, portrayal of soldiers in war as kind and generous. Donovan Campbell's *Joker One: A Marine Platoon's Story of Courage, Leadership, and Brotherhood* (2009) depicts combat in Ramadi, Iraq, and the insufficiencies of training and equipment. Craig M. Mullaney's *The Unforgiving Minute: A Soldier's Education* (2009) incorporates military academy education, combat in Afghanistan, and inner reflection.

However, National Guard veteran John Crawford's *The Last True Story I'll Ever Tell: An Accidental Soldier's Account of the War in Iraq* (2005), a compilation of stories that avoids chronological order, imaginatively blurs the line between memoir and fiction. Another National Guard veteran, Tom Young, created a fictional novel, *The Mullah's Storm* (2010), that proffers an imaginative survival story about a transport plane being shot down in Afghanistan's rugged, enemy terrain. Young's female character, an army interpreter, is of particular note. Poetry about the wars in Afghanistan and Iraq, including antiwar poetry, continues to permeate the Internet; however, traditional publications remain rare. Two collections written by war veterans address the war in Iraq: Brian Turner's *Here Bullet* (2005) and Gregory Robert Samuels's *War Poems From Iraq* (2006).

While common themes, especially the transformation of soldiers from innocence to experience, appear across the literature of war, many literary critics contend that sentiments of heroism, sacrifice, purpose, valor, and heroism have declined in war literature throughout the 20th and 21st centuries. Although this is generally true, these portrayals reappear throughout the decades.

War Literature in Military Training and Professional Development

War literature also plays a noteworthy role in the training and ongoing professional development of military personnel. Divided by rank, from privates to generals, the U.S. Army and Center for Military History provides a military professional development reading list as does the Marines Reading Program.

The Combined Arms Research library at the U.S. Army Combined Arms Center contains several types of reading lists under such categories as "Military Deployment." The U.S. Army War College library creates an annual reading list of distinguished recent publications. These lists not only tend to emphasize military history and military and strategic theory but also include memoirs and some fiction. For example, nearly every list included Michael Shaara's fictional novel, *The Killer Angels* (1974), about the battle at Gettysburg; James Webb's Vietnam War memoir, *Fields of Fire* (1979); and another memoir of that war, Harold G. Moore and Joseph L. Galloway's *We Were Soldiers Once . . . and Young* (1992). Recommended and required reading lists aim to create common ground among military personnel, to encourage intellectual reflection, to promote an appreciation for military heritage, to emphasize lessons learned, to facilitate professional development, and to help those who will and have engaged in war understand the human element of war.

English departments at military academies, institutes, and colleges, such as West Point, the Citadel, and Virginia Military Institute, offer war literature courses. These courses explore a range of themes—fear, courage, heroism, comradeship—often include historical and cultural contexts, emphasize aesthetic representation, unavoidably encounter moral and ethical issues, and typically examine film in addition to classic and contemporary literature. Elizabeth Samet's *Soldier's Heart: Reading Literature Through Peace and War at West Point* (2007) provides a civilian's perspective on the relationship between war, literature, and the military professional's training, career, and life.

Veterans and War Literature

Bearing witness to trauma is a traditional healing method, and writing continues to evolve through formal and informal treatment methods for combat-related posttraumatic stress disorder. Among military veterans, reading and writing war literature serves as a means of helping them articulate their experiences and, thereby, make sense of war's contradictions and traumas. Veterans' writing programs began as a mode of coping with trauma and as a means of healing emotional wounds through artistic expression. Writing programs aim to create social cohesion both among veterans and between veterans

and the broader society. Thus, veterans' writing programs often form a basis in outreach and reintegration efforts. Most veterans writing programs share the aim of helping veterans process their war experiences through artistic expression.

For example, during World War I, some doctors at Craiglockhart War Hospital near Edinburgh prescribed patients to engage in artistic expression, particularly metric poetry, in an effort to reorient the patients to temporality and to aid them in ordering the chaos of trauma. This therapy resulted in *The Hydra*, a literary and artistic journal that collected the artistic expressions of recovering soldiers. In addition, the 1970s and 1980s saw Vietnam veteran "rap groups" attended by volunteer therapists often resulting in veterans writing groups.

One of the most enduring writing programs, the Hospitalized Veterans Writing Project, is a therapeutic writing program founded as an outreach program for World War II veterans in 1946 and is now a component of the Department of Veterans Affairs medical center recreation and rehabilitation services. Three times each year, the Hospitalized Veterans Writing Project publishes a literary magazine, *Veterans Voices*.

Some veterans writing groups ascribe to shared philosophies, such as pacifism. In 1988, Kali Tal founded the Viet Nam Generation, an educational organization that published the *Viet Nam Generation Journal*. Tal served as editor and writing coach for Vietnam veteran writers and founded Burning Cities Press in 1990 to publish the work of combat veterans who became involved in the peace movement. A unique group formed in 1993 when the novelist Maxine Hong Kingston began leading writing and meditation workshops for veterans and their families; the quarterly meetings resulted in a community of writers informally named Veterans Writers Group and in an anthology edited by Kingston, *Veterans of War, Veterans of Peace* (2007).

In 2004, the National Endowment for the Arts created one of the most expansive national writing projects, Operation Homecoming, in response to the wars in Iraq and Afghanistan. The project consists of writing workshops for military personnel and their families held at U.S. military installations in the United States and abroad as well as at Department of Veterans Affairs' medical centers and hospitals. The project resulted in an anthology, *Operation Homecoming: Iraq, Afghanistan, and the*

Home Front in the Words of U.S. Troops and Their Families (2006) and in an expanded edition in 2008. Archives are available in the U.S. National Archives and Records Administration and the Library of Congress Veterans History Project.

Another veterans writing project created in response to the Global War on Terrorism, the Warrior Writers Project, aims to build creative communities for veterans and promotes the transformative potential of creative expression. The Warrior Writers Project workshops resulted in two books, *Move, Shoot and Communicate* (2007) and *Re-Making Sense* (2008).

The William Joiner Center for the Study of War and Social Consequences at the University of Massachusetts in Boston began holding annual writers workshops in 1988 that required an application and tuition fee. Military veterans make up the faculty leading the 2-week workshops that consist of classes, discussions, panels, readings, and exhibits. Other colleges and universities engage in short- and long-term programs; some require tuition and others are free. For example, the New York University Writing Program offers free, nonpartisan, writing workshops for Iraq War veterans. The Writers Guild of America also hosts writing workshops at state universities. As veterans groups grow on campuses, an increase in writers groups will likely follow.

Susan L. Eastman

See also Iraq War (2003); Korean War (1950–1953); Persian Gulf War; Posttraumatic Stress Disorder; Vietnam War; War in Afghanistan; World War I; World War II

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LOCKHEED MARTIN

Lockheed Martin, a major U.S. aerospace and defense technology corporation, is the product of a merger between Lockheed Corporation and Martin Marietta in 1994 and is one of the largest defense contractors in the world. Lockheed Martin is headquartered in Bethesda, Maryland, and its current chief executive officer is Robert J. Stevens. Lockheed is the largest government contractor in the country, having reported \$46.5 billion in revenue in 2011. Most of that revenue (82%) came from contracts with the U.S. government, with 61% from the Department of Defense alone. In 2011, Lockheed Martin spent about \$15 million in lobbying expenditures at the federal level. This entry examines the history of Lockheed Martin military aircraft, missile systems, and other programs and discusses Lockheed's changing role in the global market.

History

Both the Lockheed and Martin corporations were founded in 1912, and both were historically responsible for a number of notable defense and aerospace projects throughout the past century, including planes such as the B-26 bomber, the Space Race-era Titan rocket program, the SR-71 Blackbird, the Manned Maneuvering Unit, and the ill-fated Mars Climate Rover (which failed on landing in 1998 due to Lockheed's use of American measurement units instead of the metric units specified by the National Aeronautics and Space Administration). Lockheed Martin was also heavily involved in contracting for the space shuttle program throughout its existence at National Aeronautics and Space Administration.

The Contemporary Era

Currently, the major profit-generating products from Lockheed are defense systems, electronic systems, cyber security, and weaponry, while the company's

Space Systems division has suffered from a drastic loss of product sales. Lockheed's most profitable programs include the F-35, F-16, tactical missile programs such as the Hellfire, the Multiple Launch Rocket System (MLRS), the Joint Air-to-Surface Standoff Missile, and electronics and cyber security systems. An increasingly large portion of Lockheed's service sales now come from the Electronic Systems division.

One of Lockheed's major recent programs is the F-35 Lightning II, one of the world's most highly advanced fighter planes. The F-35 was conceived in the mid-1990s and was part of a multinational project that included the United States, Great Britain, Australia, and a number of other North Atlantic Treaty Organization countries and U.S. allies. The F-35 now also has two international customers, the Japanese and Israeli air forces, and the United States government alone has ordered more than 2,000 F-35s, with deliveries beginning in mid-2012. The project was planned to replace the less effective and less versatile F-22 fighter but has not been without its share of controversy, with the current price of the aircraft double the initial planned price in 2001 and a number of recent technical glitches requiring more federal money to solve. The F-35 was a significant factor in Lockheed's net aeronautics sales of \$14.4 billion in 2011.

Recently, Lockheed Martin successfully launched a Next Generation Identification System for the Federal Bureau of Investigation, the Space Based Infrared System (which provides a defense system in case of missile attack), GPS technology for the Federal Aviation Administration, the Juno spacecraft sent to Jupiter, the GRAIL spacecraft sent to the moon, and the Persistent Threat Detection System and K-MAX unmanned cargo aircraft system, both currently in use in coalition operations in Afghanistan.

Lockheed Martin is presently pursuing a number of ongoing projects, including the Squad Mission Support System, the largest unmanned vehicle ever deployed with the U.S. ground forces, which will aid supply lines and the evacuation of casualties. In early 2012, Sandia Laboratories, a subsidiary of Lockheed Martin, announced the development of a self-guided bullet, and Lockheed announced the creation of HULC (human universal load carrier), an anthropomorphic exoskeleton that will enable soldiers to carry heavy combat loads with no adverse effect on mobility. The company's Orion project is

currently designing the nation's first interplanetary manned vehicle, with the stated goal of Orion eventually being capable of taking humans to Mars.

Perhaps the biggest issue facing Lockheed Martin at present is possible sequestration due to federal budgetary concerns. With about \$487 billion cuts to U.S. defense spending set to take place over the next decade, the company has had to make cuts in certain divisions, such as Space Systems, but may still face major layoffs when the spending cuts take place. The chief executive officer of Lockheed Martin, Robert J. Stevens, said in June 2012 that the defense cuts and subsequent cuts in government contracts for the company would likely force Lockheed to undergo severe cuts to its 123,000-person workforce.

According to the company's 2011 annual report, while programs such as the Global Positioning Satellite program, the Phased Adaptive Approach Missile Defense System, and the U-2 manned aircraft program will all continue to operate, the company will need to expand its products and services in order to maintain or grow its share of the market. With this reduction in U.S. government funds in mind, Lockheed is dedicated to pursuing a more global market for its products in the near future. In 2011, the company billed \$916 million in receivables to foreign entities.

Lockheed Martin continues to develop cutting-edge technology and weaponry for the U.S. government in a number of fields, and not just those related to defense. With the ending of U.S. military operations in Iraq in 2011, the ending of the space shuttle program that same year, and full economic recovery still on the far horizon, Lockheed is currently engaged in a reshaping of parts of its business plan to reflect the changing nature of its relationship with the U.S. government and other world governments. Lockheed's changing role in developing weapons and systems, not just for the United States but for foreign governments as well, will create an interesting set of issues for the U.S. government as military contractors face the threat of budgetary cuts. Lockheed's relationship with not just the Department of Defense but with the U.S. government as a whole will doubtlessly be affected by the coming months and years of budgetary debate and Lockheed's willingness to work with foreign governments to secure other contracts.

Hillary Jean Sebeny

See also Boeing; General Dynamics; Halliburton; Radar; Raytheon; Research and Development; Stealth Technology; Targeting Systems; Technology; United Technologies Corporation

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LOGISTICS

Human nature and history are filled with many concepts of duality. Within the construct of war, there is perhaps no better reflection of this duality than the relationship between logistics and operations. The *Doctrine for Logistics Support of Joint Operations* (DOD Joint Publication 4.0) states that "Operations and logistics are inseparable facets of war. Although logistics plans are derived from operational goals, neither can claim primacy" (Department of Defense, 1992, p. 11).

For military purposes, a workable aggregate definition of logistics based on current doctrine could be specified as

the science and art of planning and conducting the movement, support, and servicing of forces to include those aspects of military operations that deal with the design and development, acquisition or construction, storage, movement, distribution, evacuation, maintenance, hospitalization and disposition of material, personnel, and facilities for the purposes of generating combat power (the total

means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time) and extending operational reach (the distance and duration across which a unit can successfully employ military capabilities) across time and distance to achieve military objectives.

It is the significance of generating combat power and extending operational reach that connects logistics with operations and forms the basis for an evolution of logistical models and strategies from ancient warfare to contemporary conflicts. Throughout this evolution, principles of military logistics have been codified covering the strategic, operational, and tactical levels of war. Future logistical problems will be met with 21st-century solutions to ever increase the readiness and reach of operational forces.

With the emergence of organized societies, the concept of war and the associated need for military logistics emerged. The rise of standing armies to defend empires and add to them through conquest required housing, equipping, and supplying military forces on a continual basis. For the sake of simplicity, the history of military logistics is divided into three periods—ancient, modern, and postmodern—and two systems: garrison (or fixed facilities) and field.

Logistics in Ancient Times

From the time of the Sumerians of Mesopotamia (ca. 3500 BCE) through 16th-century Europe, the tried-and-true logistical methods of supplying an army were requisitioning (contracting), foraging, and pillaging. Early empires and city-states maintained a small number of standing, professional soldiers backed by a semitrained portion of the population ranging from 1% to 10%. By contracting with commercial enterprises, the state ensured that the standing force was maintained and that the armaments were stored, so that the size of the army could be expanded when necessary. Requisitioning was also used when a mobile army passed through the territory of an ally or a recently conquered foe. Payment on receipt or a promise to pay later placated most hostile feelings. On marches outside friendly lands, an army on the move foraged from wild resources or pillaged those of its enemy.

The success or failure of these campaigns depended on the skill of the leaders in organizing the procurement of supplies by coin or sword. The size

of armies in garrison was dictated more by internal societal structure than by logistical requirements; there are accounts of some empires maintaining armies with a total strength of 250,000 or more. However, the size of ancient armies was relatively small when in the field, since living off the land (or your enemy) meant a limited area to pillage and required movement once the resources of an area were consumed. History records few field armies during this period exceeding 50,000 men.

Though the majority of an army's supplies were requisitioned or pillaged, there were accompanying wagons and baggage trains that carried some food and other items. Many early baggage trains supported the army's noble members and consisted of servants and the finer items necessary for a comfortable stay in the field. Technological advances such as chariots, siege engines, and various mechanical means of launching missiles (arrows, stones, etc.) required attending craftsmen to build or maintain these weapons. Wagons holding tools and supplies made up another fraction of the overall baggage train.

Horses represented one of the most important logistical elements. Whereas a man might require a combined weight of 10 pounds of food and water per day, a horse required 10 times as much fodder given its role as a beast of burden. It is easy to see why ancient armies had to keep moving and why their operational reach was limited by the quantity of supplies that could be acquired in the countryside through which they passed.

There were some notable exceptions to this process, mainly developed by imaginative and ingenious leaders. Alexander the Great is perhaps the best example. His first innovation was to reduce the size of his accompanying baggage train by shifting some of the burden to the backs of his men; the average Macedonian soldier carried 60 pounds. Alexander also made excellent use of naval transport to move supplies from captured territory forward into newly conquered lands. While this provided only a fraction of the overall supplies his army required, it did give him an advantage his enemies usually did not possess.

Modern Logistics

The transition to modern logistics began in the early 17th century. What sets the modern era apart from its ancient predecessor is the trend toward increasingly large field armies and the corresponding

complexity of the logistics systems required to support them. Societal reasons for this phenomenon aside, during the late 1500s field armies numbered between 15,000 and 40,000 troops, whereas less than 50 years later, Swedish king Gustavus Adolphus would take to the field in present-day Germany with an army in excess of 100,000 men. Three hundred years later, army groups with strengths greater than 500,000 men clashed on the European plains. This era also saw the transition to gunpowder-based projectile weapons and the increasing industrialization and mechanization of war. Military logistics followed suit to support the new requirements brought on by the increased size and dispersion of armies and their technological advances.

At first, the early modern era of military logistics reflected less a defining change in logistical processes than a change in scope. The larger armies of the era lurched between major urban resource areas, and sieges became the defining warfare tactic of the times. Armies ate their way through the countryside to reach an urban target and then settled in to wait out their opponent. A siege was actually a race against time until either the logistical capacity of the countryside gave out and the foreign army went away, a rescuing force arrived, or the besieged ran out of supplies and surrendered.

The magazine or military supply depot system represents an early method of advance provisioning some of the supplies an army would require while passing through its own borders and making a short incursion into enemy territory. The system had many variations throughout history but was refined by the French father-son duo of LeTellier and Louvois. LeTellier recognized the need to have accurate measurements of an army's requirements while Louvois created the first permanent magazines in Europe. While these were important steps in the evolution of logistics, unfortunately magazines are like lighter fluid—great to jump-start a fire but not providing sustained heat. The support of a magazine extended to only 100 miles. An army on the march still required thousands of pounds of fodder, food, and water daily—the preindustrial precursors to the petroleum fuel and packaged military rations of today.

Though known for his tactical brilliance, Napoleon Bonaparte was a meticulous strategic and operational planner who used the entire state bureaucracy to his advantage in organizing logistics

to support his campaigns. Though execution sometimes faltered, his logistical planning employed all the available assets of his time: supply trains, magazines, contracting, and foraging. It is perhaps in contracting where his agents and apparatus excelled. The ability to field large popular armies corresponded with the rise of a mercantile and banking class of citizenry to supplement increased government bureaucracy. The combination of state planning and contracting out procurement and delivery was at that time a cheaper alternative than developing a state logistical system. Despite all of these advances in logistics, however, the best way to feed an army in the field was still the ancient tried-and-true method of foraging.

Principles, Functions, and Classes of Supply

Throughout history, as the scale and scope of state-sponsored war increased so did the study of war by practitioners, politicians, and early academicians—many reprising all of those roles. The need to quantify and categorize is a habit of the state bureaucracy that seeks to control that which is sometimes uncontrollable. Though mentioned here in modern terms, the principles of military logistics, its functions, and the classes of supply have their equivalents in the Egyptian and Chinese Dynasties through the Roman and Byzantine Empires.

A concise definition of logistics principles is best represented by the logistics doctrine in the U.S. Army Doctrinal Publication (ADP) 4.0, *Sustainment*:

Responsiveness is the ability to react to changing requirements and respond to meet the needs to maintain support. Anticipation is the ability to foresee operational requirements and initiate actions that satisfy a response without waiting for a formal order. Improvisation is the ability to adapt logistics operations to unexpected situations or circumstances affecting a mission. Continuity is the uninterrupted provision of logistics across all levels of war. Simplicity relates to process and procedures to minimize the complexity of logistics. Economy represents the provision of logistics resources in an efficient manner to enable a commander to employ all assets to achieve the greatest possible effect. Survivability means protecting logistics supplies, personnel, and equipment while still ensuring mission support. Integration is combining all the elements of sustainment (tasks, functions, systems, processes,

and organizations) to operations thus assuring unity of command and effort.

In addition to the characterization of logistics principles, there have been many attempts to categorize the various functional areas of logistics. The current joint list of functions adhered to by the U.S. Department of Defense include supply, maintenance, transportation, field services, general engineering, explosive ordnance disposal, and health service support. Additionally, the category of personnel functions provides for human resources, legal, and religious support, along with financial management. These functional divisions are helpful when making procurement decisions, arranging for storage or warehousing, and maintaining financial accountability.

The final categorization of military logistics involves the creation of various classes of supply to facilitate improved management and accountability. With some exceptions, most modern armies define the classes of supply as follows: Class I represents rations and water; Class II equates to durable or consumable goods, such as tools and uniforms; Class III comprises petroleum products—whether grease, oil, or fuel; Class IV consists of both construction materials and barrier materials used to build defensive positions; Class V is all types of ammunition from bullets to shells to missiles and mines; Class VI refers to personal-use items like toiletries and alcohol; Class VII represents major end items, such as tanks, aircraft, and ships; Class VIII includes medical and first aid supplies and equipment to include blood; Class IX equals repair parts for all pieces of equipment; and Class X supplies are humanitarian in nature from farm supplies to seeds.

The Mechanization of Modern War and the Rise of Echeloned Logistics

The rise of modern, industrialized warfare signaled a fundamental shift in logistics. Although defining the moment this transition occurred is extremely difficult, the U.S. Army historian James Huston offers perhaps the best articulation of the industrialized dividing line, at least for logisticians. Huston posited that an army quartermaster officer from the 1820s could experience a Rip Van Winkle nap, wake up in 1914 at the onset of World War I, and find himself still able to function in the performance of his job. But waking a mere 4 years later, in 1918, that logistician might

as well have awakened in the science fiction world of Buck Rogers.

Ironically, the inventions and industrialization that created modern militaries also created additional logistics burdens. Trading horses and the fodder of the field for mechanized vehicles and petroleum may have increased the speed and operational reach of forces, but at the cost of increasing complexity and a larger tooth-to-tail ratio. Surprisingly, Class V ammunition requirements were almost inconsequential from a logistical standpoint until World War I, when they grew to represent the second greatest tonnage of supply required in war.

Logistics became echeloned at the strategic, operational, and tactical levels. Strategic logistics represents the connection of a nation's industrial and economic base to military operations and includes the production, acquisition, and stockpiling of equipment and raw materials for war. When combined with mobilization, strategic mobility, and distribution, strategic logistics reflects the sum of national capabilities. The distance across which the nation can project decisive military power is its strategic reach. Strategic reach provides the capability to operate against complex, adaptive threats. This multifaceted reach combines joint military capabilities—air, land, maritime, space, special operations, and cyber—with those of other instruments of national power.

Operational logistics represents the management functions of planning, preparation, processes, and system. The focus at the operational level of war is on campaigns and major operations. Tasks that support operational logistics include logistical preparation of the theater through intelligence analysis and establishing and organizing the theater logistics system to prepare for the reception, staging, and movement of tactical forces. The management of materials, supplies, and the theater distribution system preserves and extends the reach of the combat forces.

Tactical logistics supports battles and engagements through the functions of manning, arming, fueling, moving, fixing, and sustaining the soldier. The majority of tactical support organizations come from the army, although sister services (mainly the Marines), the host nation, multinational entities, or contractors can represent other sources.

Army and marine logistics organizations operate similarly during most ground operations. Both organizations consist of functional companies and battalions that can be realigned into direct support

or general (area) support units. Some units are multifunctional, including tactical equipment for smaller deliveries and a cross section of all equipment, while other units are specialized for one commodity with specialty equipment to supply fuel, ammunition, or water. Notable differences include a combined force structure of marines and navy personnel within marine logistical units, and the marines' specialized amphibious mission requiring over-the-shore logistics.

Both army and marine ground-based logistics missions include tractor-trailer units and fuel trucks equivalent to those driven on U.S. highways every day. Heavy expanded mobility tactical trucks, or HEMTTs, come in many variations (fuelers, wreckers, and cargo haulers) and are used for movements across terrain. The palletized load system consists of a truck and trailer combination with flat racks that can be downloaded and left at the battlefield. Heavy equipment transports carry loads up to and including 70-ton main battle tanks. Additional vehicles include 5- and 7-ton trucks (made rugged enough for off-road use); forklifts in many configurations to handle cargo, rough terrain, and containers (RTFL, RTCH); water trailers; and recovery vehicles—tracked M88s to tow tanks, kitchen trailers, and ambulances in wheeled and tracked configurations.

Twentieth-century military logistics reflected the ongoing development in American logistical models through World War II, the Korean War, the Vietnam War, and Operations Desert Shield and Desert Storm. The procurement and movement of mountains of supplies around the globe—known as supply point distribution—and the construction of huge overseas support areas facilitated the positioning, employment, and protection of resources required to sustain, enable, and control combat operations. These actions occurred regardless of the service, with the air force and the navy following similar logistics maxims to those embraced by the army. While still retaining some of these characteristics, logistics operations in Iraq and Afghanistan took on a more postmodern feel.

Postmodern 21st-Century Logistics

Logistics places many limits on armies that reduce operational reach. The process of generating combat power and increasing the operational reach of the combat forces is rooted in the friction between the values of efficiency and effectiveness. In essence, it is a battle of wills defined by resources and risk.

Moving men, material, and supplies in a strategic environment is usually low risk and presents greater opportunities to seek efficiency through conserving resources or maximizing their application. The fighter pilot, the naval gunnery chief, and the soldier in the foxhole care little about efficiency. They want ammunition, fuel, food, and water in abundant quantities with little fear of running out. Effectiveness is not cheap.

A modern military is an expensive beast. A heavy armor brigade combat team burns more than 75,000 gallons of fuel per day, and requires up to 50 tons of ammunition and 50 tons of other supplies per day. The 10 or more surface ships making up a carrier battle group require underway refueling and resupply every 3 days in a complex ballet of surface combat logistics with ships making leapfrog trips to ports and back and helicopters conducting vertical replenishment operations flying from deck to deck. Power for all these modern machines comes not only from petroleum-based products but also from batteries—an endless slew of batteries of all shapes, sizes, and weights. A modern air assault infantry brigade uses more than \$1.5 million worth of batteries in a 5-day period—roughly one AA battery per infantry soldier per hour.

Added to the cost of procuring all of these supplies is the cost of carrying or moving them to a user's destination. When movement to places such as the Balkans, Somalia, Iraq, and Afghanistan is needed, effectiveness as well as efficiency can be overwhelmed. The \$4.00 gallon of gas in the United States becomes \$40 when moved to Somalia and \$400 when moved to Kandahar province, Afghanistan. Additionally, the time required to build up supplies prior to an operation telegraphs intent and reduces the element of surprise. Geography, particularly long lines of communication or urban concentrations, will continue to be a limiting factor.

Twenty-first-century logistics seeks to overcome these limits through collaboration between new concepts of doing business (conducting operations) and new technology. Identification and visibility of materiel and assets, whether stationary or in motion, through the use of automated identification technologies (bar codes, radio frequency identification devices, satellites) has allowed the U.S. military to reduce its iron mountain supply point and transition to a distribution-based model where inventory is constantly in motion and always visible in a seamless supply chain. The inventory in the pipeline concept reduces

the logistics footprint on the ground, which can be a good thing in austere or immature theaters where the available level of physical infrastructure, skilled personnel, and resources in a theater are limited.

The ideas of pre-positioned stocks and sea basing represent the contemporary evolution of the magazine concept. All U.S. military services maintain pre-positioned stocks of various materials, unit sets, and supplies both on ships and in ground storages. They are maintained, serviced, and rotated by small crews waiting to marry up with forces arriving by air to quickly become combat-capable units. The U.S. Navy and Marines have taken this concept one step further and propose forward-deployed floating bases (or large ships) that are resupplied at sea and then are able to project support to forces ashore or afloat. Contracting has expanded to become operational contracting support where large corporations vie for a long-term logistics capability contracts providing services and supplies to the military. Military units themselves whipsaw between lean constructs of nearly all fighting forces and robust formations of combat and sustainment forces that can be self-sustaining for long periods.

Getting the right stuff to the right place at the right time sometimes depends on technology as well as concepts. Both lighter-than-air blimps and heavier-than-air airframes are under development with both intelligence-gathering and logistics distribution functions. GPS-guided low-altitude parachutes can precisely deliver bundles of supplies to combat outposts situated on mountainsides. Unmanned aerial systems have also delivered loads to remote sites. The joint high speed vessel being built for both the navy and the army is a fast, shallow-draft ship capable of carrying combat units or supplies to a theater. Future development seeks to further unshackle militaries from the twin yokes of fuel and ammunition. Hybrid engines, biofuels, hydrogen cells, long-life batteries, caseless ammunition, lasers, and electromagnetic rail guns are all being developed with the goal of reducing the logistics tail through decreases in weight or through increases in range and accuracy, thus requiring the use of less fuel or ammunition.

Conclusion

Logistics will always be locked in multiple roles: defined and practiced as both the art of logistical decision making and the science of calculations, struggling for a balance between efficiency and

effectiveness, and forever in collaboration and competition with combat operations. Logistics may not solely lose a war and logistics may not solely win a war, but it may certainly dictate the direction and duration. Finally, even in an increasingly specialized and complex environment, the purpose of logistics should always be focused on generating combat power and extending the reach of military forces at the strategic, operational, and tactical levels.

Allan S. Boyce

See also Ammunition; Combat Power; Combined Arms; Contractors, Private; Economy and National Defense; Food; Halliburton; Modular Army; Transportation, Air; Uniforms; U.S. Transportation Command

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LUTTWAK, EDWARD N.

Edward Nicolae Luttwak (1942–) is an American military historian, national security consultant, and public intellectual, whose books and articles have been seminal in some instances and provocative in others. Born in Romania, he was educated at the London School of Economics and received a

PhD in international relations from Johns Hopkins University. He is currently a senior associate (nonresident) at the Center for Strategic and International Studies in Washington, D.C. He had a brief academic career as a lecturer at the University of Bath (the United Kingdom) and at Georgetown University after relocating to the United States. Postacademia, he has enjoyed a long career as a prolific author, consultant, and occasionally controversial pundit, often going far afield from his acknowledged expertise in military affairs. He has consulted with various agencies of the U.S. government and several foreign governments. In interviews and in various public fora, he has also alluded to his participation in covert security operations for governmental clients to include the U.S. Drug Enforcement Agency, claiming involvement in “field operations, extraditions, arrests and interrogations.” This entry discusses the writings of Edward Luttwak and their impact within the historical and public policy communities.

From Coup d’Etat to Grand Strategy

His career as a scholar and writer began in graduate school with the publication in 1968 of *Coup d’Etat: A Practical Handbook*, an entertaining but nonetheless serious book that dissected aspects of Third World instability. In 1976, he established a solid reputation as a military historian with *The Grand Strategy of the Roman Empire: From the First Century A.D. to the Third*. This book attracted broad scholarly and popular acclaim as well as some criticism, the latter dwelling on his lack of standing as a historian of the ancient world. He periodically returned to the “grand strategy” theme with *The Grand Strategy of the Soviet Union* (1984) and his latest major work, *The Grand Strategy of the Byzantine Empire* (2009). The well-known British military author Sir Basil Liddell Hart apparently coined the term *grand strategy* in the early 1950s in his landmark book *Strategy*, according to some authorities, but gave it no more than cursory mention. With three books bearing the title, Edward Luttwak can justly claim to be the primary modern expositor of this concept, which incorporates the totality of a state’s theory and practice of national security. Other scholars have taken up this theme in recent decades, including Paul Kennedy, Williamson Murray, and Colin S. Gray, but Luttwak’s priority in the field must be acknowledged. He addressed

it from a comprehensive theoretical perspective in his influential book *Strategy: The Logic of War and Peace* (1987, revised 2002), in which he identified five levels of strategy: grand, theater, operational, tactical, and technical. The interplay among these, he argues, is often complex and not infrequently a focus on one factor works to cancel out one or more of the others.

Air Power and Maneuver Warfare

A recurring theme in Luttwak’s writings is the importance of maneuver warfare at the operational level, conducted so ably by cavalry armies in the distant past and in recent times by those acknowledged masters of mechanized warfare, the Germans. He has yet to publish at full length on this topic, but in characteristic fashion, he has staked out his position in a couple of controversial articles: “The True Military Revolution at Last” in his recent collection of essays, *The Virtual American Empire: War, Faith, and Power* (2009), and “In Praise of Aerial Bombing” (2010). The core of his argument is that modern technology enables real-time intelligence and target acquisition coupled with unprecedented weapons delivery precision from aerial platforms—the realization of the “reconnaissance-strike complex,” a decades-old Soviet concept long admired by Western military theoreticians. This development further enables ground maneuver forces to sever their dependence on field artillery, which has historically constituted the largest fraction of their logistic burden. Freed from a cumbersome supply train, ground forces now have a much greater scope of maneuver.

Other Writings

In 1976, Luttwak collaborated with the Israeli scholar Daniel Horowitz on *The Israeli Army: 1948 to 1973*, an insightful institutional study that surveyed the organizational, doctrinal, and operational history of one of the world’s most successful military establishments. In 1985, he published *The Pentagon and the Art of War: The Question of Military Reform*, an early endorsement of the Carter-Reagan era military buildup that by the middle of the 1980s had given the United States and the North Atlantic Treaty Organization a significant qualitative edge over the Soviet and Warsaw Pact nations. In typical counterintuitive fashion, he argued that

some problems could in fact be solved by throwing money at them, despite the accompanying “waste, fraud, and mismanagement.” He has also written in a somewhat pessimistic tone about socioeconomic issues in books such as *The Endangered American Dream: How to Stop the United States From Being a Third World Country and How to Win the Geo-Economic Struggle for Industrial Supremacy* (1993), and *Turbo-Capitalism: Winners and Losers in the Global Economy* (1999).

Realism and the Use of Force

A firm disciple of the “realist” school of international relations, Luttwak writes with biting, often remorseless, cynicism about the constructive use of military force while despairing of the paralyzing sensitivity of the cosmopolitan West to issues such as collateral damage and civilian casualties. Without praising either the Romans or the Nazis, he has called attention to their successes in counterinsurgency warfare, largely (in his view) a result of their willingness to make judicious use of both selective and wanton brutality. At the other end of the spectrum, he excoriates the United States and its Latin American partners for their pointless expenditure on military force and resources in the fruitless “war on drugs.” A seminal essay titled “Pablo Escobar and the War on Drugs” is included in *The Virtual American Empire*.

Ralph Hitchens

See also Counterinsurgency; Liddell Hart, Basil

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MAHAN, ALFRED THAYER

Alfred Thayer Mahan (1840–1914) was a U.S. Navy officer and naval historian and theorist. He was born on September 27, 1840, at West Point, New York, the first of six children. His father, Dennis Hart Mahan (1802–1871), was a distinguished professor of engineering and the science of war and dean of the faculty at the United States Military Academy. Alfred Thayer Mahan entered the United States Naval Academy at Annapolis, Maryland, in 1856 and graduated second in his class in 1859. Mahan's service in the Civil War was spent on blockade duties, where he saw no serious combat. His subsequent naval career in a variety of sea and shore appointments was on the whole routine. Mahan's first article, an essay on naval education, was published in the *United States Naval Institute Proceedings* in 1879. Mahan's first book, which was published in 1882, was a short history of riverine and coastal operations in the Civil War. Mahan's intellectual abilities attracted the attention of Rear Admiral Stephen Luce (1827–1917), who selected him to teach at the newly founded United States Naval War College at Newport, Rhode Island, where he served from 1886 to 1892. His second and most famous book, *The Influence of Sea Power Upon History, 1660–1783*, appeared in 1890 and was followed by three sequel histories (1892–1905), each of two volumes, as well as 15 other books that dealt with a variety of subjects, including naval history, naval strategy, international politics, autobiography, and

even theology. Mahan retired from the navy in 1896 to devote his full attention to writing. He died on December 1, 1914, in Washington, D.C. Mahan's publications established his reputation as the greatest and most influential naval historian and theorist of all time. This entry examines the writings and views of Alfred Thayer Mahan.

In his major books, Mahan presented five forms of argument: (1) political, (2) political-economic, (3) governmental, (4) strategic, and (5) professional. Mahan's political argument was that sea power had played a decisive role in the history of international relations and would continue to do so. His political-economic argument was that national prosperity—and in turn the capacity of the state to wage war—depended to a very great degree on external trade, which required the protection of a strong navy. His governmental argument was that decision making by the state or its primary agents in peace and war could play a decisive role. His strategic argument was that history demonstrated the existence of strategic and logistical principles that possessed a certain instructional value. And his professional argument was that in war executive officers needed to be able to make decisions quickly in the face of considerable uncertainty caused by changing conditions, incomplete or even misleading information, and fear.

Mahan's arguments were divided into two groups. Political, political-economic, and governmental arguments were the means by which he addressed naval grand strategy in a manner that supported a navalist political agenda. Strategic and professional arguments were the means by which

he engaged the art and science of command in war in a way that advocated a particular form of naval officer education. In the first group, governmental argument was predicated on the proposition that decision making by individuals—whether acting alone or collectively as the government—mattered and thus counterbalanced the determinist character of its two partner arguments. In the second group, naval professional argument, which in part emphasized the importance of judgment in war, offset a tendency toward the mechanical application of principles that was inherent to strategic argument.

Mahan defined sea power as a supranational interconnected system of naval strength *and* mercantile enterprise whose existence and development depended on the actions of governments and commercial entities around the world. Mahan believed that, in general, sea power could serve the interests of multiple states and, in particular, that it could, through sound government policy that addressed both naval and commercial issues, serve those of his own country. Mahan's geopolitical perspectives thus had four major aspects. First, Mahan's main concern was the critical importance of decision making by statesmen and admirals, not the power of geographical factors alone to determine the course of history. Second, Mahan was convinced that naval supremacy in his own day and in the near future would most likely be exercised by a transnational consortium made up of Great Britain and the United States because neither power possessed the resources to maintain a large enough navy to do the job on its own, while both had large and growing seaborne commercial interests that needed strong protection in the event of war. Third, for most of his life, and including the period covering the first two installments of his "Influence of Sea Power" series, Mahan's economic ideal was global free trade, a system that was an integral part of his concept of sea power and that, he was convinced, favored peace rather than war. And fourth, Mahan did not have a single vision of the future, and while he was certain that sea power was bound by the nature of things to play an important role in international affairs, he did not hold that it would necessarily define its terms or dictate its outcomes.

Jon Tetsuro Sumida

See also Military Science; OODA (Observe, Orient, Decide, and Act); Staff Relationships

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MAO ZEDONG

Mao Zedong (1893–1976) was a revolutionary, Marxist, political theorist, poet, military strategist, long-term leader of the Chinese Communist Party (CCP), and founding father of the People's Republic of China. He ranks as one of the most influential figures helping shape 20th-century China and the world. This entry discusses Mao's military thinking and strategy.

As a military strategist, Mao's theories were formed in a series of conflicts: the First Revolutionary Civil War (the First United Front) from 1921 to 1927, the Second Revolutionary Civil War (the Land Revolution) from 1927 to 1936, the Second Sino-Japanese War from 1937 to 1945, the Third Revolutionary Civil War (the Liberation War) from 1946 to 1949, the Korean War from 1950 to 1953,

and border military conflicts in the 1960s. Military leadership was a centerpiece of Mao's life. His strategic legacy remains highly respected and continues to influence contemporary Chinese elites.

Mao's Military Strategy in the Land Revolution

While attracted to the 1917 Russian revolution, Mao held that the Russian model was inappropriate for China. Living in an overwhelmingly agricultural society, Mao saw the Chinese peasantry, rather than the urban proletariat, as the basis for revolution. "To encircle the cities by the surrounding countryside" was one of the Mao's most fundamental principles of political/military strategy.

Mao first realized the importance of armed struggle in 1927 when the CCP was nearly destroyed by Nationalist military forces. He retreated to the countryside to establish a revolutionary base area and began forming the Red Army. In a speech to the Central Committee of the CCP, Mao famously argued that military power was necessary for revolution, as "Power grows from the barrel of a gun."

A reader of Sun Tzu's *Art of War*, Mao developed poetically articulated guerrilla strategies for his young Red Army: "The enemy advances, we retreat; the enemy camps, we harass; the enemy tires, we attack; the enemy retreats, we pursue" (Mao, 1965c). This strategy was designed to enable the weaker side to fight and beat the stronger side. It turned out to be a lifelong feature of Mao's military style.

During Chiang Kai-shek's offensive military campaigns in the early 1930s, Mao applied these tactics effectively. After luring the enemy into the revolutionary base area, the Red Army made use of natural geographic advantage and mass support to eliminate the superior military force.

Mao's Military Strategy in the Second Sino-Japanese War

During the Second Sino-Japanese War from 1937 to 1945, Mao made it clear that a protracted war, consisting of three phases, was the only correct approach to defeat the Japanese. These phases were designed to progress from Japan's strategic offensive and China's strategic defensive to strategic stalemate and finally to China's counteroffensive. Mao argued that as China was still weak, it needed time to gradually become strong. Mao sent his army in groups into the Japanese occupied areas for mobile

and guerrilla warfare and successfully expanded his army as well as "Liberated Areas."

The 10 Principles of Military Strategy During the Third Revolutionary Civil War

In the Third Revolutionary Civil War between Jiang's nationalist and Mao's communist armies, Mao created 10 principles of military strategy. His core ideas were focused on eliminating the enemy's human force rather than occupying territory. Mao also concentrated on creating an absolutely superior force to eliminate the enemy in every battle. In those efforts, Mao combined mobile and positional warfare to achieve victory. After three military campaigns—Liaoning-Shenyang, Huai-hai, and Beijing-Tianjin—the Nationalist army, though better equipped and backed by the United States, lost the war.

Mao's Strategic Decision to Participate in the Korean War

Initially, there seemed no reason for Mao to enter the Korean War, as a huge power gap existed between the Chinese and the U.S. militaries. Each American corps had 1,428 artillery pieces, while its Chinese counterpart had only 198. China also lacked an air force and navy in 1950, so Mao's military supply system had no protection. That was partly why General Douglas MacArthur convinced President Truman that his army would slaughter Mao's troops if the latter dared to enter the war.

But Mao looked at the Korean War from a political perspective. He needed to secure his newly established regime by persuading people at home that he could stay in power for a long time and not be intimidated by the United States. Mao's strategy was undoubtedly influenced by two powerful historical lessons: the Manchu attack in 1644 and Japan's attack in 1931. Both started around the Korea area and spread into the whole of China.

Mao's overall strategy against the United States was gradually formed from 1944 to 1946 when America was pro-Nationalist. Mao was convinced that Washington would interfere with China's affairs sooner or later in the interests of its global strategy. The UN troop's crossing the 38th parallel confirmed Mao's worry that Washington would invade China through Korea and wipe out Mao's communist revolution. If China did nothing, it would face the following four grave challenges:

1. China's buffer area would be gone. The People's Republic of China had no worry about the safety of the northeast as long as the North Korean Communist regime was there. But if it faced a hostile regime at the Sino-Korean border, China would have to dispatch massive forces to guard the country.

2. The Northeast might become an area of Washington-Moscow confrontation. On October 6, 1950, Stalin urged Kim Il Sung to set up a government in exile in the Northeast of China and organize a guerrilla war there. From Mao's perspective, this would offer an excuse for the United States to invade China to fight Kim's remaining forces. Stalin could also take advantage of this opportunity to dispatch his troops to this region in the name of protecting China. China's territorial sovereignty would likely be sacrificed.

3. Northeast China, with its rich natural resources, advanced industry, and skilled laborers would be threatened. There would be no way for CCP leaders and the people in this region to concentrate on industrial production, and China would lose her most powerful engine of economic rehabilitation and industrial development.

4. From the perspective of domestic politics, Nationalist remnants in mainland China might be bold enough to challenge the new regime if they had hope of overthrowing this new authority. The stability of Mao's regime would be questioned by those Chinese who were otherwise prepared to cooperate, particularly the bourgeoisie and intellectuals who resented socialism and remained pro-America. As Mao feared,

If we send none of our troops and allow the enemy to reach the banks of the Yalu River, the international and domestic reactionary cry will surely become louder. Such a situation will be very unfavorable to us and will be even worse for the Northeast. (Mao, 1987, p. 556)

Bearing in mind these considerations, Mao decided to enter the war against the United States in Korea. Mao's strategy was to first get political support from the Chinese people. He initiated the slogan: "Resist the United States and aid Korea. Guard our families and defend our nation." This slogan effectively linked this war with the Chinese people's own interests and the national security.

Facing the most powerful country in the world, Mao believed that the most effective way to fight was to take advantage of MacArthur's arrogance and underestimation of Mao's army. Mao's now familiar strategy was to create a misperception that China had no intention of entering the war, initiate a surprise attack, fight at night, concentrate on mobile warfare, and employ a numerically superior force in each battle.

The first two phases of the People's Volunteer Army's (PVA) military campaigns revealed Mao's military artistry. After the first encounter with UN troops, Mao ordered his army to disengage the enemy and hide themselves immediately. This deliberate withdrawal reinforced MacArthur's misconception that only a small Chinese army was involved in the war. When UN troops rushed to the border of China without coordination, they faced surprise attacks one after another. The result was that the PVA successfully repelled the UN troops and pushed them back to the 38th parallel after just two military campaigns.

However, the PVA's disadvantages in a modern war soon became apparent. Having realized that the PVA was limited to 1-week offensives, as PVA soldiers' food and ammunition could last only for 1 week, General Ridgway adopted a new strategy of disengagement. UN troops withdrew and avoided a direct fight with advancing PVA's troops in the first week. Then the UN troops engaged in fighting when PVA soldiers did not have food and ammunition. This new strategy caused tremendous PVA losses. Mao had to shift from mobile warfare to positional warfare through the use of bunkers after the fifth offensive campaign. This new military strategy effectively offset the advantage of the UN troops, despite their air attacks and modern weaponry. Ultimately, the war became a battle of wills. After a stalemate of 2 years, the Korean War came to an end.

Many militarists regarded the result of the Korean War as Mao's failure because of the PVA's tremendous personnel losses. In Larry Wortzel's words, "China sustained heavy losses and suffered a strategic geopolitical defeat" (Burkitt, Scobell, & Wortzel, 2003, p. 327) in the Korean War. However, Mao and the CCP looked at it very differently: Marshal Peng Dehuai returned as a hero, while MacArthur was fired by Truman. It was the first time since the Opium War that a Chinese army was able to defeat or break even with the world's most powerful

military force by itself. It was almost a miracle for Mao to force Truman to accept a truce, given the fact that the PVA entered the war without its air force or navy and facing a serious shortage of food and ammunition. Second, Mao achieved his political objective of making North Korea a buffer area for China. Third, Mao's regime won the confidence of the Chinese at home and abroad after the Korean War. Politically and psychologically, Mao's statement that the "Chinese have stood up" became true.

Tactical Offensive and Strategic Defensive During the Sino-Indian War

Competition for disputed territory led China and India into conflict in the Sino-Indian War in 1962. Frustrated with India's "forward policy" (China characterized it as a policy of "nibbling") to control disputed territories in the Sino-Indian border since 1959, Mao launched a military offensive. He called it a "self-defensive counterattack." After two phases from October 20 to 24 and from November 16 to 21, Chinese People's Liberation Army troops wiped out most of the Indian Fourth Army and drove the enemy to "the line of actual control." Mao made use of traditional mobile warfare in this conflict. The People's Liberation Army concentrated a superior force to make a frontal attack, and at the same time, attacked the Indian army from both flanks. Following the attack, People's Liberation Army troops eliminated the isolated enemy one by one.

To the surprise of India and the world, China announced a unilateral cease-fire twice, on October 24 and November 21, and Chinese troops withdrew 20 kilometers behind the line of actual control. Facing an American military threat from the east and south, and a Russian challenge from the north, Mao's purpose was to thwart Indian's attempt at territorial expansion and maintain peace on the Sino-Indian border. It was a tactical offensive in the form of a strategic defensive. That is, Mao made use of military initiative to create political conditions favorable to resolving the border conflict on Beijing's terms in the "diplomatic struggle." Mao claimed that this war dealt India a heavy blow and maintained peace for 10 years. Actually, India has not challenged the status quo since the Sino-Indian War in 1962.

The People's War forms a key aspect of Mao's military theory and practice. In Mao's words, "The richest source of power to wage war lies in the

masses of the people" (Mao, 1967c). "The revolutionary war is a war of the masses; it can be waged only by mobilizing the masses and relying on them" (Mao, 1965a). In Mao's mind, the power of conflict is not only expressed through the competition of military and material strength but also through the competition of manpower and winning the people's support. How to win people's support is the key to successful revolution. Redistribution of land helped the CCP gain massive manpower from poor peasants, the majority of the Chinese people.

It was with support of the people that the CCP could defeat enemies that had greatly superior military strength during the Northern Expedition, the Land Revolution, the Second Sino-Japanese War, the Civil War, and the Korean War.

Mao's United Front forms another important political policy and military strategy. Mao would form a temporary alliance with whoever could help him achieve his political objectives. He even made efforts to establish a united front with the Nationalist government, including landlords and rich peasants, to win support from the United States during the Second Sino-Japanese War. When this effort to win support from the United States failed, Mao decided to join the Soviet Union in the civil war and the Cold War. Later, Mao again showed his flexibility by overlooking past hostility with Washington and becoming a new U.S. ally when China was facing military threat from Moscow in the 1970s.

Strategic Thinking and Tactical Preparations

Strategically, Mao scorned all his enemies no matter how powerful they were. However, tactically, Mao treated his enemies very seriously and concentrated absolutely superior force at every possible opportunity to achieve victory. On the one hand, Mao was very good at finding his enemy's strategic weakness and disadvantages. On the other hand, he could highlight the strong points of his own side no matter how weak it was. In this way, he gained confidence in himself and transferred his confidence to his party and army. For example, the CCP experienced heavy losses during the Land Revolution, but Mao was very confident that his party and the Red Army could survive and develop because China was experiencing almost constant fighting between different warlords supported by different imperialist powers. Moreover, most of China's

population was poor peasants, and they supported the land revolution. When the civil war broke out, Mao told his party that the CCP could not be better off because of the expanded revolutionary base areas, a well-trained and experienced army, and the support of peasants. In contrast, Chiang's civil war was not popular with ordinary people, especially in the countryside. To relieve fear of the United States, Mao told his party, "All reactionaries are paper tigers. In appearance, the reactionaries are terrifying, but in reality they are not so powerful. From a long-term point of view, it is not the reactionaries but the people who are really powerful" (Mao, 1969f, p. 100). The development of both strategic and tactical views put Mao's army in a confident and advantaged position.

Taking Initiatives Within a Flexible Military Strategy

Mao's armies generally (but not always) took a strategically defensive stance in the wars that Mao experienced. The great exception was the civil war battles of 1948–1949. However, Mao always opposed passive defense and preferred to be proactive rather than reactive. That is to say, he would advocate tactical initiatives in a situation and at a time favorable to his army. Thus, Mao would recommend a tactical offense within a strategic defense, a fast-paced battle within a protracted war, and a surprise attack from the rear of the enemy instead of a frontal assault.

In conclusion, Mao was both a political strategist and a military strategist, and his military means always served his political ends. With his military strategy, Mao defeated his enemies one after another and established the People's Republic of China. His military thinking and strategy have become a legacy in military history and continue to have an impact on the world, particularly Third World countries, today.

Wanli Hu

See also China, People's Republic of; Korean War (1950–1953); World War II

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MARINE CORPS, U.S.

The U.S. Marine Corps is a very unique military organization that has been at the forefront of American defense and national security for more than 235 years. While modeled off of the Royal Marines, the U.S. Marine Corps has become distinctive in terms of its size, the strength of its institutional culture because of its historical achievements, its relationships to the other U.S. military services, and its continuing central role in American force structure and power projection capabilities. This entry discusses the history of the U.S. Marine Corps, the corps' distinctive culture, and differences—sometimes rivalry—between the Marine Corps and the other services.

Origins and Early Decades

The U.S. Marine Corps traces its origins to November 10, 1775, when the Continental Congress created the Continental Marines as an adjunct force to the Continental Navy. The Continental Marines fought throughout the American Revolution, primarily as sharpshooters in the masts of Continental naval vessels during ship-to-ship engagements, landing parties in small-scale amphibious operations, and ship-board security guards for naval vessels and bases. All of these missions were fairly typical for marine forces in the 1700s and were modeled on missions from the Royal Navy and Marines, on which the Continental Navy was modeled.

Like the Continental Navy itself, the Continental Marines were disbanded at the end of the Revolution in 1783 and not resurrected again until the Quasi-Naval War with France (1798–1801). After that time, the marines were never again disbanded, though they were threatened with it on several occasions over the next century and a half. Performing largely the same missions as during the Revolution,

the marines in the Quasi-War, the War of 1812, the Seminole War, and the Mexican-American War found themselves in each major engagement the United States took part in during the antebellum period, but they also took on additional roles as required. At the insistence of their longest serving commandant, Brevet Brigadier General Archibald Henderson, the marines took on any and all missions that kept them in the national spotlight, gained the favor of politicians, and prevented the U.S. Army from having them disestablished as a “second army.” Such a mixture of pragmatism and flexibility has been a hallmark of the corps’ existence throughout its history. Under Henderson, the Marine Corps survived these “doldrums” and took part in similar types of missions during the American Civil War, when there also existed a Confederate Marine Corps modeled on its prewar Yankee forefather.

Surviving the Gilded Age and Progressive Era

The Marine Corps, like the U.S. Navy and U.S. Army, endured another period of national, political, and budgetary neglect during Reconstruction and

the Gilded Age, numbering no more than a few thousand at best, relegated to similar missions as before the Civil War, and constantly seen as a wasteful duplication of the army. Again taking on any and all missions that pleased its political masters—including strike breaking—the Marine Corps survived to be able to take part in the Spanish-American War and began Progressive Era reforms for the increased professionalization of its officer corps. The Spanish-American War saw the marines primarily again in naval adjunct roles but also helping man gun turrets on new armored battleships and cruisers. Moreover, senior political and military authorities began dimly recognizing by the end of that war that there was the need for the United States to have a force that could seize and defend bases outside of the Continental United States. This recognition by American politicians of the need for a force that could participate in an amphibious warfare role combined with the obvious need for the United States to have light military forces for duty in places such as Central America and East Asia. The latter duty resulted in the Marine Corps writing one of the first manuals on irregular warfare, the *Small Wars Manual*, the predecessor



Historical image of a marine battalion in front of Commandant's House at the marine barracks, Washington, D.C., 1864.

Source: Courtesy of the Library of Congress.

to many of the counterinsurgency doctrines of the later 1900s and early 2000s. All of these duties combined again allowed the marines to survive, to grow into a larger force, and then to take part in some of the bloodiest trench warfare when the United States entered World War I in 1917. These missions also allowed Marine Corps leaders such as Major General Commandant John A. Lejeune to continue thinking about amphibious assault as a potential mission for the marines.

Finding Amphibious Assault and the Pacific War

This kind of thinking was even more vital after 1919. Although the marines had gained great fame in battles such as Belleau Wood, the marines' role in trench warfare also allowed the army to once again argue that the Marine Corps was a wasteful duplication of the army. Lejeune and his protégé,

Lieutenant Colonel Earl Ellis, therefore focused on the navy's plans to fight Japan in the Pacific and began portraying the marines not so much as a naval adjunct for guarding ships and bases but as a full-blown amphibious assault force that specialized in that type of warfare as no other branch did. This focus within the navy's sea control mission afforded the marines, especially officers such as Major (later General) Holland Smith, the opportunity to begin developing amphibious assault techniques and technology in the 1920s and 1930s, to begin practicing those types of exercises before the start of World War II, and even to write amphibious assault doctrine into documents such as the *Tentative Manual for Landing Operations* (1934).

Accordingly, the Pacific war was a watershed and even godsend for the marines. Their pioneering of amphibious warfare doctrine, techniques, and technologies meant that the Pacific war was seen by the American public and politicians as a "Marine Corps war," much to the chagrin of the army. The fact that the marines largely taught the army in the Pacific how to carry out these types of operations—even though the latter service outnumbered the marines by a ratio of four to one during the war—added even more to the public's image of the ground phases of the war as largely Marine Corps operations. The marines did not waste this opportunity either, capitalizing on the publicity gained from their role in battles such as Guadalcanal, Tarawa, and Iwo Jima to score major lobbying victories with Congress, the media, and the public, inroads that would help the corps greatly in the immediate postwar period.

The Cold War and Beyond

One problem the corps had in 1945, however, was that it had grown during the war to six divisions and four aviation wings, and it truly did look like a second army to a budget-conscious Congress. In the postwar battles in Washington, D.C., over such controversial issues as defense unification, roles, and missions, it was not even clear if the navy, under assault by the Army Air Forces, might not offer up the marines for elimination as a way to keep naval aviation from U.S. Air Force control. In the end, however, senior and mid-grade Marine Corps officers were able to use their clout with the public and influential members of Congress to get roles for the marines written into the various national security acts of the early Cold War.



Recruiting poster, World War I era, 1917.

Source: Courtesy of the Library of Congress.

The Cold War, however, presented a doctrinal challenge to the marines since the primary enemy, the Soviet Union, did not have much of a fleet and did not have outlying bases that would need to be seized and defended. The navy did, however, very quickly create the origins of what would later be called the Maritime Strategy, whereby it would project American naval power toward and into Soviet territory in areas such as the Mediterranean Sea, the western Pacific, and later (by the 1970s and 1980s) the North Atlantic. Where the navy went, the marines accompanied, even developing their own mix of forces for Arctic operations in Norway and strikes into the northern Soviet Union. In addition, the marines continued to guard naval bases and to provide internal detachments on large naval vessels such as aircraft carriers and cruisers, but their primary duty, just as in the interwar period, was as a light infantry and quick reaction force for political crises such as in the Dominican Republic in 1965. Even more so, these “light” infantry duties turned into heavier force operations in Korea and Vietnam, but always with an emphasis on quick response by the marines so as to continually differentiate the corps from the army. Operations and exercises in Korea, Vietnam, Norway, and later Panama, Kuwait, and Iraq, however, led the marines to need armor, field artillery, tactical air, and combat engineers in a major way, so the marines were always concerned about a harsh budgetary climate perhaps leading to calls for their disestablishment as a “second army.”

The marines were fortunate in that each time they seemed to look like a maritime copy of the army, operations came along that allowed their particular role to shine. For instance, in the Persian Gulf War, the marines were used as amphibious decoy forces to keep the Iraqis busy in Kuwait while U.S. and coalition forces carried out the “left hook” into the desert to envelop Iraqi forces. While the marines were not thrilled with this type of decoy mission and were truly prepared to carry out an amphibious assault, the success of the mission nevertheless added to Marine Corps prestige. In the Global War on Terrorism, the marines have integrated themselves into the navy’s “From the Sea” Strategy and “New Maritime Strategy” and have argued that marines deployed in Afghanistan and Iraq are actually the ground force power projection of the American naval power. Time will tell, however, if this type of strategy allows the marines to survive

what will probably be very lean budgetary times for the early 21st century American military as a largely deindustrialized United States deals with major domestic economic problems. Given that the marines were well inland in Iraq and Afghanistan with heavily mechanized forces trying to perform both conventional and counterinsurgency missions that the U.S. Army is also performing, it may be difficult for the marines to continue to argue that they are so distinctive. It is doubtful, however, that calls for the marines’ disestablishment would really lead anywhere given the corps’s high popularity with the public as the embodiment of American military virtues as well as the Marine Corps’ utility in the Defense Department’s latest strategy oriented toward the People’s Republic of China, Air-Sea Battle.

Marine Corps Culture and Performance

From the very start of its history, the Marine Corps developed a distinctive military culture. This could be seen in the 1900s, in particular, since the marines emphasized their own service or corporate history as a central part of their culture and identity building. The marines, in fact, made the most of their history much earlier than the other services, perhaps not only out of desperation and a means to illustrate that they were unique and therefore worthy of being retained but also because this strong sense of history and tradition became part of the training, the leadership, and the “mystique” of the marines. Other things set the marines apart early on as well. Unlike the U.S. Army—which did accept African American soldiers during the American Revolution and even integrated them into the ranks at that time—the marines from the beginning refused to enlist African Americans, other minorities, or women. This parochialism continued without the slightest change until presidential orders in World War II forced the service to accept limited number of female and minority recruits.

Much more than institutional racism, however, defined Marine Corps culture. Again, from the very beginning of the corps’ existence, the marines were highly selective about enlistees, including the physical size and health of the recruits. The fact that the marines remained the smallest service (and still is, with the exception of the U.S. Coast Guard) meant that it could maintain that selectivity into the present. Marine Corps selectivity went beyond physical

requirements, however, and still does. U.S. Marines from all eras talk about the marines endowing a special kind of confidence and esprit de corps in terms of training, leadership, and even the distinctive uniform. Eugene Sledge, a mortar man in the 1st Marine Division at Peleliu and Okinawa, talks at length in his wartime memoir about the particularly difficult training that he endured as a recruit trainee that he argues prepared him for the extraordinarily traumatic combat that he endured. Many other marines from World War II echo Sledge's comments, while wartime memoirs of U.S. Army personnel talk about how their training was very often counterproductive to the actual conditions they encountered in combat.

Moreover, postwar records show that the marines had a decidedly lower percentage of battle fatigue casualties than any other service, something again that is typically attributed to training, leadership, and the esprit created by the mystique of the corps. Comparisons to other services are interesting in that members of the U.S. Navy typically become attached to their ships, U.S. Air Force personnel obviously become attached to their aircraft, and members of the U.S. Army typically talk about their leaders or perhaps units. Marines, however, have had these kinds of attachments to their entire service. At significant times, of course, this distinctiveness has led to intense interservice rivalry between the marines and the other services, both officially between leaderships and unofficially in the field and off duty. The marines have often been seen by other services as obviously very competent but also arrogant and clannish, and their image and prestige with the public and with politicians have often been resented.

It has also, however, led to a unique relationship with the Marine Corps Reserve. Long before the Pentagon started talking about a Total Force Policy and that kind of integration between active and reserve forces became a reality, the marines were living this idea by having their Reserve forces conduct real-time training during both weekend and summer drill sessions, by making sure that large numbers of Reserve personnel had prior active service, and by having the 4th Marine Division (Reserve) assigned missions that they trained for on a regular basis during peacetime and would fulfill in case of mobilization. Reports about the competence of the Marine Corps Reserve units differed markedly on a number of occasions with those of the National Guard

forces, especially during the Korean and Persian Gulf Wars, when the latter typically took months of training to be brought up to speed with their active-duty counterpart units, while Marine Corps Reserve forces deployed with minimal preparation time.

Rivalry has at times been significant with the U.S. Navy as well. To a certain extent, Marine Corps history has been one of being tied to the navy's "apron strings." Since the marines grew out of the U.S. Navy, both in 1775 and 1798, and since the marines have always been and still are part of the Department of the Navy, the marines have often been seen, or marines have often felt, to some extent, like the servant of the Fleet. This attitude could be seen when marines were charged with guarding naval bases and providing internal security detachments on naval vessels, something that continued on some American naval vessels until the late 1990s. Of course, in the Age of Sail, marines were also on board to quell potential mutinies, and so they were widely despised by sailors. In the late 1800s and the 1900s, marine detachments continued to have an internal security function, but in a more contemporary context of serving as orderlies to commanding and flag officers, providing small landing parties for expeditionary operations, and guarding nuclear weapons onboard Cold War-era warships. Recently, there is even some discussion of returning marines to smaller warships because of their skill in the anti-piracy operations that are becoming so central to U.S. Navy deployments.

Into the 21st Century

Apart from conducting current operations in the Global War on Terrorism, the Marine Corps has been moving into new ground in terms of its leadership positions in the U.S. national security establishment. During the George W. Bush administration, General Peter Pace was the first marine to become vice chairman of the Joint Chiefs of Staff and then the first marine to hold the chairmanship of that body. In addition, the retired general James Jones became the assistant to the president for national security affairs (better known as the national security advisor) at the beginning of the Obama administration. These positions mark the pinnacle, at this point in U.S. history, of Marine Corps generals in high-level national security positions and demonstrate the degree to which the Marine Corps is taken

much more seriously than it was before the Cold War by the senior national leadership.

It also demonstrates the historical development of senior leadership in the marines, which has been, like its institutional culture, somewhat distinctive. For instance, even today, the marines typically commission more officers from their enlisted ranks than the other services do. This is, in fact, an old tradition from the 20th-century Marine Corps. In the 1800s, the marines largely took their officers from civilian life or, by the late 1800s and afterward, from the United States Naval Academy. There has been a tendency in the 1900s, however, to commission officers from the ranks, a tradition that has continued into the post-Cold War era. There has also been, at least in previous times, friction between officers who were commissioned from civilian life or the Naval Academy and tended to serve long periods at Headquarters Marine Corps (so-called political marines) and those who came from the ranks and served primarily in the Fleet and the Fleet Marine Force (field marines). Given the modern-day commonality of educational experiences in commissioning programs and enlisted service, this friction has probably lessened, but the marines do continue to pride themselves on a style of aggressive leadership from the front that was exemplified by the former commandant general Alfred Gray, who had marines don battle dress uniforms on a regular basis to reinforce the idea of the corps as a fighting organization, not a military bureaucracy.

The Marine Corps currently numbers approximately 203,000 active-duty marines and 40,000 Marine Corps reservists. The marines are equipped with the latest small arms and heavy weapons, including tanks; amphibious assault vehicles; air defense, self-propelled, and stationary artillery; helicopters; and aircraft, the latter both of conventional and vertical/short takeoff and landing type. The marines are organized into Headquarters Marine Corps, the Operating Force, the Supporting Establishment, and the Marine Corps Reserve. In addition to their traditional military missions, the marines provide the guard detachments for nearly 150 U.S. embassies, consulates, and interests sections in more than 130 countries around the world. This force currently numbers approximately 1,000 marines, and this mission dates from the late 1940s. None of these missions will probably change very radically in the foreseeable future, though the

marines, like the other services, may endure cuts from lean budgetary times in the near future.

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See also Navy, Department of

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MARINE CORPS LEAGUE

Established in 1923, the Marine Corps League is a national organization serving the interests of current and former marines. In 1937, President Franklin Roosevelt approved the league as the only federally chartered organization of U.S. Marine Corps veterans. Today, an elected national commandant and 14 national staff officers run the organization from its headquarters in Fairfax, Virginia. It oversees more than 1,000 detachments spread throughout the United States and holds a yearly convention. This entry describes the history, focus, and activities of the Marine Corps League.

Demonstrating its close ties to the Marine Corps at its establishment, the first convention met for 2 days in 1924 at the Marine Barracks in Washington, D.C. The 26 delegates spent 1 day touring a Marine Corps base in Quantico, Virginia, attending modern warfare demonstrations and learning about developments in marine aviation.

Many of the delegates had served in World War I, when the corps swelled to more than 70,000 marines. After the war, marine veterans received few benefits and had difficulty finding employment. Many of these veterans joined a number of newly formed organizations, including the Veterans of Belleau Wood and even the Girl Marines of the American Legion. One of these organizations, the Marine Corps Veterans Association, would become the Marine League. Unlike many previous organizations, the league would seek to integrate veterans of other wars.

The experience of marine veterans in Buffalo reveals the evolutionary development of the association and, later, the league first at a local and then at a national level. In Buffalo, New York, marine veterans and local marine recruiters gathered in November 1919 to establish the Marine Veterans Club for their community. The detachment attended funerals for deceased marines whose bodies had been returned from France and helped relatives with funeral expenses. This local organization and others like it also provided other forms of mutual aid, including assisting returning marine veterans with finding employment and visiting wounded marines.

In 1922, local marine organizations primarily from the east coast gathered to establish the Marine Corps Veterans Association, first headed by Major S. W. Brewster, U.S. Marine Corps (Ret.). This association, which provided the first overarching framework to bind local groups together, evolved into the Marine League in June 1923 after veterans met at the Hotel Pennsylvania in New York City.

The Marine League differed somewhat from its counterpart, the similarly named Navy League, which began in 1902. While the Navy League similarly promoted the welfare of current and veteran sailors, it focused more on educating the public about the navy's importance, especially in regard to promoting a larger navy. In contrast, the Marine League organized itself more to provide for the welfare of marines as well as serve as a patriotic and social organization to promote the heritage and pride of individual members in the Marine Corps.

In the immediate years after World War I, the league used the marines' participation in the Battle of Belleau Wood as a means to celebrate the identity of marines. At its first meeting, for example, U.S. major general James Harbord spoke at 4:45, exactly 5 years after he received the order for marines to enter the battle at Belleau Wood. The league subsequently elected Harbord as the league's first honorary member; no wonder, given that he announced at the meeting that if he could begin his career again, he would choose the corps over the army.

In its early days, the league benefited from a close association with Commandant John A. Lejeune. As the head of the Marine Corps from 1920 to 1929, Lejeune promoted many rituals, such as the formal celebration of the institution's birthday. The league took a similar approach. To this day, local detachments follow a ritualistic meeting that adheres to the spirit of the corps' institutional culture in order to promote a shared camaraderie.

The Marine Corps as a whole also worked closely to help the league. Active-duty marines, particularly those associated with recruiting, promoted, supported, and even organized local detachments. The corps' publication for enlisted marines, *The Leatherneck*, regularly published news about the league's activities. At one point, the entire staff of *The Leatherneck* joined the Washington Detachment.

Interestingly, given the extent to which the league adopted the phrase "Once a Marine always a Marine," it had yet to avow the now common belief that there is no such thing as an ex-marine, only a former marine.

From 787 members in 1923, the league increased to more than 5,000 members by the time the U.S. entered World War II. By the War's end, the league had more than 25,000 members before tapering off to a rough average of between 10,000 and 15,000 members. Beginning in the 1980s, however, membership began rising. From just shy of 14,000 members in 1979, it has steadily gained in size. In 2005, it had more than 60,000 members. In contrast, the Navy League, which draws from a much larger potential pool of potential members, currently has only about 50,000 members. Membership in the Marine League is limited to those who have been honorably discharged from the Marine Corps and who have served more than 90 days. The league also welcomes those navy corpsmen who have served in the Fleet Marine Force.

The league works together with other military organizations and belongs to the Military Coalition, which consists of 28 organizations that serve those with current or prior affiliations to the military. It also informs and educates members about veterans benefits for which they might be eligible. The league has a number of subsidiary organizations. The Young Marines, established in 1958, became a part of the league in 1974. The Young Marines seeks to instill in young adults the corps' core values of discipline, teamwork, and leadership while promoting physical fitness. Other auxiliary organizations include the "Military Order of the Devil Dogs." Established in 1939, this self-proclaimed "Fun and Honor Society" of the league provides a smaller fraternal organization by invitation only. It requires the member to be nominated by two members of the Military Order of the Devil Dogs. Its emphasis on "devil dogs" celebrates the nickname that marines purportedly received from their German opponents during the Battle of Belleau Wood.

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See also Marine Corps, U.S.; Navy, Department of

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MARINE CORPS UNIVERSITY

The Marine Corps University (MCU) is the home for all U.S. Marine Corps professional military education. MCU is part of Education and Training Command under the Marine Corps Combat Development Command. Located in Quantico, Virginia, MCU encompasses the Marine Corps War College, the School of Advanced Warfighting, the Marine Corps Command and Staff College, the Expeditionary Warfare School, Enlisted Professional Military Education, and the School of Marine Air-Ground Task Force Logistics. MCU is also the parent entity of the Lejeune Leadership Institute (LLI), the U.S. Marine Corps History Division (HD), the General Alfred M. Gray Research Center (GRC),

and the National Museum of the Marine Corps (NMMC). MCU receives its accreditation through the Commission on Colleges of the Southern Association of Colleges and Schools and offers master's degrees in strategic studies, operational studies, and military studies. This entry describes the schools, institutions, programs, and missions of MCU.

Major General Commandant John A. Lejeune established the MCU's predecessor, the Marine Corps Institute, in 1920 as part of his Marine Corps education initiatives. In 1989, General Commandant Alfred M. Gray re-formed the Marine Corps Institute and created a professional education institution similar to those of the other military services. MCU was designed to attract civilian experts in military studies who could inspire a higher level of intellectualism within the ranks of the Marine Corps. Along with MCU, the commandant also established the Commandant's reading list, which dictated that marines at all levels must read a selection of the most influential studies in military doctrine, international affairs, and history.

The Marine Corps University educates men and women of all military services and government institutions, along with civilians and members of foreign militaries. At the Marine Corps War College, MCU trains senior-level military officers and civilians in broad-scale operations management, including joint military, interagency, and multinational environments. The Marine Corps War College is also responsible for educating these men and women in strategic studies at national and theater levels, as well as providing training in military support and national security. The Marine Corps Command and Staff College trains senior Marine Corps officers in military history, international and cultural studies, as well as strategic studies as part of the Master's in Military Studies Degree.

The Marine Corps University also offers programs and schools distinct to the Marine Corps' mission within the U.S. military. At the Expeditionary Warfare School, career-oriented military officers receive training in issues of command and control, ethics, operational culture, logistics, information technology, and leadership in environments specific to the Marine Corps' relationship and mission as America's expeditionary forces. These roles include combined arms, joint task force, and Marine Air-Ground Task Force. The Marine Air-Ground Task Force Logistics School is also part of MCU and

provides marines, Department of Defense personnel, and their civilian equivalents with the corps' premier training in the logistics of expeditionary warfare. Along with its mission-specific schools, the Marine Corps University also oversees Enlisted Professional Military Education, in which it provides military and cultural studies as well as leadership and tactical studies to provide the Marine Corps with highly trained noncommissioned officers. The MCU trains noncommissioned officers both at the main campus at Quantico, Virginia, and at Enlisted Professional Military Education academies worldwide.

The Marine Corps University also encompasses numerous satellite schools and program initiatives, including the LLI, GRC, and the HD. The LLI oversees leadership conferences and programs related to the ethics, morals, and laws of war. At the LLI, officers, enlisted personnel, and civilians take leadership courses and workshops on subjects such as communications, conflict resolution, and family readiness.

The Marine Corps University is also tasked with preserving and disseminating the history of the Marine Corps. The mission of the GRC is to support the students and educators at MCU through the storage, organization, and retrieval of current and historical archival materials. The GRC is the main repository of the official archives of the U.S. Marine Corps. The Special Collections and Archives Section maintains a massive collection of personal papers, command chronologies, and audiovisual resources. The GRC is also the location of the Library of the Marine Corps, which is the single most important repository for secondary sources either directly involving or related to the study of the U.S. Marine Corps.

The Marine Corps University also encompasses the HD. The HD is tasked with researching and writing the Marine Corps' official histories. Through the Histories, Reference, Oral History, Editing and Design, and Field History branches, the HD, now nearly a century old, is one of the premier locations for the study and dissemination of Marine Corps history as well as the corps' main institution for the collection and preservation of oral histories of marines of all ranks. The HD currently employs field historians to collect information from current operations around the world from those who experience it every day.

The Marine Corps University educates the leaders of the Marine Corps as they encounter all levels and methods of 21st-century warfare. The MCU also offers scholarships and training to nearly 70 foreign

military officers and scholars through the Foreign Professional Military Education Program (FPME). Overall, the Marine Corps University had 5,786 students as well as 365 faculty and staff for the year 2010 and maintained a budget of nearly \$65 million for the 2010 fiscal year.

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See also Command and General Staff College; Marine Corps, U.S.

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MARINE GUARDS, EMBASSY

The U.S. Marine Corps Embassy Security Group (MCESG) deploys more than 1,300 Marine Security Guards (MSGs) to 148 diplomatic posts in 133 countries to provide security for U.S. diplomats and civilians abroad. Marine Corps embassy guards carry out a number of duties in cooperation with the U.S. Department of State, including security for U.S. embassies, consulates, and diplomatic missions, as well as protecting classified material and American civilians abroad. The MCESG headquarters is located in Quantico, Virginia, and provides leadership to nine regional commands throughout the world. The MCESG provides training, education, logistics, and assignments for MSGs abroad. This entry describes the history and functions of the MCESG.

The relationship between the U.S. Marine Corps and the State Department dates back to the earliest days of the American Republic. Along with their duties as shipboard security, U.S. Marines provided protection for U.S. diplomats abroad and acted under the direction of the State Department. Though the marines during this period were not recognized as "Embassy Marines," they nevertheless took part in sensitive missions in close association with U.S. diplomats. Marines not only provided security but also symbolized the growth of American power and influence in global affairs.

Due to their critical role in the 19th century, marines during this period became directly involved in events of lasting significance. The first documented excursion of marines with the State Department involved the guarding of the U.S. consul general Edward Stevens in his diplomatic mission to open relations with the newly established Haitian leader Toussaint L'Ouverture in 1799. A few years later, as part of the First Barbary War, marines also took part in the historic attack on the "shores of Tripoli" under the command of Consul General William Eaton at his post in Tunis. Marines continued aiding the State Department throughout the 19th century and into the 20th century, taking part in actions of war and peace. In 1905, marines represented the American diplomatic mission in France when they assisted in returning the remains of Revolutionary War hero John Paul Jones to the United States.

It was the Second World War, however, that would usher in the corps' direct relationship with the protection of U.S. embassies. Even prior to America's entry into the war, the State Department deployed marines to the U.S. Embassy in London, England. It was there that marines established themselves as the defenders of diplomatic officers and as security for the embassy. The marine detachment at the U.S. Embassy in London also faced intense combat even while the United States remained neutral. In 1940, these marines came under attack when German bombers began terrorizing the city of London during the infamous blitz.

The marines' esteemed conduct during the Second World War prompted the State Department to establish further protocol regarding the deployment of marines at U.S. embassies throughout the world. It was also thought that the marines' status as quickly deployable naval infantry added to their adaptability and flexibility, a necessity for an expanding State Department. In 1946, the State Department entered an agreement as part of Section 562 of the Foreign Service Act, in which any action concerning the protection of U.S. embassies must be coordinated through the Department of the Navy alone, thus ensuring marines their role as embassy guards. Two years later, this agreement was made official through the Memorandum of Agreement of 1948, which established the Marine Security Guard Program.

Throughout the second half of the 20th century, MSGs remained dedicated to their duties and as such became embroiled in America's best and

worst moments. Standing side by side with the State Department, Marine embassy guards became involved in incidents including the Fall of Saigon in 1975, the Iranian Hostage Crisis of 1979, the 1982 bombing of a Marine Corps barracks in Beirut, Lebanon, as well as repeated bombings and riots nearly every year all over the world. In the 21st century, particularly with the terrorist attacks of September 11, 2001, MSGs across the world continue to defend U.S. embassies and represent the United States even under severe scrutiny and danger. Eleven marines have died in the line of duty protecting U.S. embassies abroad. The Marine Security Guard Program officially changed its name to MCESG in 2007 and underwent administrative reorganization.

Typical deployment of marines to U.S. embassies consists of a minimum of one detachment commander and five MSGs. The number of marines deployed to each location differs for nearly every embassy in the world and is contingent on local threat levels and even the size of the structures in which they are stationed. MSGs are expected to maintain readiness 24 hours a day, 7 days a week, and they must always be prepared for quick reaction exercises, in which marines are required to respond to emergency tests based on historical situations. MSGs receive specialized training at MSG School. MSG School has one of the highest attrition rates of any Marine Corps school as MSGs are expected to meet the highest standards of the Marine Corps and the State Department.

MSGs in the Global War on Terrorism continue to conduct all assigned duties in coordination with the State Department. Operating in war zones such as Iraq and Afghanistan, however, has forced MSGs to adapt to changing conditions. With diplomatic officials in highly dangerous areas, the MCESG has grown and trained to meet these new demands. The addition of new posts in both war-torn countries also keeps MSGs close to the U.S. diplomatic effort as well as the combat that rages there every day.

Colin M. Colbourn

See also Marine Corps, U.S.; Navy, Department of

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MARINE ONE

Marine One is the moniker given to the presidential helicopter, managed by the U.S. Marine Corps, to facilitate short-distance presidential transport. Marine Two refers to the machine used for the vice president and other very important persons (VIPs) needing high-priority transportation. From Eisenhower to Obama, the size and expense of the executive helicopter fleet has ballooned, growing from a few off-the-shelf general purpose choppers to a planned fleet of controversial sophistication and cost. This entry discusses the history of presidential helicopters and the fleet in use today and looks at the controversy surrounding the recent proposals for a new design of presidential helicopter.

History

President Dwight D. Eisenhower was the first to use helicopters for short-distance presidential transport. Their use arose from an array of needs: greater speed, relief of the congestion of civilian traffic lanes that motorcades caused, and lower costs for presidential travel and security. Originally, two Bell UH-1s were used to fly him to Camp David and to his farm in Gettysburg. (“UH” refers to “utility helicopter”; in military situations, the UH-1 was a general purpose hauler of people and goods, including for medical evacuation.) The practicality of this impromptu solution led, over the next decade, to the creation of a fleet of helicopters with the sole purpose of transporting the president, members of his cabinet, foreign heads of state, and special executive personnel. Half a century later, presidential helicopters are flown in ahead of a trip, so the president has access to them anywhere he travels. Redundant aircraft are a security feature, and they increase the size of the fleet.

On January 1, 1958, the U.S. Army Executive Flight Detachment was activated and joined Marine Helicopter Squadron One. Their task was to develop emergency evacuation of the president, First Family, and key government officials, but their daily function was the transport of the president and White House VIPs. The army and marines shared transport responsibilities until 1976 when President Gerald R. Ford dismantled the Army Executive Flight Detachment, leaving Marine Helicopter Squadron One responsible for all helicopter operations from the White House.

The original machine used by both units came from the Connecticut-based Sikorsky Company; it was the Sikorsky CH-34-C—the military transport version of the Sikorsky S-58. In 1963, CH-3 helicopters joined the H-34s. The CH-3 is a modified version of the S-61 or U.S. Navy SH-3, “Sea King.” During the 1970s, the CH-34s were replaced with Bell UH-1-N, better known as Hueys. The UH-1-N was a “stretch” version of the original UH-1, with a second engine for power and reliability. It was in the 1970s that the primary Marine One helicopters became the UH-60N, a variant of Sikorsky’s UH-60 Black Hawk, and the model is still in use today. Presidential and VIP helicopters modify their alphanumeric designation from CH to VH to indicate their VIP status.

Recent Controversy

Following the events of September 11, 2001, Chief of Staff Andy Card initiated the revitalization of the presidential helicopter fleet. President George W. Bush spent a large portion of 9/11 in Air Force One—the fixed-wing aircraft—where issues of security, communication, defense, and mobility became evident. The 30-year-old helicopter fleet—11 VH-3D Sea Kings and 8 VH-60N Black Hawks—was ill equipped to meet the challenge of global terrorism. The need for more space, greater communication, and the ability to withstand the electromagnetic pulse of a nuclear attack; to support the president’s control of the nuclear forces; and to transport essential personnel over longer ranges added up to an imperative to redesign presidential helicopters for the 21st century.

For the first time, off-the-shelf military designs were considered inadequate, and an aircraft specifically designed for presidential transport was demanded at a new magnitude of cost. The escalating

requirements emerged between 2002 and 2004 when an official request for proposal was issued. Two corporations vied for the contract: Sikorsky and Lockheed Martin. Sikorsky stated that it should be the only choice since it was the “premier” U.S. firm, engineering, building, and maintaining the U.S. fleet since its inception. Lockheed Martin responded by pointing out that although some of its subcontractors were European—Italian and English—they were military allies in Iraq, and 90% of the jobs created by the contract would be allocated to U.S. workers. In November 2005, the contract was awarded to Lockheed Martin, interpreted by many military and civilian observers as a blow to U.S. manufacturing. Although the navy’s analysis indicated that the technical criteria, labor reliability, and historical precedent lay with Sikorsky, Lockheed Martin’s cabin design was based on the Augusta Westland prototype, a European machine. This cabin design is already in use in a number of ally nations of the North Atlantic Treaty Organization, delivering a smaller original production cost. The established prototype was thought to make development faster and cheaper and the program less risky. In 2004, the estimated contract cost for 28 helicopters, or the size of the presidential fleet, was \$6.1 billion.

In February 2009, the navy informed Congress that the VH-101, the Lockheed Martin prototype, overran its costs and had now reached \$11.2 billion. Both Congress and the Obama administration began a review of the contract. Connecticut’s congressional delegation asked that Sikorsky be offered an opportunity to rebid for the contract, arguing that Lockheed Martin’s lack of helicopter experience lay at the root of the cost overruns. In May 2009, the contract was cancelled. Although a few prototypes had been built at a cost of nearly \$6 billion, the administration’s desire to limit costs ended the contract. Immediate complaints arose in Congress, especially the New York delegation representing Owego, the construction and labor site.

In early 2010, the Pentagon released a new request for proposals. In April, Sikorsky and Lockheed Martin announced a decision to build the new presidential helicopters together based on the S-92 (Sikorsky) in order to provide a commonsense economic and technological solution for the next presidential aircraft. In May, Boeing also entered its bid to build the new VXX helicopter. Discussion over the past 2 years has created a compromise: the present

fleet will be renovated in two separate phases, the first finishes in 2016, the second in 2020. No new fleet will occur prior to 2024. Secretary of Defense Robert Gates argued that the VXX was a “poster child for an acquisition program gone seriously wrong” (in Andrea Shalal-Esa, “Pentagon Eyes Two Presidential Helicopter Models, *Reuters.com*, May 20, 2009), as designing a helicopter for routine presidential trips yet able to offer security during a major military threat resulted in continuous cost escalations.

Jacqueline Swansinger

See also Air Force One; Helicopters

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MARSHALL, S. L. A.

Samuel Lyman Atwood (S. L. A.) Marshall (1900–1977), widely known as “SLAM,” was a journalist, self-proclaimed military historian, and military analyst who observed and reported on the actions of soldiers in battle in five separate conflicts (World Wars I and II, Korea, Vietnam, and the Sinai Conflict of 1956). He authored 29 publications, pioneered the afteraction combat interview to analyze the behavior of soldiers in combat, and introduced the controversial notion of a “ratio of fire” into the professional and popular lexicon. SLAM had a major impact on helping soldiers and others obtain a better understanding of what actually occurred in small units engaged in combat.

Born in Catskill, New York, in 1900, Marshall spent time in Colorado and California before settling in El Paso, Texas, and Detroit, Michigan, both of which would have major impacts on his life. He served in World War I as an enlisted man and briefly as an officer before returning to El Paso to work at a variety of jobs until finding his niche as a journalist for the *El Paso Herald* and the *Detroit News*, especially reporting on sports. Always writing for

the common man, Marshall's journalistic approach was characterized by clear and readable prose that tended to simplify events while also exploiting their interest and making them both understandable and engaging for the reader. Recalled to active duty in World War II as a major, Marshall joined the army's newly established Historical Section and applied his journalistic skills to study the performance of U.S. soldiers in combat in the Pacific and European theaters.

The Group Interview Technique and *Men Against Fire*

One of his first books, *Island Victory* (published in 1944), established him as an important contributor to the analysis of combat actions. In *Island Victory*, which addressed the fighting in the Marshall Islands, Marshall introduced his "group interview" technique and applied it to help gain a better understanding of the specific actions of six infantry companies in that fight. Marshall contended that his technique was "how the truth of battle is found," and the book was heralded by the *Infantry Journal* as a pioneering work in the study of combat. Moving to the European theater of operations in 1944, Marshall used his technique to help determine the actions of airborne units during Operation Overlord, which were particularly confusing. As a colonel and theater historian, Marshall finished out the war helping the army conduct the most extensive historical treatment ever attempted during the conduct of actual operations.

After the war, Marshall returned to civilian life (but remained in the Army Reserve) and published a synthesis of his observations in the 1947 book *Men Against Fire: The Problem of Battle Command in Future War*. In *Men Against Fire*, Marshall argued that "more and better fire" in battle would remain essential to victory in future conflicts, despite technological advances; he observed that fewer soldiers fired their weapons in combat during World War II than most people had thought. Marshall's book was initially well received, but his assertions regarding the number of soldiers who claimed to have fired their weapons in combat became the subject of intense disagreement among combat veterans and military historians. The debate surrounding his work centers on two fundamental issues: (1) his methodology and (2) his conclusions.

Methodology

Marshall studied the conduct of U.S. soldiers in battle using the "group interview" technique he pioneered. As described by Marshall, after researching a given battle and securing permission to conduct an interview, Marshall would gather a platoon- or company-sized unit together as quickly as the situation permitted after the completion of a combat action and conduct a group interview with as many participants as possible. He would begin the interview by discussing the unit's first actions and continue in chronological order until they had discussed the entire episode. Throughout the process, Marshall encouraged equal participation and discussion among all unit members, regardless of rank, and he would ask specific questions to ensure that the soldiers addressed all aspects of the battle. These interviews lasted between 4 and 8 hours, and Marshall tried to conduct them as close as possible to the battlefield on which they occurred. Marshall was not a trained historian, and the fundamental problems with Marshall's methodology were twofold: (1) the number of interviews he claimed to have conducted did not appear to be feasible and (2) he could not produce evidence of his interviews to document his findings.

Conclusions

Using his observation that between 15% and 25% of men in battle ever fired their weapons in combat during World War II, Marshall continued to publish his observations about the conduct of soldiers in future wars, opining that this number rose to approximately 55% in the Korean War and to an astonishing 90% in Vietnam. Marshall also appeared to take credit for this development, implying that he was largely responsible for doubling or tripling the ratio of fire for the entire U.S. Army. While a wide variety of authors past and present tend to corroborate Marshall's findings, many veterans viewed them as insults to their men and unit, openly disagreed with Marshall's findings, and challenged him to produce evidence to support his conclusions. Knowing that an exact accounting of the actual numbers of soldiers' firing in any given engagement would be difficult to determine, Marshall readily acknowledged that some soldiers may have been lying or exaggerating. He presented his observations as overall estimates of the soldiers' conduct in battle and never produced evidence to corroborate his findings.

Despite failing to accept the challenge directly, Marshall managed to establish and maintain a near-total dominance within this field of study. Few works other than his own address the ratio-of-fire issue specifically; and those that do tend to rely almost exclusively on Marshall's own findings for their support, making the debate somewhat circuitous. While Marshall's analyses were praised initially as conclusive, subsequent investigations have never located the cache of notebooks in which Marshall supposedly recorded the results of his interviews, leading current scholarship to discredit his findings. Nevertheless, some authors continue to lend support to Marshall's overall observations about the conduct of soldiers in combat.

Later Work

Marshall published two other works that had substantial impact on the armed forces and are worthy of note. As with *Men Against Fire*, his *The Soldier's Load and the Mobility of a Nation* continued to champion the role of the soldier on an increasingly technological battlefield by making explicit the connection between mobility in combat and the troops' will to fight. Marshall's *The Armed Forces Officer*, published in 1950 and not credited to him, served for more than 50 years as a basic primer for officership and leadership within the Department of Defense and has only recently been supplanted.

Marshall continued to contribute his observations about the conduct of soldiers in battle during the Sinai campaign of 1956 and the Vietnam War. He was promoted to brigadier general in the Army Reserve and died in December 1977. Throughout his life, his impact and influence on many aspects of ground combat was substantial, but his influence began to wane in the wake of challenges to his methodology and conclusions that began in the 1980s and continue to the present. Standing only 5 feet 5 inches tall, Marshall was nevertheless a giant in terms of the amount of influence he had and the controversy he created among the broader public regarding matters normally of interest to professional military men in the second half of the 20th century.

Kelly C. Jordan

See also Direct Fire; History, Military: Approaches to; World War II

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MEDIA RELATIONS, MILITARY

The necessity, if not obligation, of the American military to inform the American public and Congress of its missions and policies and of the news media to respond with approval or criticism has been a feature of U.S. democracy from the beginning. If the process has posed problems at times, it has generally been mutually beneficial. This entry examines news media–U.S. government relations from the Vietnam War to the present.

Tensions Between the U.S. Government and the Media

Communication between the two sides has been particularly difficult since the end of the Vietnam War. The United States began that conflict with a largely compliant press and a public affairs program that upheld military security without violating the rights of reporters. Between 1965 and 1968, reporters often criticized the violence of American tactics, the clandestine U.S. operations in Laos and Cambodia, and the ineptitude of the South Vietnamese armed forces, but the bulk of news reporting favored both the military and the American cause. A survey of television reporting prior to 1968 showed that spokesmen for the war predominated over critics on news programs by nearly six to one. Meanwhile, the credibility of the U.S. commander in Vietnam, General William C. Westmoreland, was so high that newsmen often replayed his background briefings word for word in their reports.

Circumstances soured in mid-1967, when Americans—under the influence of mounting taxes, casualties, and a host of questions rising from a flawed American strategy—turned against the war, and the administrations of Presidents Lyndon Baines Johnson and Richard M. Nixon began a prolonged withdrawal that stretched from 1968 to 1973. The press followed along, chronicling not only anti-war demonstrations in the United States but also a disastrous decline in morale among young soldiers in South Vietnam who had no wish to be the last to die in a conflict that seemed increasingly without purpose. Many in the military concluded erroneously that the coverage constituted nothing less than a stab in the back.

Mistrust seethed between the American military and news media during the years following the war. It remained largely unseen until October 25, 1983, when President Ronald Reagan deployed troops to the Caribbean island of Grenada to deter a supposed communist takeover. Concern for secrecy was so great that members of his administration declined to notify the press of the operation, and the military made no initial arrangements to deal with reporters in the field. As a result, the first officially sponsored team of reporters arrived in Grenada 2 days after the operation had begun and saw nothing of importance. The press received full access only on October 30, well after all fighting had ceased.

Following a storm of protest in the news media and well aware that the government needed to maintain cordial relations with the press in times of war to convey its messages credibly not only to the Americans but also to the people of the world, Secretary of Defense Caspar Weinberger convened a special panel composed of knowledgeable members of the news media and the military to recommend remedies that would be fair to the press while preserving military security. In its final report, the group suggested that every operational blueprint should include a public affairs plan and that the military should move the press to the scene of a conflict quickly. Since it was rarely possible to accommodate large numbers of journalists during the early stages of an attack, the panel suggested that an officially sponsored pool of correspondents could supply news to the rest of the press until full coverage was possible.

Although the Defense Department accepted those recommendations and established an official Pentagon press pool, it failed to take to heart the

commission's recommendation that every operational plan have a public affairs annex. As a result, when U.S. forces entered Panama in December 1989 to depose dictator Manuel Noriega, bad planning and unforeseen obstacles combined to create a public relations disaster. To preserve military security, the secretary of defense, Richard (Dick) Cheney, purposely called out the pool 5 hours late. Once in Panama, the group encountered more delays and worthless briefings. Transportation was virtually nonexistent, and the U.S. Southern Command's media center possessed too few fax and telephone lines to serve even the official pool, not to mention the hundreds of journalists who arrived over the days that followed. Under the circumstances, reporters became incensed when public affairs officers barred them from photographing the closed caskets of Americans killed in action. They also grew indignant when ABC News reporter Sam Donaldson, a big name in the news business, appeared to receive better treatment than they did.

When the buildup began for the Persian Gulf War in August 1990, the armed forces were determined to avoid the mistakes that had dogged their handling of the media in Grenada and Panama. They held regular news briefings, appointed high-ranking officers who could speak with authority as official spokespersons, and avoided exaggerated claims of progress. All those measures sat well with the press, but when ground combat neared in February 1991, the U.S. Command instituted a series of restrictions that seemed draconian to many. With nearly 1,000 correspondents vying to cover the war and up against a U.S. Army command that wanted as little to do as possible with the press, public affairs officers decided to force commanders to open up by establishing 25 five-person pools to cover events in the field. At the insistence of the U.S. command, each pool would have an official escort, and everything its members wrote would undergo security review, but the press would at least have some access to the fighting.

The situation deteriorated almost as soon as fighting began. Some escort officers took excessive advantage of their right to review press reports. Others stepped in front of news cameras when they objected to a line of questioning. Meanwhile, army units failed to transmit pool reports expeditiously, leading to charges from the press that the service was exercising censorship by delay. In contrast, ever

conscious of image, the U.S. Marines made it a point to cultivate press coverage by welcoming reporters. As a result, the army's stunningly successful left hook around the forces of Saddam Hussein went virtually unreported, while subsidiary operations by the marines in Kuwait received disproportionate coverage.

The army never forgot the lesson. During the U.S. interventions in Somalia from 1992 to 1994 and in Haiti in 1994, the armed forces exercised little control over the press because reporters were already at the scene and capable of operating without military assistance. In Bosnia and Herzegovina, however, the United States adopted an approach radically different from the one they had followed in the Persian Gulf. Assuming that journalists would develop a more positive attitude if they were thoroughly familiar with the troops and their mission, the army made reporters virtual members of the units they covered and abandoned all thought of censorship. Even so, on November 27, 1995, an embedded *Wall Street Journal* reporter overheard a brigade commander's pep talk to his troops. The article that followed was complimentary to the army and its men, but it noted that the officer, after telling Blacks in the unit to be wary of racist Croats, had added that U.S. forces would probably be in Croatia for far longer than the 1 year the administration of President Bill Clinton had promised. When the *New York Times* noted the next day that a senior U.S. official had condemned the officer's remarks, the article had a chilling effect on military-media relations not only in Bosnia and Herzegovina but around the world.

Reporting came full circle during the North Atlantic Treaty Organization–Yugoslav War of 1999. Reporters criticized the tight control of information at headquarters in Washington and Brussels; however, coverage of a relief mission in Albania was extensive and unfettered. With nothing to complain about but a shortage of hotel rooms, reporters characterized the effort as a shining example of military humanitarianism.

As the operation continued, the press speculated that a ground war was in the offing. A sizable number of reporters were embedded with units slated for movement to Kosovo, but when nothing occurred, only 30 of them remained with the troops. Given the lack of combat, many of the biggest news stories had to do with mishaps—for example, helicopter accidents, tanks mired in the mud, and the capture

by the Serbs of three soldiers who apparently lost their way. When the international peacekeeping force entered Kosovo, nonetheless, reporting from the field was generally favorable, leading both public affairs officers and journalists to conclude that the embedding had been a success.

September 11, 2001, and Beyond

With the end of the 20th century, it became increasingly evident that it was in the best interests of all belligerents in a war to explain not only why they were fighting but also why other nations should support their efforts. The increasing speed and diminishing cost of transmitting information—over the Internet, via satellite telephone and television, and through 24-hour global news programming—had so opened up the means of communication that no military endeavor could be deemed successful if it lacked sustained and coordinated public affairs efforts to inform the world.

In that light, although there was little initial need following the September 11, 2001, attacks on the World Trade Center to build a public consensus favoring war, President George W. Bush took pains in his speeches to solidify American and international support for a prolonged war. Emphasizing that he intended to hold all nations that supported terror accountable for the evil they caused, he asked the president of Afghanistan in public to surrender the leaders of the al Qaeda movement who had plotted the attack and then went to war against the nation's Taliban government when it declined to cooperate.

In the conflict that followed, the State Department hired an advertising executive, Charlotte Beers, to market the justice of the American cause to Muslim nations. The White House meanwhile established a Coalition Information Center to synchronize its evolving public affairs program and engaged a public relations firm, the Rendon Group, to promote democratic themes around the world. The Rendon Group also began to advise a new Defense Department agency, the Office of Strategic Influence, which sought to use a broad range of electronic media to flood closed societies with Western music, literature, and ideals. When allegations arose in the press, however, that the program was an Orwellian effort to spread false news abroad that could lead to military manipulation of public opinion at home, and high-level military public affairs officers warned

that the program might harm military credibility, the Department of Defense shut the office down. To counter continuing concerns that some among the military might attempt to confuse the enemy by using the American news media as an instrument of war to spread disinformation abroad, the Joint Chiefs of Staff released specific guidance in 2005 that emphasized that propaganda had no place in Defense Department public affairs programs. The policy, the deputy chief of U.S. Army Public Affairs, Brigadier General Mari K. Eder (2007), explained in a later article, went "to the heart of the morals and ethics that underpin our constitution" (p. 70).

A number of journalists traveled to Afghanistan, but they received little official assistance because the U.S. Special Forces were engaged in covert operations. As a result, although the Bush administration allowed reporters to visit aircraft carriers and Marine Corps amphibious ships, it afforded them little access to the pilots and troops who were doing the fighting. Seeking a broader view of events, some reporters chose to enter the field without military assistance. Although eight of them were killed in action, the American public seemed unfazed. Polls during 2001 and 2002 revealed that a majority supported their government's right to restrict press coverage in order to preserve operational security.

The possibility of military action against Iraq came to the forefront in early spring 2002, just as combat operations in Afghanistan seemed to be winding down. When media speculation fueled public conjecture that war was imminent, the coverage worked to the Bush administration's advantage by preparing American and world opinion for the likelihood that the fighting would soon shift into a new phase. By summer, while insisting that a decision one way or the other was yet to come, administration spokespersons began building a case for armed intervention: Iraq's leader, President Saddam Hussein, had connections to al Qaeda and was thus involved in the 9/11 attacks; his government was seeking nuclear capabilities; and his government possessed stockpiles of biological and chemical weapons, which it had already used on Iraq's Kurdish population and in an earlier war against Iran.

By February 2003, that campaign had achieved its effect. Polls showed that more than 70% of the American public backed the use of force. If the administration succeeded with the American public, however, nothing the United States said seemed

to have much effect in dispelling international concern. Instead, antiwar protests erupted in Great Britain, France, Germany, Morocco, Indonesia, and elsewhere. Reflecting the trend, Beers resigned on March 3, 2003, asserting that her attempts to gain Muslim support had been to no avail.

Two weeks later, the Bush administration moved against Iraq. During the conflict that followed, U.S. government spokespersons at home and abroad sought to allay Islamic concerns about the well-being of Iraq's people by emphasizing coalition efforts to provide humanitarian aid and publicizing pictures of Iraqis celebrating Saddam Hussein's fall. Playing on Muslim mistrust of U.S. intentions, Islamic media outlets responded by highlighting every mistake U.S. forces made and some they had not made. As the war progressed, moreover, no Iraqi nuclear capabilities or weapons of mass destruction surfaced.

Expecting success to speak for itself, U.S. military planners believed that an effort to embed reporters with U.S. forces would be an excellent way to ease the world's concerns while eliminating the frictions that had dogged military-media relations since Vietnam. The press reacted so well to the opportunity that hundreds of news outlets competed in a lottery for the right to participate in the program. The more than 760 reporters selected agreed to accept strict rules that banned all mention of topics such as ongoing missions, numbers of troops and aircraft involved in specific operations, rules of engagement, and intelligence collection methods and activities. Public affairs officers in Kuwait also registered some 2,200 unembedded reporters.

Critics within the media argued that some of the embedded correspondents suffered from extreme pro-American bias because of their close personal identifications with the troops. Concerns also arose that embedded correspondents lacked perspective and transmitted too narrow a view of the conflict. While expressing unease with the positive tone of some American reporting, news analysts nonetheless concluded that the decision to embed reporters had given journalists more access to this conflict than to any other since Vietnam. Although the reporting that resulted was sometimes narrow, the broad analyses that appeared in newspapers and on television often made up the difference.

The military, for their part, were largely satisfied with the program. At a September 2003 conference sponsored by the Army War College, representatives

from all the military services agreed that the presence of reporters at the scene had countered misinformation from militant Islamic sources while destroying the credibility of Saddam's war machine with the people of both Iraq and the world.

George W. Bush announced on May 1, 2003, that major combat operations had ended, but the remark was premature. Over the years that followed, insurgencies grew in both Afghanistan and Iraq that tested the ingenuity of both military planners and news executives. Following considerable trial and error, the military mounted surge efforts that showed considerable promise. By then, however, the traditional news media lacked the means to maintain the sort of coverage they had mounted at the beginning of the war. Although newspapers remained the main source of information, people were reading them online, free. With advertising revenues lagging as a result, many famous journals had gone under, and even the most successful were cutting back. As for television news, viewership for serious news programs was in serious decline, prompting broadcasters to feature lightheaded news that would attract audiences. In the end, although some 276 embedded reporters remained at the beginning of 2010, many of them represented online media rather than traditional news outlets. A number of them were independent bloggers with no employer to answer to but themselves.

What does the future hold for media-government relations? Only time will tell. It would be wise to remember, however, that even in wars where reporters possess the means for instant communication via satellite and cell phone, the military will have the upper hand because it will still control access to the battlefield. Even so, the news media will hardly be without advantage, for if they need the military and the government for the news they provide, official sources will need them just as much to attract support and to deter enemy propaganda by delivering factual, credible information both to the American people and to audiences around the world.

William M. Hammond

See also Journalists, Embedded; Public Affairs, Military

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MEDICAL DISABILITY, VETERAN

The meaning of veterans' medical disabilities is not static and can change in a relatively short period of time, since disabilities are defined not only medically but also socially and politically. What disabilities deserve benefits? What disabilities are service related? How can we conclusively determine the cause of disease? These questions are pivotal in forming governmental policies and the political agenda of veterans service organizations, and answering them, one must refer to a variety of aspects: (a) social attitudes to wars and the armed forces, (b) economic conditions, (c) the number of disabled veterans, (d) the nation's political culture, and (e) opinions of

the medical professions. Focusing on these factors, this entry describes what the government defines as medical disability of veterans that it has a responsibility of providing care for.

Benefits for Veterans With Disabilities

Both the Veterans Health Administration and the Department of Veterans Affairs (VA) provide services for veterans with impairment, based on the philosophy that the state should fix the earning capacity of veterans or compensate the loss of such ability from a service-related origin. The Veterans Benefits Administration offers Vocational Rehabilitation & Employment programs for veterans having more than 10% service-connected disability rating, if they are discharged “under conditions other than dishonorable.” To obtain benefits, an applicant first meets a vocational rehabilitation counselor, who determines whether the veteran can be entitled to Vocational Rehabilitation & Employment services. If the veteran has a disability rating of more than 20% or a serious handicap to employment, the veteran and a vocational rehabilitation counselor work together to choose employment or independent living as the suitable goal of rehabilitation and select a program track leading to it. The basic period of rehabilitation eligibility is 12 years from the date of a veteran’s separation from the armed forces or the first notification of a service-connected disability rating by the VA.

Veterans with service-connected or non-service-connected disabilities who cannot afford private health services can also qualify for a pension and/or disability compensation. They need to have served at least 90 days of active military service, 1 day of which was during a wartime period, to qualify with non-service-connected disabilities and must not have been dishonorably discharged. Additionally, a surviving spouse and unmarried children of a deceased veteran may be eligible for death pension benefits.

Disability Rating and Presumption of Service Connection

Since the Continental Congress adopted the first national pension law of the United States in 1776, the evaluation of veterans’ disability has depended on the judgment of how individuals’ impairments limit their earning opportunities. The Department of

Defense (DOD) evaluates whether a wounded soldier or a soldier with a disease is able to continue active military service and, if not, rates his or her disabilities to establish the availability of compensation programs for the retiring service member. When the DOD judges that a soldier should be discharged because his or her disability makes service in the armed forces untenable, the soldier usually receives a VA disability rating. The VA then determines the degree of handicap, focusing on the veteran’s prospect for civilian employment, while using the rating schedule shared by the DOD. The VA reevaluates its ratings periodically.

The two separate disability evaluations of the DOD and the VA reflect the transfer of service personnel from the military field to the civilian field in the governmental jurisdiction, which often results in producing different ratings. The DOD has an incentive to lower the level of a veteran’s disabilities because a rating of less than 30% disability exempts the DOD from paying lifelong compensation for a disabled veteran who served for less than 20 years. For coordinating the two departments’ ratings and ensuring consistency, the DOD and the VA established the Integrated Pilot Disability Evaluation System in 2007. They later expanded the system beyond the National Capital Region, in which it was implemented first, by their agreement of 2009, to “improve the timeliness, effectiveness, transparency, and resource utilization in transitioning Service members from the military service to the VA” (Department of Defense and Department of Veterans Affairs, 2009, p. 1).

To further improve rating procedures, in 2007 reports from the Institute of Medicine (IOM) and the National Academies recommended that the VA include quality of life and disabilities not limited to employment handicaps into its criteria to more precisely evaluate the total effect of impairments on veterans’ lives.

A veteran needs to present that his or her disability originated in the armed service before receiving governmental care and benefits. It is, however, sometimes impossible to determine whether an individual’s disability has service connection. Difficulties in determining etiology in addition to insufficient medical and service records are the main causes. To compensate for a lack of ability to conclusively prove the connection between medical issues and military service, the VA introduced a legal mechanism called

presumptive decision making or simply “presumption.” This procedure provides for the certification of a veteran’s disabilities, even when a soldier cannot establish that his or her disability has a service-related origin, based on certain facts ordained by Congress or the VA such that a veteran acquired a certain disease during a defined period after being on a specific campaign. With the legal remedy via presumption, the VA avoids rejecting veterans who have a right to benefits.

Congress enacted the first presumption law in 1921 for neuropsychiatric disease and active pulmonary tuberculosis for Great War veterans. Today, the VA infers that various symptoms were caused by radiation exposures in Hiroshima and Nagasaki, nuclear experiments, exposure to Agent Orange in Vietnam, and service in the Persian Gulf area. Although it requested professional medical opinions from the IOM, the VA set the presumption provisions independently behind closed doors. The IOM criticized the VA for its lack of transparency and argued that the political pressure of veterans’ advocacy groups influenced the presumption-making process without due regard to scientific legitimacy.

Agent Orange and Gulf War Syndrome

Recent cases involving Vietnam and Gulf War veterans reveal how controversial it is to presume disabilities’ connection to military service. Herbicides such as Agent Orange (AO), used as a defoliant by the U.S. military forces in Vietnam, appeared to expose U.S. soldiers to toxic chemicals like dioxin. While some medical professionals remain skeptical about the causal association between AO and Vietnam veterans’ disabilities, multiple studies have indicated the possibility that high AO exposure triggers or abets various disorders, including cancer, heart disease, and diabetes. Fierce criticism of the VA erupted when it denied the connection between AO and diseases other than chloracne (a skin condition). Also, Vietnam veterans have brought a number of class action lawsuits since the late 1970s against manufacturers that produced AO. Facing the mounting cry for relief of veterans’ sufferings, Congress eventually passed the Agent Orange Act of 1991. The act mandated the VA care for veterans if the “evidence for the association [between the disease and AO exposure] is equal to or outweighs the credible evidence against the association” (<http://www7.nationalacademies.org/ocga/laws/PL102-4.asp>). This law

also ordered biennial reports by the IOM about veterans and AO.

Although studies are ongoing, it is difficult to determine how many veterans were exposed to AO in Vietnam. Additionally, the potential harms of AO on veterans’ health may surface in the future. In October 2009, VA secretary Eric K. Shinseki decided to add B cell leukemias, Parkinson’s disease, and ischemic heart disease to the list of health problems presumed to be associated with herbicides, based on the opinion of the IOM.

Medical problems experienced by Gulf War veterans since 1990 represent a more ambiguous and confusing example. The VA and other federal agencies have conducted research on certain symptoms of veterans who served in the Gulf during Operation Desert Shield, Operation Desert Storm, and Operation Iraqi Freedom. Symptoms include chronic fatigue, joint and muscle pain, memory and concentration problems, stomach and bowel problems, and loss of sexual drive. Today, these are referred to under the blanket designation of “Gulf War syndrome.” Various agents, such as vaccinations, nerve agent pretreatment sets, chemical warfare agents, depleted uranium ordnance, toxic fumes from burning oil wells, and organophosphate insecticides have been blamed, but there remains no specific set of symptoms and single cause to explain the diversity of disabilities among Gulf veterans. In fact, the international scientific and medical community agrees that there is not sufficient evidence to define these illnesses as unique. Nonetheless, Congress established a presumption for some of these symptoms, associating them with the toxic “environment” of the Gulf area by passing the Persian Gulf War Act and the Veterans Programs Enhancement Act in 1998. These acts did not designate the causative agent, a crucial difference with the case of AO in Vietnam. These acts were subsequently applied to Operation Iraqi Freedom veterans.

Scientists blame the formal recognition of the diffuse and unproven syndrome and compensation measures for Gulf veterans, pointing out that the same disorders are common among veterans of other wars and exist even among civilians. Yet, the administrative decision to compensate or give benefits for veterans’ disabilities cannot totally depend on any scientific criteria, in spite of physicians’ commitment to medical objectivity. In fact, the growing list of presumptive provisions since the 1990s reflects a social and political attention on the causal

association between veterans' disabilities and toxic exposure in the armed services.

Conclusion

Based on interviews with UK Gulf War veterans, the anthropologist Susie Kilshaw points out the necessity of seeing veterans' claims of illness in a social context, which gives them a way to explain their sufferings. According to Kilshaw, the concept of Gulf War syndrome provides a frame of interpretation by which veterans understand their diseases as an unidentified threat such as mad cow disease and genetically modified foods. For Kilshaw, these represent signs of declining faith in medicine and a lack of trust in government institutions. Information from the media, doctors, friends, and families convince returning veterans that their disabilities originated in their military service, unless definite causes for their symptoms existed. Veterans' conclusions are shaped by their cumulative knowledge of the government's chemical and toxic operations. If so, improving disclosure of the government's information, growing transparency of its operation, and strengthening its accountability may contribute to calming down veterans' unrest.

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See also *Agent Orange*; Benefits, Veteran; Gulf War Syndrome; Medicine, Veterans; Veterans Affairs, Department of

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MEDICINE, MILITARY

The term *military medicine* denotes a specific field of medicine that focuses on caring for soldiers during war. Today, the military has approximately 39,000 combat medics who are responsible for directly administering treatment to military personnel. Their special training in emergency care is first-rate and has resulted in an increasingly high rate of injury survival. One of the primary goals of the Military Health System is to safeguard U.S. military personnel during times of war and peace. The U.S. military has historically been at the forefront of medical advancement. Since their introduction, military physicians have provided critical care and preventive medicine to all soldiers. Recently, the Military Health System began administering care to the relatives of military personnel. Moreover, military medicine has introduced the wider medical community to new technologies and practices. Military medicine has brought about some of the greatest medical breakthroughs, often through collaboration with civilian researchers. Their careful research has established effective mass casualty protocols, preventive medicine, and disease eradication.

Early Development of Military Medicine

During the period of the American Revolution, the social position of physicians began to change. Before

1775, each regiment had a surgeon on staff who accompanied it throughout its tours. Officers often came from the leisure class, while physicians were viewed as being slightly above enlisted personnel, granting physicians little authority. While the basic tenets of human anatomy were established, physicians still knew relatively little in modern medical terms, and their ability to heal the sick was limited. Surgeons, in contrast, were tasked with performing operations, including amputation and bullet extraction. Unlike physicians, surgeons were contracted to the military, their skills generally necessary only during periods of active conflict when bullet and shrapnel wounds necessitated treatment. Surgeons were viewed similar to cooks or blacksmiths—they performed an essential service, but did not have a position of authority within the military hierarchy.

In the years following the American Revolution, a number of medical advances took place. There was a much-needed overhaul of the military medical system that reorganized the pay schedule for physicians, and medical practice became rooted in science and the scientific method. In 1818, Secretary of War John C. Calhoun put forth legislation establishing a permanent army medical department. As its head, he chose Dr. Joseph Lovell, who initiated the methodical gathering of medical facts and standardized the admissions examinations for aspiring military surgeons. In 1834, Lovell, after years of effort, ultimately convinced Congress to compensate each army surgeon at the pay grade of major.

The high mortality rates of soldiers during the early months of the Civil War alarmed surgeons on both sides; however, the Union made the first concerted effort to save lives through medical technology. Charles Tripler and Jonathan Letterman, the medical directors of The Army of the Potomac, established a new evacuation system in an attempt to remove the sick and injured from the battlefield. They implemented new vaccination protocols, requiring all soldiers to receive vaccinations for smallpox, and oversaw quinine distribution to prevent malaria outbreaks. In addition, Tripler and Letterman built a system of subsidiary hospitals and stressed the importance of sanitation among soldiers to the Union officers. By the time of the Battle of Fredericksburg in December 1862, the Union's Medical Corps was superior to that of the Confederacy, which suffered from an ill-prepared medical staff and equipment shortages.

During the years after the Civil War (1866–1898), American medicine saw great change and modernization. Military physicians began incorporating the latest in medical theory and science, including Louis Pasteur's groundbreaking research concerning germs and disease, and Joseph Lister's method of antibacterial surgery. During this period, physicians in both the army and navy gradually began offering medical services to both sailors' and soldiers' family members.

During the Mexican-American War (1846–1848), the American Civil War (1861–1865), and the Spanish-American War (1898), "camp fevers" were widespread, especially among Union armies stationed in the southern areas. Between May 1, 1898, and April 30, 1899, 5,400 individuals died from "camp fevers," accounting for approximately 84% of deaths. "Camp fevers" were initially identified as a number of diseases, including typhoid, malaria, yellow fever, and typhomalaria. During the Spanish-American War of 1898, Captain Walter Reed established through microscopic analysis of blood that the primary cause was typhoid, a bacterial disease that can be stopped by correct use of sanitary camp methods. Unfortunately, U.S. medical officers—political appointees—had little knowledge of suitable sanitation measures; however, in 1909, Frederick F. Russell, a U.S. Army physician, developed a typhoid vaccine that was introduced into the army in 1909 and made mandatory for all military personnel in 1911.

The Medical Reserve Corps was created in 1908 as an agency separate from the National Guard. In addition, a Veterinary Corps was added to the medical department. Veterinarians were skilled in taking care of horses and mules, the primary animals used by the military. Moreover, veterinarians were indispensable in the examination of meat for the purpose of consumption. An arrangement was made with the American Red Cross to provide nurses in times of crisis. The social status of military physicians rose to new heights in 1910, when President William Howard Taft chose Leonard Wood, a Harvard-trained physician who served as an army physician, as Army Chief of Staff.

The Era of the World Wars

On entering World War I, the United States was able to implement many modernizations and improvements to medical protocols that proved essential in the fight against the Central Powers. One initial

difficulty revolved around combat aviation. Shortly after America entered the war on April 6, 1917, the military realized that a large number of pilots were dying from flight-related mishaps rather than in attacks by German planes. On investigating, army physicians found that pilots flew to the point of collapse. A new specialty, flight surgery, was established. These experts emphasized the importance of adequate rest periods between flights. The extensive use of poison gas led to the formation of movable degassing units that functioned under the direction of army physicians and supplied bathing systems and new uniforms. Widespread availability of the typhus vaccine dramatically reduced incidence of that disease during the war, and ongoing research into a tetanus vaccine bore fruit by 1924, a particular boon to soldiers. In France, American military medicine introduced a new triage system, allowing physicians to treat the sickest patients first. The injured were organized to prioritize life-saving care depending on that individual's likelihood of survival. The military also began to establish laboratories with army hospitals that aided in speedy diagnosis; likewise, X-ray machines became common in military hospitals throughout the country. The single greatest achievement of the American military during these years was the institution of blood transfusions to decrease the lethal consequences of shock and blood loss among injured personnel.

During the interwar years from 1918 to 1939, civilian medicine greatly affected military medical protocols through the development of specializations, such as cardiology, neurology, and orthopedics. During the 1920s, civilian physicians began to earn more money in the private sector, and as a result, it became more difficult to recruit physicians to the military health service. The Veterans Administration, an independent governmental organization established in 1930, aided in the recruitment of physicians by expanding employment opportunities and supporting increased pay scales, as the Veterans Administration began to offer medical treatment for veterans. The army and the navy created research centers studying common problems facing aircrews, including the effects of life-threateningly cold temperatures. Harry G. Armstrong, a captain in the U.S. Army Air Corps, researched embolism and found that the single most critical element in its development were nitrogen bubbles forming in a pilot's blood while flying at high altitudes.

In New London, Connecticut, the navy created a medical program researching submarine medicine, whose primary purpose was to have skilled physicians and corpsmen attached to submarine units. In addition, individuals graduating from the submarine program aided in the creation of lifesaving underwater breathing apparatuses for use in emergency evacuations.

During World War II, the United States was again able to implement cutting-edge medical technology. The interwar creation of quinacrine, a new prophylaxis to treat and prevent malaria, allowed medical professionals to dramatically reduce incidents of malaria—particularly vital during Pacific Island-hopping campaigns. In addition, the creation of penicillin greatly aided individuals suffering from serious wounds overcome infection.

Advancements in lifesaving technologies are well illustrated in the navy's Landing Ship, Tank (LST), which assisted in amphibious warfare operations by safely carrying a great number of soldiers and supplies to and from battle sites. With a little rearranging, LSTs became hospital ships. The powerful insecticide dichlorodiphenyltrichloroethane (DDT) was used by the military to control a severe epidemic of typhus in Italy and malaria in the Pacific.

The Cold War

During the Cold War (1947–1991), American military medicine continually adapted to civilian benchmarks, working to recruit military medical personnel in the face of rapidly rising salaries in the civilian sector while increasing the number of noteworthy developments for the medical field. Both the army and the navy launched residency programs in military hospitals intended to meet the standards required for practice in civilian specialties. Dependent care restrictions were reduced by the 1956 Dependents Medical Care Program, which allowed for utilization of, and reimbursement for, civilian health care when military resources were unavailable. Recruitment problems were improved through the 1972 Health Profession Scholarship Program, which offered qualified individuals the funds to attend medical school, as well as a monthly stipend for agreeing to serve in the military for a specified period. Another improvement centered on the Nurse Corps, which became a recognized subdivision of the military, with commissions awarded on a permanent basis.

Recent Advances in Military Medicine

During the Persian Gulf War, August 2, 1990, to February 28, 1991, military medicine protocols adapted to a shortage of physicians by creating an intricate personnel hierarchy that functioned under the watchful eye of physicians. When the U.S. Army went to Saudi Arabia, more than 24,000 of those deployed were medical personnel. Approximately 3,000 were licensed physicians and dentists. Additional health care workers included nurses and medical technicians. These individuals performed many of the tasks associated with military medicine.

In the most recent U.S. military engagements, the Afghanistan and Iraq Wars, a major problem confronting the medical community has been the widespread proliferation of traumatic brain injury (TBI). Estimates place the number of soldiers affected by TBI since the beginning of the Afghanistan and Iraq conflicts in 2001 and 2003, respectively, at more than 250,000. Of these, it is believed that up to 90,000 individuals exhibit signs and symptoms indicating the need for long-term care.

In Afghanistan and Iraq, military physicians have struggled with the increased number of head injuries, especially since the overall death rate for soldiers has dropped to an all-time low. Technological advances in body armor better protect soldiers from injuries to the chest and brain during explosions. The 1996 adoption of the Tactical Combat Casualty Care system created new trauma training protocols to further decrease death rates from nonlethal injuries. Moreover, both military and civilian physicians have greater knowledge regarding the treatment of closed head injuries.

While trauma care has kept up with the demands of the military, nongovernmental organizations and the Veterans Administration play a key role in bettering the lives of soldiers who survive with increasingly severe wounds. Improvised explosive devices have come to play a central role in disfiguring soldiers, with injuries often including second- and third-degree burns and amputation. Advancing technologies in cosmetic and reconstructive surgery aid soldiers with skin grafts and the removal of burnt skin. Many soldiers require amputation of limbs. Advances in orthopedics and prosthetic limbs allow wounded soldiers to regain as much normalcy as possible. Additionally, nonprofit organizations like the Wounded Warrior Project works with injured soldiers to help them adjust to their new lives postinjury.

Contemporary advances have also extended into the realm of mental health. Although post-traumatic stress disorder (PTSD) was officially recognized in the *DSM-III* in 1980, in recent years, the military has worked to clarify and simplify the diagnosis of PTSD among veterans, especially in light of high rates of PTSD among those who have served in Afghanistan and Iraq. Researchers have discovered that behaviors exhibited by someone with PTSD often parallel those of someone with a minor TBI. Magnetic resonance imaging may be used in the diagnostic stage, allowing physicians to chart the compression of alterations in the brain after a concussion. Symptoms include sleep disturbances, headaches, memory problems, and mood swings. Military medicine uses a variety of different types of therapy to address these issues. For mild cases of TBI and PTSD, treatment plans include the ancient Chinese practice of acupuncture. Other treatments for PTSD include cognitive, exposure, and virtual reality therapies and various medications.

Unfortunately, the military has seen a drastic rise in the rate of suicides and attempted suicides among active-duty soldiers since 2001. As more soldiers ask for access to counseling in theater, the Pentagon has reminded commanding officers that it is their responsibility not to stigmatize those seeking help. This is an essential reminder, considering that the rate of combat deaths for 2012 was eclipsed by suicides as of June among active-duty service members. While access to counseling is available, the military is working to tackle negative stigmas associated with seeking psychological help.

Cary Stacy Smith and Li-Ching Hung

See also Combat, Physical and Psychological Impact; Gulf War Syndrome; Medicine, Veterans; Posttraumatic Stress Disorder; Sexually Transmitted Diseases; Suicide; Surgeon General, Air Force; Surgeon General, Army; Surgeon General, Navy; Traumatic Brain Injury; Wounds and Injuries

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MEDICINE, VETERANS

American veterans can receive a wide range of medical care services from federal and state governments. Although they can choose health care programs from the Department of Defense under specific conditions, this entry focuses on the federal service provider that exclusively treats former soldiers and their families—the Department of Veterans Affairs (VA).

Historical Overview

There is no record of a federal hospital giving medical care to veterans as its primary purpose before the First World War other than incidental medical facilities in the custodial institutions founded in 1865 for the indigent and/or elderly disabled Union soldiers of the Civil War (i.e., the National Home for Disabled Volunteer Soldiers). When the War Risk Insurance Act of 1917 gave monetary support to disabled Great War veterans and survivors of dead soldiers, it also mentioned the hospital care and vocational rehabilitation programs. In 1921, vocational rehabilitation programs of the Federal Board for Vocational Education and Public Health Service Hospitals moved into the Veterans' Bureau to gather the administration of all federal benefits for the World War veterans under a sole agency. Besides, construction plans of new veterans' hospitals had already started. Yet the growing number of veteran's hospitals, admission of non-service-related patients, and the resultant increase of costs for administration led to the criticism against the Veterans' Bureau from the perspective of economy. Thus, the

Economy Act of 1933 cut the budget of the VA's Veterans Administration (VA, the successor of the Veterans' Bureau) under the turmoil of the first 100 days of the New Deal. As a result, construction of new VA hospitals stopped until the appropriation of \$21 million by Congress in 1935 and the approval of the construction policy by the administration of Franklin D. Roosevelt in 1937.

The health care needs of World War II veterans exceeded the moderate increase in the number of VA facilities and its personnel. Pressed by public revelation of deficiencies both in quantity and quality of services at VA hospitals, government officials sought to improve their health care programs by affiliating with recent developments in medical technology in research universities. According to the VA's requests, heads of medical departments formed the Dean's Committees, which accredited and furnished part-time and full-time doctors and other health care specialists to each VA hospital. This equipped the VA's medical system with the most recent technology and made its health care services catch up to the standard of other federal facilities. In return, the VA provided universities with fiscal supports and spaces for training, education, and research. Physicians held their superiority in decision making over lay officials after an intensive struggle to reconfigure VA facilities into institutions for medical care, not primarily as places for long-term custodial care. The VA's hospital system became a large military-academy complex in the medical field.

The late 1940s were also the period of reform in terms of racial discrimination. Until the upsurge of the civil rights movement after World War II, the VA hospitals had segregated African American patients in hospitals and provided them spaces, services, and staffs inferior to ones for White veterans except in the Tuskegee Veterans Hospital founded for the care of Black veterans. When the Truman administration applied to the VA hospitals Executive Orders 9980 and 9981, which prohibited racial discrimination in federal employment and the segregation of the armed services in 1948, accommodations were integrated.

Despite the modernization and the reform of the VA's hospital system after World War II, criticisms of health care programs of the VA did not disappear. Especially during and after the Vietnam War, popular media and public discussions on medical care for veterans were dominated by tragic stories of returning disabled soldiers and scandalous conditions of VA hospitals—for example, Ron Kovic's memoir

Born on the Fourth of July (1976). An antiwar organization of veterans, Vietnam Veterans Against the War, claimed the improvement of VA hospitals as one of its agendas. Furthermore, recognizing mental ailments prevailing among Vietnam veterans, including posttraumatic stress disorder (PTSD), physicians pointed out the shortage of mental health care personnel and facilities as the most acute problem of the VA's hospital system. In 1977, the National Research Council of the National Academies of Sciences submitted to Congress the report titled "Health Care for American Veterans." The report recommended reducing inpatient care for psychiatric disabled veterans by increasing the outpatient care facilities and personnel and expanding corroboration between VA services and community mental health resources. As a response to the anticipation of increasing veteran mental problems, the Veterans Health Care Amendments of 1979 established the psychological counseling system and alcohol and drug programs for Vietnam veterans. In addition, it authorized the VA to contract for private health providers when emergency medical care was needed by veterans.

Recent Developments

Following the reconfiguration of the VA into a department with a cabinet-level position in 1989, medical and health care activities for veterans came under the jurisdiction of the Veterans Health Administration (VHA). The creation of a new government department and the VHA within it did not allay the concerns raised by the veterans' service organizations and the public. With regard to the quality of health care offered to veterans, the VHA's hospital-centered structure emphasizing acute care was seen as inadequate for the needs of patients with chronic disorders needing primary care. Meanwhile, the declining percentage of younger veterans with service-related disabilities in the benefit recipients as a whole had been undermining the legitimacy of maintaining the large personnel and facilities of the VHA since the 1970s. In terms of budget, the pressure for reducing public expenditures for health care grew. The expectation of more responsibility by individual veterans in the maintenance of their own health expanded. The spread of "managed care" pressed the application of the system in federal hospitals.

In 1994, the undersecretary of health of the VA, Kenneth W. Kizer, started reform efforts of VHA

programs and public relations activities for the purpose of improving the agency's reputations. Main components of the reform included expansion of outpatient care capacities, accommodation to the needs of the growing number of elderly veterans, and improvement of accessibility to the VHA facilities in the face of the obvious number of empty beds in veterans' hospitals. Kizer and succeeding undersecretaries had to manage these agendas to adjust to the budget-cutting demand that itself was the major cause of reform efforts. For such a purpose, duplication of services between hospitals and other facilities was a major deficiency that needed to be fixed. Thus, the Veterans Health Care Eligibility Reform Act of 1996 enabled the VHA to restructure its health care system through establishing the Veterans Integrated Service Networks, which constituted 22 geographical service areas of the agency. Using allocated budgets, each Veterans Integrated Service Network coordinated its resources and workforce among its facilities and discouraged competition between them. The Electronic Health Record was another significant tool in efforts to make health care activities more rational. Via the technological update of interface in 1997, the Computerized Patient Record System greatly improved the efficiency and expediency of medical records for physicians. Furthermore, the Computerized Patient Record System contributed to reducing the rate of adverse drug events.

Due to these reform initiatives since the mid-1990s, the health care quality of the VHA improved greatly. In comparison to other health care services of the federal government, such as Medicare, there is a general feeling that the health care cost of the VHA per patient is cheaper and its protocols are more efficient. Today, the VHA, America's largest body of integrated public health care activities, is regarded as the most successful among health care systems in the United States, although the warrant for growing total budget remains.

Services Today

The VHA provides a comprehensive health care for veterans in 153 medical centers and more than 800 community-based outpatient clinics. The administration of this enormous public health care system is the biggest task of the VA. In Fiscal Year 2008, of the 250,000 employees of the VA, 222,000 were the personnel for medical care and research. In the same fiscal

year, the budget for medical care and research purposes was \$43 billion and \$500 million, respectively, while the total budget of the VA was \$90 billion.

Although medical centers provide a wide range of traditional hospital-based services for ex-soldiers, community-based outpatient clinics are facilities for easier access by veterans from their homes to the most common outpatient services, even in rural areas. From a historical perspective, community-based outpatient clinics are the complement of VA hospitals, which were concentrated in urban areas after World War II to be near research universities. In addition to hospitals and clinics, there are 48 VA domiciliaries that care for veterans in a “homelike environment.” Community Living Centers play a role like that of nursing homes. Furthermore, the VA provides grants-in-aid for the construction and acquisition of veterans homes by each state and for payment of per diem cost of individual veterans in state homes (i.e., in the State Veterans Home Program). Plus, about 230 Vets Centers provide readjustment counseling and outreach services to veterans and their families.

All veterans of the U.S. Army, U.S. Navy, U.S. Air Force, Marines, or Coast Guard are potentially eligible for health care services from the VHA if discharged “under conditions other than dishonorable.” Also, Reservists and National Guard members who were called to active duty by a federal executive order or were left with a service-connected disability may qualify for VA health care benefits. Following the submission of a form available on the VA’s website, an applicant will be examined for his or her eligibility by the VA.

The VA offers family members of veterans comprehensive health care programs, such as Civilian Health and Medical Programs of VA. The application form is available on the VA’s website. In this program, the VA shares the cost of covered services and supplies with eligible beneficiaries. If a veteran is rated permanently and totally disabled by his or her service by a VA regional office, whether dead or alive, or if he or she died from a service-connected disability, the veteran’s spouse and children are eligible for Civilian Health and Medical Programs. In limited cases, the surviving spouse and children of a military member who died in the line of duty are eligible too, but most of them can apply for TRICARE from the Department of Defense instead of Civilian Health and Medical Programs.

Programs of the VHA have been updated to tackle health problems inherent to returning soldiers as depressive legacies of recent wars:

- The environmental warfare in Vietnam exposed soldiers to herbicides such as Agent Orange. Congress passed the Agent Orange Act in 1991, mandating care for veterans known to be exposed to Agent Orange. Today, the VA recognizes certain diseases of veterans—chronic lymphocytic leukemia, multiple myeloma, prostate cancer, and others—and birth defects of children of veterans as associated with exposure to herbicides.

- The VA and other federal agencies have been conducting research on certain symptoms among veterans who served in the Gulf during Operation Desert Shield, Operation Desert Storm, and Operation Iraqi Freedom. They include neurological disorders and are bracketed as Gulf War syndrome. Although the VA did not determine the cause of symptoms, it recognized some of them as associated with military service in the Gulf.

- Neurological and psychiatric cases among veterans are increasing as the United States conducts the Global War on Terrorism in the early 21st century. A recent study estimated that 18.5% of soldiers who returned from Operation Iraqi Freedom and Operation Enduring Freedom met criteria on a survey of probable PTSD and depression. Many of them do not receive the mental health care needed to remit their symptoms.

- As a part of the Health Care for Reentry Veterans, the VA provides veterans referrals and linkages to medical, psychiatric, and social services to prevent homelessness, help readjustment into communities, and decrease the reincarceration of those leaving prison.

- For care of military sexual trauma and PTSD of both female and male veterans, every VA facility has a designated military sexual trauma coordinator who can help them find and access VA services, state and federal benefits, and community resources.

- The VA administers the Veterans Chat Service by trained counselors on the VA National Suicide Prevention Hotline.

Outstanding Problems

Despite recent development of the VHA's health programs, there remain many challenges. Unmet mental health care needs of Operation Enduring Freedom and Operation Iraqi Freedom veterans are among such issues. Because they are widely dispersed around the country, it may be difficult to access a VHA's mental care facility and see a specialist, especially in rural areas, and sometimes these facilities are oriented toward caring for older chronic patients from former wars. For increasing accessibility, concentration of physicians in urban areas and an inadequate veterans' budget are significant bottlenecks. To fill gaps between needs and provisions, the VHA and private service providers are cooperating to expand the utilization of community mental health centers in the care of veterans. For the quality improvement of the mental health of recent war veterans, some scholars point out further demands for encouragement of veterans with potential needs of care to come to medical facilities, for increasing the workforce capacity of the VHA and community health care providers, and for evidence-based treatment for PTSD and depression, including psychotherapy and medications.

These visions require the VA to expend further cost for care and cooperation with private and community health providers. Yet, it is not clear whether the VA can ensure a budget sufficient for the development of medical care for veterans. Veterans' health care is at the discretion of Congress, unlike entitlements such as Medicare and Medicaid. While the latter can automatically claim their increasing expenditures from the federal government, Congress annually decides the size of the budget appropriated to the former. When the total cost for health care programs increases, the pressure for economy can lead to focus on discretionary programs such as veterans' medicine. This situation necessitates the limitation of eligibility for VHA health care to poor veterans and those with service-related disabilities. As a result, VA patients can become sicker and more indigent than the general population.

Conclusion

Historically, health care services for veterans have been distinguished from health care services for the rest of the citizens of the United States. This distinctive status of medicine for former soldiers created a

paradoxical situation. For keeping its own health, the United States seems reliant on the private and market sectors to the largest degree among industrialized nations. Nevertheless, it possesses one of the biggest public medical care agencies in the world. Professional management of the VA's program by physicians enabled such first-class health care for returning veterans. Furthermore, it is an irony that despite criticisms of the VHA based on the ideological revulsion of state medicine, reforms resulted in the establishment of the most efficient and prestigious VHA. The VA has to address diverse and changing health needs of both younger veterans readjusting into communities and an aging group of earlier war veterans gradually leaving society, plus their family members. It cares for almost all generations in America. The VA's medical care activities are a distinct contradiction in America's self-image as a country of private medicine.

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See also Medical Disability, Veteran; TRICARE (Military Health Plan); Veterans Affairs, Department of

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MEXICAN-AMERICAN WAR

This conflict, fought between the United States of America and the United Mexican States from April 25, 1846, to February 2, 1848, resulted in Mexico ceding to the Americans the area that became the present-day states of Texas, New Mexico, Arizona, Nevada, and California in return for \$15 million and assurances of the rights of Mexican citizens remaining in the ceded territories. The history of the conflict, discussed in this entry, falls in seven segments: (1) the background, (2) military capabilities, (3) the northern and western battles, (4) the battles in central Mexico, (5) the negotiations, (6) lessons learned, and (7) historical interpretations.

Background

In 1821, a newly independent Mexico inherited the boundaries set in the 1819 Adam-Onís Treaty signed by the United States and Spain. However, earlier that year, the last Spanish authorities in Texas granted the American empresario Moses Austin permission to establish a colony of 300 families. The Spanish hoped that the admission and assimilation of such immigrants would create a barrier against future filibusterers and other annexationists seeking to expand U.S. territory. Also, the additional settlements in Texas could provide a barrier to incessant Indian raids.

On Austin's death in 1821, the grant passed on to his son, Stephen Fuller Austin. Under his leadership, American immigration increased. On March 2, 1836, the colonists declared Texas independent of Mexico. In their Declaration of Independence, they accused the Mexican government of violating fundamental and inalienable liberties. The colonists identified the precipitating cause of their revolt as

the violent February 27, 1836, overthrow of the Mexican government by Conservatives intent on repealing the less conservative 1824 constitution.

However, many Mexican historians argue that the colonists never intended to assimilate into Mexican society and instead used the tumult created by that 1836 coup d'état as an excuse to secede. General Antonio López de Santa Anna led forces sent north to crush the rebellion. Following the destruction of Texan garrisons at the Alamo and Goliad, he divided his forces into five columns. Leading one of the columns northeastward past present-day Houston, he and some 1,200 men were defeated at San Jacinto by Texans under General Sam Houston.

Although Santa Anna acknowledged Texas's independence following the battle, the Mexican government refused to do so. Given the parlous state of Mexico's treasury and internal warfare, that nation made only one effort at reconquest. This ended in a Texan victory at the Battle of Saldado Creek (September 18, 1842).

Subsequently, Mexico branded the 1845 U.S. decision to admit Texas into the Union as an act of war. Once U.S. troops entered Texas and then began constructing Fort Texas opposite Matamoros, an armed clash of some sort was inevitable. The senior leadership of Mexico's army harbored no illusions about their nation's military strength and hoped to confine the conflict to the border regions.

Military Capabilities

The two armies differed considerably in their structure, training, and equipment. At the start of the war, the U.S. Army mustered 8,500 men concentrated primarily in the infantry and artillery branches.

Although the American cannons and mortars varied from state-of-the-art pieces to some used during the U.S. War of Independence, the recently acquired 1842 family of artillery weapons proved critical to the Americans' success on a number of occasions. Designed and produced in the United States, these cannons and mortars utilized the latest alloys. As such, the 6- and 12-pound pieces could be rapidly moved by horse from one part of the battlefield to another. At the Battle of Buena Vista, this mobility enabled the artillery to deploy quickly enough to meet *en serie* thrusts from a Mexican force that outnumbered General Zachary Taylor's forces by more than three to one. Also, the destructive power

of the American artillery enabled U.S. commanders to significantly weaken any fixed point, no matter how heavily fortified, that they wish to take.

Overall, the quality of the officers and enlisted ranks was excellent. Both Taylor and General Winfield Scott were officers of proven competence and their subordinate commanders mostly were graduates of the United States Military Academy at West Point. The enlisted men were trained to a high standard and stood well prepared for their responsibilities.

However, three weaknesses marred this otherwise impressive picture. First, the cavalry arm proved too small to either secure the long supply lines that would extend from Veracruz to Mexico City or hunt down and destroy Mexico's mounted partisans. At first, both Taylor in northern Mexico and Scott in central Mexico addressed this problem by employing Texas Rangers in a scouting and counter guerrilla capacity. They did not prove wholly successful in either case. Also, their brutal treatment of civilians alienated many Mexicans.

Second, the volunteer regiments appended to the regular army by Congress proved less effective than did the regular forces. While the regulars completed a required, comprehensive, and consistent program of training, the preparation of the volunteers varied in quality from one unit to the next. Often, their officers owed their position to election by their troops rather than to their ability to command. Soldiers ill prepared for war led by officers untrained or unsuited to command created problems both on and off the battlefield. The worst single incident occurred at the Battle of Buena Vista, where the Arkansas Volunteer Regiment broke and fled in the face of an advancing enemy.

Last, the trust and openness necessary to establish the most productive working relationships between a commander in chief and his senior generals did not exist. President James Knox Polk, a Democrat, disliked and distrusted both Scott and Taylor because they publically identified with the opposing Whig party and because he thought they harbored presidential ambitions. Consequently, the success and popularity that the two generals achieved by virtue of repeated victories made the president fear them even more.

In return, both generals eventually saw Polk as a man bent on their destruction. Taylor bitterly concluded that the president's decision to invade central

Mexico by sea rather than by allowing his own forces to move south was motivated by Polk's desire to prevent him from gaining further success. Scott, who was cashiered by Polk, no doubt shared such sentiments.

As a result, communication between the commander in chief and the generals proved barren. When Scott argued that the result of a continued U.S. occupation most likely would be collapse of Mexico's government and when Taylor suggested an end to the occupation by unilaterally withdrawing to the Rio Grande, Polk rejected their opinions and ordered an expanded occupation. Fortunately for the Americans, the Mexican army confronted greater problems.

On paper, Mexico's army numbered more than 30,000 men. However, many of these soldiers existed only on paper, with corrupt civilian and military officials pocketing their wages. Those Mexican forces that did take the field proved to be in far poorer condition than their American counterparts. The worst deficiencies existed in the officer corps.

From 1821 onward, the Mexican army's officers became involved in the violent overthrow of numerous governments. While many of them accumulated considerable experience in shooting fellow Mexicans, they were not professionals in the sense that this term was understood in the United States or Western Europe. Also, to a far greater extent than the American foe, this army had been burdened by officers holding rank on the basis of political influence rather than competence. These men would be of as little value to Mexico's war effort as the one politically appointed senior American commander (General Gideon Johnson Pillow) was to the American cause.

Additionally, the dire state of Mexican finances and widespread corruption meant that the army lacked funds to purchase modern weaponry or adequate supplies. That shortcoming would be evident in the field throughout the war. At the start of the conflict, General Mariano Arista reported that a lack of supplies severely limited his movement along the northern frontier. The powder provided to his artillerymen proved to be of such inferior quality that at the Battle of Palo Alto their shot rarely reached the American lines. During the later battles for Mexico City, General Pedro María de Anaya surrendered at Churubusco because he had exhausted his ammunition.

The only arm in which Mexico possessed an advantage was the cavalry. From the earliest years of the colonial era, the owners of Mexico's great estates (*haciendas*) considered the ownership and mastery of horses a political and social obligation. As was the case with the southerners who formed the Confederate cavalry during the U.S. Civil War, they and their mounted employees spent many of their waking hours in the saddle. In both cases, the result was a skilled and highly mobile force.

At sea, the Mexican situation proved more dire than on land. The industrial base and fiscal resources needed to construct and maintain a navy had not existed in Mexico since 1821. The fleet consisted of a few small ships incapable of confronting their foe in a major battle. By contrast, the substantial U.S. Navy could land troops and take cities along either of Mexico's coasts more or less at its discretion.

Last, instability of Mexico's federal government proved very damaging to the war effort. During the conflict, vital functions such as the collection of taxes and the provisioning of the army could not take place. With generals serving as presidents and presidents becoming generals, both the military and civilian administrations suffered as political parties maneuvered for their own advantage.

The Northern and Western Battles

On May 3, 1846, Arista led some 4,000 troops across the Rio Grande. Five days later at Palo Alto, he encountered a U.S. force, half the size of his troops, marching to reinforce the garrison at Port Isabel. The ensuing battle was a contest of artillery. Here, the U.S. force, led by Taylor, possessed distinct advantages.

While Mexican shot often did not reach U.S. lines due to the poor quality of the gunpowder and the shorter range of their pieces, U.S. cannon struck their opponent's ranks with deadly effect. Also, the greater mobility afforded to the American commanders by the 1842 family of artillery pieces allowed rapid movement of cannon to threatened sectors. Known as Flying Artillery, these weapons proved decisive.

On the following day at Resaca de la Palma, the two armies clashed again. Unlike the previous day's battle, this contest primarily was an affair of infantry and cavalry. Bold attacks by the outnumbered American shattered Arista's army. Mexican

casualties for the two battles totaled some 350 dead and 600 wounded with U.S. losses being 44 killed and 137 wounded.

Arista retreated and the Americans occupied Matamoros on May 17, 1846. From there, Taylor struck southward, taking Camargo on July 14 and then moving westward to his main objective: the city of Monterrey. The assault on the city proved to be a costly affair, with 120 Americans killed in action and 411 wounded. Given these casualties and the prospect of more costly urban fighting if the battle continued, Taylor accepted the offer of an armistice. Signed on September 25, 1846, that agreement allowed the Mexican infantry and cavalry to withdraw. Taylor's army then occupied the city. However, two problems soon emerged.

First, General Jose Urrea, a Mexican commander associated with the Goliad massacre during the Texas War of Independence, led a partisan movement consisting of Mexican cavalry and mounted ranchers. They emerged as a major threat to U.S. supply lines. However, Taylor's most severe challenge came as a result not of actions by Urrea, but because of a decision made in Washington.

On January 3, 1847, Taylor, as per orders from Secretary of War William Learned Marcy, began transferring troops to the army being assembled by Scott for the invasion of central Mexico. On learning of this depletion of Taylor's strength, Santa Anna began preparing an attack on Monterrey.

Taylor realized the futility of barricading himself in the city and enduring a siege in the middle of hostile country. So he moved south with a force of barely 5,000 men to confront Santa Anna at Buena Vista on February 22, 1847. The size of the Mexican force has been estimated at 20,000 to 25,000 men. During both the first and second days of the battle, Mexican forces attacked *en serie* rather than en masse. That enabled the rapidly moving U.S. artillery to shift from one threatened sector to another. The destructive firepower of the American cannon proved decisive and on the night of February 23, 1847, Santa Anna ordered a retreat. At the battle's end, 40% of his army was killed, wounded, or missing in action. In contrast, Taylor lost some 15% of his army. The Battle of Buena Vista concluded major hostilities in the northeast.

In the west, American forces achieved their initial objectives set by Polk: to take the Mexican provinces of New Mexico and California. This campaign

began on June 30, 1846, as Colonel Stephen Watts Kearny led a force of 500 regulars and 1,100 volunteers from Fort Leavenworth, Kansas. They reached the New Mexican capital of Santa Fe on August 18, 1846, having met no significant opposition. Although Governor Manuel Armijo tried to raise a militia force from some 57,000 Mexicans living in that province, he failed to do so.

Kearny entered Alta California in December 1846. His forces proved vital in crushing the Mexican resistance that had remained after both the earlier U.S. naval landing at Monterey on July 7, 1846, and the capture of Los Angeles by a naval expedition on August 12, 1846. Polk believed that once he seized these two Mexican provinces and secured the Rio Grande frontier, the Mexicans would accept a *fait accompli* and negotiate a peace. They did not.

The Battles in Central Mexico

Although the Mexican territories so far occupied by the United States amounted to hundreds of thousands of square miles, they contained only 7% of Mexico's population. That demographic reality left the Mexican government with considerable resources for further resistance. Any Mexican government surrendering half of the national territory before the possibilities of such resistance had been exhausted would have faced charges of (and probably criminal trials for) treason. So there would be no Mexican request for peace. Consequently, the United States proceeded with the invasion of Central Mexico.

On March 9, 1847, the Americans landed at Collado Beach, several miles south of the port of Veracruz. They chose this site to avoid the very modern and potent French cannon in the harbor fortress of San Juan de Ulúa. Marching north, they besieged the city for 15 days and forced its surrender. Since every drop of water needed to sustain the 5,000 Mexican in the harbor fort came from Veracruz, San Juan de Ulúa soon surrendered.

Scott then decided to move his forces off the coastal plains before the yellow fever struck. Before doing so, he promulgated a strict policy regarding the treatment of civilians that would prove of great benefit to his army. Scott ordered his men to pay for every item taken from Mexicans, to commit no offenses against them, and to show public respect to

religious and civil authorities. He understood that unless Mexicans along the route sold food to his forces, he could not advance. Also, Scott thought that such civility would lessen the willingness of the more than 2 million Mexicans living athwart his line of march to participate in a mass uprising.

On April 8, he headed toward Mexico City. Santa Anna and a Mexican force of between 11,000 and 12,000 men awaited him at Cerro Gordo, the mountain pass leading from the coastal plain to the highlands. Rather than focusing on frontal attacks against well-fortified positions, Scott exploited a gap in the Mexican defenses located by engineers led by Captain Robert E. Lee. Following initial clashes on April 17, 1847, the Americans successfully attacked this weak point at Atalaya, stormed the El Telégrafo position in close quarters fighting, and then struck Santa Anna's main camp at Cerro Gordo. The Mexican position collapsed in barely 3 hours.

At this point, the Mexican president Pedro Maria Anaya decided to begin guerrilla warfare in central Mexico. In an April 28, 1847, proclamation, he called for volunteers to command a new force, the Light Corps (*Cuerpo Ligero*). The terms of appointment required that each commander have sufficient private resources to support his force and that he operate in an assigned geographic area.

By June 1847, these guerrillas became so formidable that Scott informed Marcy that a force of 1,200 to 1,500 men would be needed to escort a single U.S. general from the forward American positions back to Veracruz. During July to August 1847, every American supply convoy leaving Veracruz departed with an escort of at least 1,000 soldiers. Meanwhile, Scott marched toward the climactic battles that awaited him before Mexico City.

There, Santa Anna awaited him with a force of some 20,000 men. Many of these men joined the army under duress and did not receive adequate weaponry or training. Also, the officers Mexico fielded for this battle reflected long-standing weaknesses in the national army. Between 1821 and 1847, generals participated in many of the 29 (often violent) changes of government that took place during those years. In an environment in which advancement rested in large part on political factors, a first-rate officer corps did not develop.

On entering the Valley of Mexico, Scott confronted a formidable set of geographic barriers. To the south and east, Lakes Chalco, Texcoco, and

Xochimilco limited an invader's movements as did nearby marshes and swamps. Consequently, Santa Anna assumed that Scott would approach from the northwest and constructed a very strong defensive position at El Peñon.

Scott then took the same course he had taken at Veracruz and at Cerro Gordo: He found an alternate avenue of approach. That route consisted of a ravine passing through the Pedregal, an area of volcanic stone lying in the southern sector of the defenses. At dawn on August 20, 1847, U.S. soldiers under General Persifor Frazer Smith surprised and routed General Gabriel Valencia's Army of the North at Contreras.

Santa Anna responded by trying to close this gap in his defenses by ordering several commands to regroup at Churubusco. In turn, Scott promptly attacked this point from both the front and rear. On August 20, 1847, U.S. forces turned the flank of the Churubusco position, forcing a second Mexican retreat. Although American losses had been severe (163 dead and 865 wounded), Mexican losses amount to some 10,000 men killed, wounded, and (mostly) missing.

The truce then requested by Santa Anna lasted until early September, when Scott, angered by the Mexican's efforts to rebuild its army, informed the foe that military operations would resume on September 6, 1847. On September 8, 1847, Scott's forces attacked at Molina del Rey and Casa Mata. Inexplicably, the American commanders did not give their artillery time to do its deadly work and the Mexican defenders repelled multiple attacks at great cost to the Americans. Only after employing the artillery to full effect did the Americans take these points. During these attacks, the U.S. Army lost more men in less time than at any other confrontation of the war. American casualties totaled 787, of whom 116 were killed. This amounted to almost a quarter of the forces engaged. Mexican losses stood at 2,000.

The final battle for the capital took place on September 13, 1847. In this confrontation, Scott attacked Chapultepec Castle. Having learned the lessons of the previous day, he ordered that an intense and prolonged artillery bombardment precede the infantry assault. The fortress fell that day. Rather than witness an American triumph, one young cadet defending the castle jumped from the parapet to the ground wrapped in his nation's flag.

On the following day, Scott entered Mexico City. A group of civilians greeted him with sniper fire and a barrage of rocks. He responded by cannonading part of the city and threatening to allow his troops to begin looting if fire did not cease. The hostile Mexicans complied. U.S. casualties in the battles for Mexico City numbered some 3,000, with Mexican casualties being at least five times that figure.

In Mexico City, Scott maintained his conciliatory policies toward civilians. He allowed the municipal government to retain its powers and gave it revenues belonging to the national government. Soon thereafter, he turned his attention to guerrillas by dispatching 5,000 men to man garrisons at five points along the supply route. However, supply convoys continued to require escort exceeding 1,000 men until the March 1848 truce took effect.

The Negotiations

On the day before Scott's forces entered Mexico City, the Mexican government left the capital for Queretaro, some 125 miles to the north. In spite of their circumstances, the nation's legislators and president were not ready to surrender. Some of them believed that by waging a guerrilla war, Mexico could deny the Americans a clear victory and ultimately force them to withdraw. Also, many politicians still feared the accusation of treason that might result from the surrender of much of the nation's territory. Last, Mexicans of all political persuasions took hope from a report of rising antiwar sentiment within the United States.

There, the unexpectedly high human and financial costs of the war strengthened the Whigs, who always had opposed Polk's expansionist goals. Also, powerful forces within his own Democratic party grew increasingly worried about the possibility that the addition of so much new territory would disrupt the balance of legislative power between the two main regions of the United States. Northerners feared that the new territories would become states open to slavery with a consequent increase in southern power in both the federal House of Representatives and the Senate. Conversely, many Southerners thought that the new territories would be filled with immigrants and free-state advocates who would proceed to reduce the South to a politically marginal force in both legislative bodies.

In April 1847, a State Department clerk, Nicholas P. Trist, joined Scott's army to negotiate a final peace treaty with Mexico. Tensions arose between Polk, Scott, and Trist over the terms for ending the war. The president stood willing to occupy Mexico until the Mexican government agreed to his terms. In contrast, Scott remained convinced that if the American occupiers remained indefinitely, Mexico would collapse into anarchy and that there would be no government with which to sign a treaty. Trist, although publicly loyal to Polk, privately considered the war an unjust one and sought a treaty that would take as little from Mexico as possible while minimally pleasing the president. Polk eventually resolved these conflicts by cashiering Scott and recalling Trist. The diplomat, however, refused to accept his recall order and proceeded to negotiate the Treaty of Guadalupe Hidalgo signed on February 2, 1848.

The consideration that finally brought the Mexican government to the peace table was the revolts occurring within Mexico. With most of the Mexican army having been defeated by the Americans, no adequate force remained to secure Mexico's social order. That polarized structure included a majority composed of largely impoverished Indians and mestizos (persons of mixed ancestry), who had little role in the nation's political or economic life, and a ruling minority of more lightly pigmented Mexicans, who feared them.

By late 1847, revolts had spread from southern Mexico to the center of the country, and senior officials of the government feared the prospect of a nationwide war along lines of ethnicity. The eruption of that sort of conflict at the start of Mexico's 1810 War of Independence had cost the nation 1/10 of its population and decades of lost growth. The Mexican government now sought aid from the invader.

In the Truce Agreement of March 6, 1848, the U.S. Army agreed to disperse any group of armed men their forces encountered other than those of the Mexican army. Since the Americans held Mexico City, Puebla, Monterrey, Veracruz, Tampico, Acapulco, and Perote, the U.S. Army now protected major cities and strategic points from rebel attack. Additionally, substantial quantities of infantry weapons and ammunition were sold to the Mexican government at below market prices. U.S. forces completed their withdrawal from Mexican territory during August 1848. By 1849, some 20,000 Mexican troops were fighting various rebel groups.

That truce agreement proved as critical to ending the conflict as did the Treaty of Guadalupe Hidalgo. Although Trist's treaty gave the United States the Rio Grande boundary sought by the Texans, he abandoned Polk's objective of obtaining Baja California. Also, the two nations pledged to respect the rights of Mexicans in newly conquered U.S. territories who elected to become American citizens and to cooperate on subduing hostile indigenous border tribes. Although very much angered by Trist's concession, Polk nonetheless decided that a better document could not be negotiated in the rapidly changing political climate.

Lessons Learned

First, the conflict demonstrated the critical military importance of maintaining good relations with the civilian population of an occupied nation. Had Mexicans along Scott's line of march either withheld food or participated in a general uprising, the U.S. forces, which totaled barely more than a single modern division, well might not have reached Mexico City. But his insistence that his troops respect the religion, private property, and autonomy of the Mexican communities through which they passed converted potential opponents into assets. Mexicans sold food to his army, thereby relieving Scott of a critical supply concern. Also, allowing local officials to continue exercising authority in managing day-to-day affairs meant that the American general in chief would not have to constantly weaken his forces by assigning small and easily isolated garrisons to each town.

Furthermore, the conflict demonstrated the importance of excellent leadership. Scott proved himself a bold, thoughtful, and sagacious commander. Those qualities marked the distinction between victory and defeat. For example, if he had allowed his troops to commit the offenses to Mexican civilians and sensibilities that characterized Taylor's campaign in the north of the country, the resulting civilian hostility well might have cost him the final victory and perhaps even his life. But he learned from Taylor's errors and consequently promulgated rules of conduct that he then strictly enforced. Similarly, he swiftly recognized the menace posed to his infantry by mounted guerrillas and modified his army's procedures to minimize casualties resulting from guerrillas picking off stragglers.

In contrast, Santa Anna's failure to act at a critical point cost his nation dearly at Buena Vista. Had he ordered his army to attack *en masse* rather than *en serie*, the American's flying artillery would not have been able to direct the same massed fire against an entire army that it could when facing piecemeal attacks. Here, the victory might have been Mexico's had he seen the opportunity. Similarly, his failure to adequately fortify his rear at Cerro Gordo cost his nation an entire army and opened the country's heartland to attack. Last, his lack of imagination and consequent failure to order adequate reconnaissance before the opening battle for Mexico City blinded him to the fact that the Pedregal indeed could be crossed by the foe. Santa Anna's mediocrity proved most damaging to Mexico's cause.

Scott's campaign also demonstrated the value of a lean force structure. His decision to divide his force into four autonomous all-arms units increased the flexibility with which they could respond to various contingencies. Unencumbered by the necessity of waiting for a steady flow of supply trains bringing food to his army, he could move rapidly.

Last, the campaign demonstrated the critical importance of good civil-military relations and provided examples of the difficulties that can be expected to occur as a matter of course. The greatest of these was the matter of perception. From Washington, Polk and his fellow expansionists perceived the struggle as a primarily political one and insisted on an indefinite occupation. In contrast, Scott's perspective was that of a general deep into enemy territory. To him, indefinite occupation was not a tactic but a menace. While these differences might have been resolved had the president and the general in chief trusted each other, they did not. The president saw Scott as a potential political rival. This poisoned their working relationship.

Historical Interpretations

Throughout the remainder of the 19th century and the first third of the 20th century, U.S. historians wrote of the conflict in a triumphant tone. Horatio Ladd's *History of the War With Mexico* (1883) and George Lockhart Rives's *The United States and Mexico* (1913) both portray the outcome of the conflict in very positive terms. This school of thought reached an apogee with the 1919 publication of Justin H. Smith's *The War With Mexico*. In

this two-volume work, he deemed the U.S. seizure of half of Mexico's territory to be just compensation for various acts of Mexican misconduct.

This flow of U.S. historical interpretation began to turn with the 1935 publication of Albert K. Weinberg's *Manifest Destiny: A Study of Nationalist Expansionism in American History*. Therein, the author attributed the cause of the conflict to catalysts both ignoble as well as honorable.

In the following decades, historians approached the conflict from multiple perspectives. Works emphasizing motivations, such as racial prejudice and greed, included Reginald Horsman's *Race and Manifest Destiny* (1981), Thomas R. Hietala's *Manifest Destiny: Anxious Aggrandizement in Late Jacksonian America* (1995), and Richard Griswold del Castillo's *The Treaty of Guadalupe Hidalgo: A Legacy of Conflict* (1991). Concurrently, other authors sought to exhaustively chronicle the conflict without taking a triumphal or condemnatory perspective. Most prominent among these books are K. Jack Bauer's *The Mexican War 1846–1848* (1974) and the work jointly authored by Seymour Condor and Odie B. Faulk in *North America Divided: The Mexican-American War 1846–1848* (1971).

In Mexico, the books published in the aftermath of the conflict utilized a primarily narrative perspective rather than the combined narrative and thematic perspectives seen in the work of Lockhart, Rives, and Smith. Works of excellent quality making extensive use of primary sources include Ramon Alcaraz's edited volume *Apuntes par la historia de la guerra entre Mexico y los Estados Unidos* (1848), Carlos Maria de Bustamante's *El Nuevo Bernal Diaz del Castillo, o sea, la historia de la invasion de los angloamericanos en Mexico* (1847), and Jose Maria Roa Barcena's *Recuerdos de la invasion norteamericana* (1883). Commenting on the causes of the war, Alcaraz offered the brief opinion that the conflict arose from American greed and Mexican weakness.

To the extent that he and other Mexicans delved further into the causes for Mexico's loss, they cited the disunity exemplified by the political disorders of the early national period and the alleged nature of the Indians. Many Mexicans of that era, such as Roa Barcena, unselfconsciously held the indigenous people in contempt.

The current Mexican interpretation of the causes and outcome of the conflict are best represented in Josefina Vasquez's *La intervencion norteamericana*,

1846–1848 (1997). Therein, she writes of a United States whose territorial ambitions neutralized divisive political quarrel, whose army was small but modern, and whose immigrants could be easily converted into soldiers that proved superior to a Mexico weakened by decades of revolts that could call only on a demoralized population and a politicized army.

Current Mexican scholarship examines war in a regional or local context. Typical of these works are Maria Gayon Cordova's *La ocupacion yanqui de la ciudad de Mexico* (1997) and the anthology edited by Laura Herrera Serna, *Mexico en guerra* (1997). Similarly, recently published U.S. works focus on particular aspects of the conflict. Some recent examples include books such as Paul Foos's *A Short, Offhand, Killing Affair: Soldiers and Social Conflict During the Mexican War* (2003) and Manley Witten's *War With Mexico: America's Reporters Cover the Battlefield* (2010).

Irving W. Levinson

See also Mexico

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MEXICO

Consisting of 31 states and a federal district, the United Mexican States (Estados Unidos Mexicanos) is a republic of 761,601 square miles with an estimated 2009 population of 111,200,289. The nation is bounded on the north by the United States of America and on the south by Guatemala and Belize. Additional territories include a small number of offshore islands. The political, economic, financial, and intellectual capital of the nation is Mexico City, which has an estimated metropolitan population of 22 million.

Mexico's government consists of executive, legislative, and judicial branches. The president is elected for a term of 6 years and may not run for reelection. The legislative branch has two houses, the Senate and the Chamber of Deputies. Each state and the federal district elect two senators, who serve a term of 6 years. In contrast, deputies serve for only 3 years. Also, the size of each state's representation in this chamber is based on its population. Both senators and deputies are barred from seeking two consecutive terms. The judicial branch is led by the Supreme Court, which consist of 21 judges who may preside as a full court or in sections. Candidates for the court are nominated by the president and subject to Senate approval.

Mexico's economic system combines market and state components. As per the Constitution of 1917, the federal government claims ownership of all natural resources, rivers, and other inland marine waters. Also, the government retains ownership of all facilities that generate and transmit electricity and of the petroleum extraction, refining, and distribution network. However, faith in the state diminished over the past four decades, and consequently, many other government enterprises have been sold off, including the national railway system and the national telephone company.

There are three major political parties in Mexico: the Partido Accion Nacional (PAN; National Action Party), the Partido Revolucionario Institucional (PRI; Institutional Revolutionary Party), and the Partido de la Revolucion Democratica (PRD; Party of the Democratic Revolution). The PAN includes both the Mexican equivalent of European Christian Democrats as well as more conservative elements. The PRI contains two wings. The first, known as technocrats, favor a wider role for the private sector and do not embrace the traditional concept of the corporate state, which the PRI supported for many decades. Typically, their leaders come from Mexico City and possess graduate degrees. The other group, known as the dinosaurs, argues that the traditional PRI organization combining labor, business, and all other major groups in one dominant political party can best lead the development of Mexico. Typically, dinosaurs have more experience in politics than do technocrats. The PRD includes leftists, socialists, and Marxists who to varying degrees argue for an expansion of the role of government. Also, they favor a reduction of the foreign presence in Mexico. In contrast to the PAN and the PRI technocrats, the PRD supports a protectionist trade policy.

As a rule, the PAN is strongest in the north and west of Mexico while the PRD's base lies in Mexico City and the southern part of the nation. The PRI remains competitive throughout Mexico.

Topics addressed in the remainder of this entry include geography, early history (ca. 1200 BCE to 1810 CE), the national period (1810–1910), the modern era (1910–2012), the armed forces, and U.S.-Mexican relations.

Geography

Two mountain ranges, the Sierra Madre Oriental (Mother Mountain of the East) and the Sierra Madre

Occidental (Mother Mountain of the West) dominate much of the landscape. Both chains are an extension of the Rockies. They run southward in the form of a Y, with the stems joining some 70 miles south of Mexico City. From there, the mountains gradually decline in height, becoming the Chiapas highlands.

Flanking the outer edges of the two great mountain ranges are coastal plains and uplands. The coastal plains vary in depth from 150 miles to as little as a few hundred yards and have a hot and humid climate. In contrast, the uplands offer a more temperate climate and more fertile soil. Major ports on the Caribbean coast include Veracruz and Tampico, and major west coast ports are Acapulco and the recently constructed container port at Lazaro Cardenas. Another geographic factor of note is the absence of a major river system connecting parts of the nation in the manner of the Rhine or the Mississippi-Missouri.

Early History

The first Mexicans are believed to have migrated from northwestern Asia across the Bering Strait many thousands of years ago. By 900 BCE, they constructed their first urban communities at San Lorenzo in southeast Veracruz state. Other prominent civilizations later emerged in the Valley of Mexico at Teotihuacan, in the Valley of Oaxaca at Monte Alban, and at the dozens of cities built by the Maya in southeast.

Some 31 million people lived in Mexico when the Spanish invasion began on February 18, 1519. Faced with the challenge of prevailing against such numbers with his initial force of 508 soldiers and 100 sailors, the Spanish explorer and conqueror Hernan Cortes decided to divide and conquer. Fortunately for him, the Aztec Empire based in the Valley of Mexico had created many powerful enemies through brutal rule and by refusing to allow even the best and brightest of conquered subjects to rise into the imperial hierarchy. When Cortes began his final assault on the Aztec capital of Tenochtitlán (today Mexico City) in 1521, his army included some 250,000 Indian warriors and barely more than 1,000 Spaniards.

While the war of conquest resulted in heavy casualties, the diseases that the Europeans carried on their bodies (small pox, influenza, and the bubonic plague) proved far deadlier. Between the violence and the germs, an estimated 90% of the native population died. Even so, the remaining Indians outnumbered the colonists.

The Spanish recognized the necessities of coexistence imposed by their minority status and consequently gave legal title and protection to many loyal Indian villages. However, at no point did they or the criollos (a person of pure Spanish descent born in Spanish America) consider the Indians and those of mixed ancestry (mestizo) their equals. The economic and social practices of colonial Mexico reflected that sentiment and created a colony divided along lines of ethnicity as well as socioeconomic class.

Throughout this period, the Indians retained a strong sense of identity, territoriality, and resentment toward the criollos. As the colonial period drew to a close, the Spaniards constituted a mere 2% of the population and the criollos only 10%. The royal officials and the laws they administered derived their authority from the king, who ruled from Madrid. When a monarch died, another took his place. This left unresolved the question of who would exercise authority if by some unforeseen circumstance no monarchy existed. That hypothetical issue became a real one in 1808.

In that year, Napoleon Bonaparte decided to add Spain to the growing number of nations under French dominion and to which the ideas of the French Revolution would be exported. He waited until the followers of the king and crown prince began openly fighting over the issue of whether to resist or appease France and then invited the monarch and his son to a French palace for mediation. There, he arrested them and soon moved to install his own government in Madrid.

Given these circumstances, the predominantly criollo municipal council of Mexico City contended that in the absence of a king, authority should revert to the cities as per medieval Spanish custom. However, royal officials in Mexico believed that the king remained sovereign even though he was captive. As such, these Spanish administrators and officers considered themselves under no obligation to acknowledge any group of colonists as sovereign over Mexico or over the Spaniards who administered the colonial government. Instead, royal officials placed colonists who had advocated this change of authority under arrest. Also, the Spanish intensified their surveillance of literate Mexicans in an effort to find more opponents of imperial sovereignty.

The National Period (1810–1910)

Father Miguel Hidalgo was one such foe. In early September 1810, he learned that the Spanish knew

of his opposition and planned to arrest him. Facing with the choice of fleeing or fighting, he proclaimed independence on September 16, 1810, from the balcony of his church in the village of Dolores. As he marched toward Mexico City, many of the poor and the resentful and the hungry joined his ranks. He soon found himself leading a motley, armed group of some 60,000 southward. En route, many of the Indians and poorer mestizos took the opportunity to loot and burn rural estates (*haciendas* and *plantaciones*) and kill their owners. In response, the criollos and the Spanish colonists closed ranks against Hidalgo. Although his forces met defeat at the battle of Monte de Cruces and Hidalgo himself subsequently was captured and executed, the war continued for more than a decade.

By 1821, the royalists believed their victory to be imminent. The rebel forces had been reduced to two groups totaling no more than 4,000 soldiers. However, unforeseen developments in Europe once more disrupted the political and military equations. At that time, royalist commanders in Mexico learned that rebellious subjects had overthrown the restored king of Spain and that the new government intended to grant suffrage to all men except the Spanish subjects of African descent. In Mexico, the consequence of such a change would have meant a loss of criollo power to a vengeful populace. Consequently, a majority of the criollo officers in the Royal Army switched sides and joined with their former foes to proclaim an independent nation. The war ended with the criollos in control of all of Mexico's institutions.

From 1821 to 1855, the question of who would participate in the political and economic life of the nation dominated the national dialogue to the exclusion of almost all else. Divisions proved so bitter that the presidency of the nation changed hands, often violently, 47 times during those 34 years. In this type of environment, no effective government existed for very long. Activities essential for national development such as the maintenance of public order, the defense of the national territory, the construction of public works, and the collection of taxes did not take place.

To create a barrier to American migration, the Mexican government allowed immigrants to settle in Stephen F. Austin's Texas colony in the hope that they would assimilate and become loyal Mexicans. This did not occur. In 1836, the Texans responded to the imposition of a new and more restrictive Mexican

constitution by declaring their state an independent nation. In 1845, the United States admitted Texas to the union. Mexico responded by branding this decision an act of war.

In 1846, President James Knox Polk ordered U.S. troops into the disputed territory between the Nueces and Rio Grande rivers. Following a clash between soldiers of the two armies, war began. In the subsequent peace treaty, the Americans gained two provinces of Mexico (Nuevo Mexico and Alta California), the acquisition of which was deemed by Polk as the primary goal of his administration. The loss of approximately half of the national territory to the United States left Mexicans embittered. However, internal strife continued to consume their nation.

In 1855, Liberal General Juan Alvarez successfully led an army in defeating the Conservative President Antonio López de Santa Anna's forces. The victorious Liberals promptly abolished legal privileges of the Church and the army, ordered the seizure and subsequent sale of all Church property other than the churches themselves, and proclaimed universal male suffrage. In turn, this led to a second war between Liberals and Conservatives, known as the War of the Refo (1858–1861). This too ended in a Liberal victory. However, disgruntled Conservatives then allied themselves with the French, whose emperor, Napoleon III, invaded Mexico in 1862. This third war between Liberals and Conservatives ended with another Liberal victory in 1867.

At the head of the victorious Liberal coalition stood Benito Juárez, Mexico's first and only Indian president. Born into poverty in the state of Oaxaca, he overcame great odds to obtain a law degree and soon entered politics. His steadfast dedication to the rule of law, to civil liberties, and to equality assured him a major place in Mexico's history as did his critical role in placing these principles at the core of the Constitution of 1857. But his role during the French invasion ensured that he would be the most revered of Mexican presidents to this day. As the invaders and their domestic allies prepared to enter Mexico City, Juárez left the capital with little more than an escort and fled to the remote northwest city of El Paso (today Ciudad Juárez). There he remained for 5 years as resistance to the occupier slowly grew and the invaders eventually left. His persistence probably saved the national cause and ever since then, he has been a symbol of the struggle against adversity.

The order that so many sought for Mexico came with the administration of President Porfirio Díaz. He seized power in 1876 and ruled Mexico until 1910, a period known as the Porfiriato. Although production of industrial and agricultural commodities increased during these decades, Díaz's model for national development proved deficient. In essence, he focused on the gross national product while neglecting to develop the most important resource of all: the people. By 1910, so many Mexicans had lost their land through evictions designed to create vast agricultural estates that only 4% of the population owned the ground on which they lived. More than 90% of the population remained illiterate. Concurrently, Díaz's decision to repress all meaningful political opposition by lethal as well as non-violent means alienated the slowly growing middle class. Last, and in spite of Díaz's mixed ancestry, the Porfirians, like the Spanish and the criollos who led the postindependence Mexico, held the majority of the nation's population in contempt. The result was the Mexican Revolution of 1910.

The Modern Era (1910–2012)

The Mexican Revolution began with the war to overthrow Díaz (1910) and ended with the adoption of the Constitution of 1917. Three factions contended for power. The largest, led by Francisco (Pancho) Villa, sought to create a nation based socially and economically on largely self-sufficient rural communities owned and controlled by their citizens. In this scenario, the nation's cities and industries would produce primarily for a domestic market and would be subordinate to the rurally based majority of the population. His support came mainly from northern Mexico.

A second faction, led by Emiliano Zapata, sought to dissolve the plantations and haciendas by giving these lands to peasants. In this scenario, lands and natural resources would be communally owned and controlled. Zapata did not address larger issues such as the role of industry and urbanization. Although often branded a modern Marxist, he in reality was a reactionary who sought to return the Indian population to the autonomy they had enjoyed centuries before.

The victors, led by Venustiano Carranza, sought to create an industrially based urban society and stressed modernity as one of their main goals. Aided by substantial U.S. material support supplied

through the American-occupied port of Veracruz, the Carrancistas won. However, the new constitution embodied concepts advocated by the defeated as well as by the victors. For example, the new constitution declared null and void all legal proceedings by which the Porfirians had seized hundreds of millions of acres of land.

The Carrancistas hoped that all elements of Mexican society would organize and then seek representation within a single ruling party. Industrialists, owners of small businesses, labor unions, and professional organizations would join to eliminate the factionalism that had plagued Mexico since the Spanish began sorting Mexicans in castes. After changing names on several occasions during the 1920s and 1930s, the party adopted the name by which it is known today: the Partido Revolucionario Institucional, or PRI (Institutional Revolutionary Party). The PRI held power from 1917 to 2000. They accomplished this goal not only by bringing a wide range of groups into the party but also by employing a combination of bribery, exclusion, intimidation, and lethal violence to curtail opposition.

From 1920 to 1968, the party maneuvered as necessary to master the political winds of the day. During the Great Depression, the administration of President Lázaro Cárdenas turned sharply leftward, returning more than 50 million acres of land seized by the Porfirians and funneling loans to communal Indian villages. From 1940 onward, the party instead chose to emphasize industrial development and encouraged growth of the private sector with infrastructure projects and interpretations of law favorable to the business community. During the 1950s and much of the 1960s, the economy grew at an annual rate of 6%. PRIistas pointed with pride to such growth as well as to the fact that the life span of the average Mexican increased from 40 years in the early part of the century to 60 years as proof of their success.

However, by 1968, the party's unity began crumbling. The socialist and progressive wings argued that the leadership had abandoned the duty of returning lands to the poor, denied credit to farms and communes in the interest of serving industry, allowed foreigners to again dominate certain Mexican industries, fostered a polarized distribution of income reminiscent of the Porfiriato, and sought to repress opponents. The PRI's leaders argued that their accomplishments stood without parallel in

Mexican history. An additional, if often unspoken, argument was that if the repression of opponents on either side of the political spectrum was the price of such progress, that price remained well worth paying.

When several hundred leaders of the protest movement rallied at Mexico City's Tlatelolco Plaza on October 2, 1968, army helicopters and marksmen opened fire. At least 400 people perished. In the following days, more executions took place. No formal investigation of the events of that week ever took place. The PRI now split.

The leftists formed a number of successive parties, the most recent of which is the PRD. Concurrently, many of the more conservative PRIistas, disillusioned by the government's violence, joined the PAN.

Díaz's successor, Luis Echeverría Álvarez, tried in vain to restore party unity by expanding social welfare programs, by visiting communities throughout the country, and by striking a strident leftist and nationalist tone in his foreign policy. His criticism of the U.S. role in Latin America and his support of the anti-Zionism resolution at the United Nations were part of this effort. Also, he welcomed refugees, such as Isabel Allende, fleeing dictatorships in Latin America just as Lázaro Cárdenas had welcomed tens of thousands of Spaniards fleeing the victorious General Franco in 1936. But the wounds opened at Tlatelolco could not be closed.

Those events of 1968 marked the beginning of a series of crises. The first of these was an economic crisis. During his 1976–1982 presidency, José López Portillo sought to stimulate the economy by undertaking infrastructure projects using money obtained from loans based on future oil revenue. When the price of petroleum collapsed, the nation was left with massive federal debts and a weakened private sector. As bankruptcies increased, López Portillo nationalized the country's banks. This action angered the business community. Simultaneously, spiraling inflation and rising unemployment destroyed loyalty to the PRI across a wide segment of Mexican society.

From the late 1970s to the early 1990s, inflation accelerated to the point at which the number of pesos required to buy a single U.S. dollar increased from 8 to 3,300. The life savings of many Mexicans as well as innumerable businesses, both large and small, were lost.

By 1988, dissatisfaction with the PRI had become so widespread that a leftist opposition grouping of

three small parties, led by Cuauhtémoc Cárdenas, seriously challenged the PRI in the presidential elections. The victory of his opponent, Carlos Salinas de Gortari, probably rested on vote fraud. At the state and local levels, the PAN and PRD continued to win more and more elections.

Then on January 1, 1994, the largest Indian rebellion since the 1847 Caste War erupted. Led by four Maya commanders, they seized the capital of the state of Chiapas and other areas of that southern state. Three intertwined factors led to the revolt: (1) poverty, (2) corruption, and (3) official indifference. Chiapas ranked as the poorest state in Mexico, and the majority of its indigenous citizens eked out a meager living from the little land they owned. Over the preceding decades, the federal government made little effort to change this. Chiapas's remoteness from the demographic, political, and economic centers of power ensured that the state's development needs would receive a low priority. Also, the unspoken, but powerful, opinion that Indians were determined to remain poor was a factor. Last, the political syndicates that ran the state for their own benefit regularly produced large majorities for the PRI and in return did not fear interference from the federal government. Levels of corruption proved extraordinary. In one case, a town's airport was built 20 miles from the city so that construction could take place on a political boss' land.

The rebels called their army the Ejército Zapatista Liberación Nacional (National Zapatista Liberation Army). They chose as their spokesman Subcomandante Marcos, a non-Indian history professor at a suburban Mexico City campus of the National Autonomous University of Mexico. Although he spoke and wrote of concepts such as neoliberalism and imperialism, the core of this rebel movement proved to be regional and Indian. The federal government confined the rebels to a small area and subsequently diffused the situation with prolonged negotiation involving some concessions.

From 1968 onward, the violence, the inflation, the consequent loss of employment and savings, and the economy's chronic inability to generate jobs at a rate equal to the growth of the population catalyzed a massive migration of Mexicans to the United States. The most reliable estimates are that some 12 million have sought permanent or temporary employment on the north side of the Rio Grande

since the first of the economic crises began in the late 1970s. The wages sent back to Mexico by these workers now constitute Mexico's second largest source of revenue.

A far more violent migration also developed during these decades as criminal syndicates within Mexico sought to satisfy the demands of the millions of substance abusers in the United States. Cocaine, heroin, marijuana, methamphetamines, and any other illicit substance that could be sold to Americans was processed, transported, and vended by these gangs. The billions of dollars in profits financed the expansion of these syndicates into groups capable of bribing, intimidating, and/or killing police and judges who obstructed them.

So massive were the losses of wealth and confidence and public order that the PRI's defeat became inevitable. In 2000, PAN candidate Vicente Fox won the presidential election even though the PRI and PRD retained joint control of both the Senate and the Chamber of Deputies. There, they blocked Fox's major proposals. His successor, PANista Felipe Calderon, significantly increased the involvement of the armed forces in combating the drug syndicates (*narcotraficantes*). The new president believed that only the federal government possessed the power to prevent the *narcotraficantes* from emerging as a parallel government.

These efforts have not resulted in the eradication of the trafficking syndicates. Several factors account for this failure. First, the capture of syndicate leaders often results not in the disintegration of the syndicate but in the replacement of that leader. Second, the syndicates appear to be coalescing rather than fracturing. Two cartels, the Sinaloa and the Zeta, now dominate the drug trade in the majority of the nation. Third, the syndicates' tactics make the task of the armed forces more difficult. Instead of fighting stationary battles, they often target a town's police station, killing officers and then local elected officials. Although the federal government responds with troops, the *narcotraffickers* usually are gone by the time troops arrive, and the local administration and population have been taught that they can be assaulted at will. In this manner, federal authority has been destroyed in many areas of the nation, particularly in the areas bordering the United States. Last, the quality of training, equipment, and integrity of many of Mexico's police forces leaves much to be desired.

Calderon's administration failed to crush the drug syndicates just as surely as did Fox's. In the 12-year period of PAN presidencies extending from 2000 to 2012, some 60,000 Mexicans lost their lives to drug-related violence. Crimes such as kidnapping and robbery significantly increased. The PANista's failure to remedy this rising tide of violence constituted one of two factors in his party's loss of power in the 2012 presidential election. Economic problems were the other cause. Although Calderon could point to increases in the gross domestic product in excess of those in the United States, these improvements brought little change to the 40% of Mexicans living below the poverty line.

Consequently, the PRI candidate, Enrique Peña Nieto won the presidency by a wide margin in 2012. A question of major importance remains whether he indeed will bring a new, honest, and effective administration to Mexico or whether the PRIistas will fall back into their old corporatist pattern of corruption. Interestingly, the new president does not publicly identify himself as a technocrat or a dinosaur.

Armed Forces

Mexico's armed forces report to two separate cabinet-level officials. The army reports to the secretary of national defense while the navy, the naval air force, and the marines report to the maritime secretary. The Mexican Air Force is considered a branch of the army.

The armed forces budget currently totals a modest 0.05% of the gross domestic product and that level of spending is reflected in the type of equipment used. Mexico possesses no main battle tanks, no jet fighter more recent than the 10 F-5 and 2 F5-E Tigers purchased from the United States in 1982, and no air defense missiles. Similarly, the army's tactical air support consists of middle and late Cold War-era helicopters and some propeller-driven aircraft such as the Swiss-made Pilatus P-7.

The primary objective of Mexico's armed forces is the maintenance of domestic order. Given this goal, the absence of external military threats and no foreign commitments other than the occasional humanitarian mission, Mexico probably does not need Mach 2+ jets or state-of-the-art tanks. However, this does not alter the unpleasant reality that much of the counterinsurgency and counter-narcotrafficking equipment is obsolescent. For example, the Vietnam-era Bell Huey helicopters and

the more modern propeller-driven planes that can be used for strafing are quite inferior to the range of platforms now available.

Since the civil conflict between powerful narcotics syndicates and the government intensified, exact and recent figures about the size and disposition of the armed forces are not as readily available as might be wished. Based on the most recent information, the air force consists of less than 12,000 personnel, including a 1,500-man airborne brigade. The roster of combat aircraft includes 10 F-5 jets, T-33 trainer jets, 70 Pilatus P-7 aircraft, 70 attack helicopters, and a transport fleet of 35 aircraft including seven Lockheed C-130 planes.

The Mexican navy reliably is reported to number some 37,000 personnel, of whom 8,600 are marines. Although the general headquarters is in Mexico City, there are separate headquarters for the Pacific forces (Acapulco) and the Atlantic forces (Veracruz). The navy confronts the same equipment problems as does the air force—a mixture of platforms, many of which are quite old and rather obsolescent. Newer equipment includes six *Halcon* (Falcon)-class patrol boats purchased in 1983 with platforms for helicopters. The most recently available figures list the principal forces as 3 destroyers, 8 frigates, and 109 coastal combatants. In addition to traditional responsibilities, such as defense of territorial waters, the navy also is responsible for dredging the nation's port facilities and for oceanographic research.

The Mexican army includes some 192,000 active-duty personnel and reserves of 559,000. The main maneuver units consist of three corps of three brigades each based in the region of Mexico City. Also based in the capital area are elite units such as the Special Forces Brigades and the Presidential Guard. Most of the remaining troops are posted to each of the nation's 12 military regions, which in turn are divided into 45 military zones. Both independent regiments and battalions are posted to each of these zones.

The army's equipment consists of a full range of light infantry equipment such as the domestically manufactured FX-05 Xiuhcoatl battle rifle, the Heckler & Koch HK 33 assault rifle, and the Browning M2 machine gun. The artillery arm largely consists of towed weapons, including 105-millimeter howitzers and light, medium, and heavy mortars. The army's armored fighting vehicle is the French-built ERC 90F1 Lynx, which mounts a 90-millimeter cannon.

Although Mexico's constitution requires all able-bodied men to undergo military training, this universal service consists of a few perfunctory drills and a very brief time on the shooting range.

Recent U.S.-Mexican Relations

Relations between the two nations remain complex with mixed objectives and feelings on both sides of the border. The considerable differences between the economic, military, and demographic power of the two countries give rise to a natural suspicion and resentment on the part of the Mexicans. Given the U.S. conquest of half of the nation's territory during the 1846–1848 war, the subsequent American economic domination of Mexico in the late 19th and early 20th centuries, and U.S. intervention during the Mexican Revolution, these concerns are not without foundation. But conversely, Mexicans of all socioeconomic strata understand that the United States can be of use to them. The Americans provide an adjacent and affluent market for Mexican products. Imported U.S. capital and technology can be of use. Last but not least, the money sent back to Mexico by expatriates working in the United States now constitutes the nation's second largest source of foreign earnings and provides financial sustenance to millions of Mexicans. Mexico seeks a close relationship with the United States in which Mexican sovereignty remains respected. For example, the considerable American military equipment offered for antidrug efforts under the Merida Plan remains welcome, while the presence of American advisors to go with that equipment would be considered an unacceptable diminution of Mexican sovereignty.

In pursuit of traditional objectives, the United States seeks open global markets and successfully obtained such access to Mexico with the passage of the 1994 North American Free Trade Agreement. However, the United States remains concerned with the migration of so many Mexicans into the United States. While this additional labor proved welcome during periods of economic growth, the recent economic recession resulted in many Americans viewing the migrants as competitors rather than fellow workers.

Also, the flow of drugs into the United States remains an issue of great concern and ranks as perhaps the most critical unresolved issue. The Americans argue that without this flow of drugs, the United States would not have a narcotics problem.

The Mexicans argue that if Americans would stop using these substances, the problem would vanish. Ironically, as the two nations become more closely linked, some tensions seem to become more acute.

This contrasts with earlier Cold War relations. Then, both nations accepted their differences. The United States recognized that as a country that endured six invasions, Mexico placed noninterference in the affairs of other nations at the top of her list of global priorities. So while Mexico's refusal to join the North Atlantic Treaty Organization rankled some U.S. administrations, the Americans accepted the decision without retaliating. Similarly, while the Americans resented the 1938 nationalization of Mexico's petroleum, they accepted that reality and have continued to purchase Mexican oil. Indeed, from the resumption of oil imports to the United States in 1938 until the present day, Mexico never withheld a drop for political reasons.

The Future

Although the events of the past four decades give pessimists much ammunition, there also is some cause for optimism. During this same period, Mexico transformed itself from a one-party state to a multiparty democracy. The strong extended family structure that has served as the bedrock of the nation and that has survived war and famine remains largely intact. Most important, there remains a quiet and deep pride in being Mexican. To quote a very Mexican phrase, *Dios tu bendecirá* (God will bless you).

Irving W. Levinson

See also Mexican-American War

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MIDDLE EAST CONFLICT

The Middle East conflict has centered on a small piece of land in the eastern Mediterranean littoral, called Palestine (*filisteen*) in Arabic and Israel (*eretz israel*) in Hebrew. For clarity, this entry will use "Palestine"—the name British authorities used until 1948—to refer to the land itself and "Israel" to refer to the State of Israel.

International, regional, and local forces have shaped the Middle East conflict since World War I. Since then, local dynamics have played an increasingly important role, despite the efforts of international actors such as the United States to mediate a peaceful resolution, an evolution that is evident in five phases: the founding of the modern Middle East (World War I to 1947), the Arab-Israeli Wars (1948–1973), occupation, resistance, and the land-for-peace framework (1973–1987), the first *intifada* and the Oslo peace process (1987–2000), and the second *intifada*, the Quartet, and Iran (2000 to the present). This entry discusses these five phases of the Middle East conflict.

Founding of the Modern Middle East (World War I to 1947)

The modern Middle East grew out of World War I. In an effort to open a new front against the Central Powers, the British High Commissioner in Egypt, Sir

Henry McMahon, exchanged a series of letters with Sherif Hussein of Mecca in 1915 and 1916. Hussein agreed to rise up against Ottoman control in return for British money and military support and Arab independence after the war. Also in 1916, Britain and France negotiated the Sykes-Picot Agreement to divide the post-Ottoman Middle East into British and French zones of influence and control. In 1917, as the joint British-Arab military campaign conquered the Levant, the British foreign secretary Arthur James Balfour issued a declaration stating, in part, that "His Majesty's Government view with favour the establishment in Palestine of a national home for the Jewish people."

Many in the region saw these events as contradictory. A mandate system set up by the League of Nations led to Arab independence in some areas, but in Palestine, Arabs, Zionist Jews, and the British clashed over Jewish immigration and control of Palestine. Zionist Jews were intent on establishing a Jewish state in Palestine, while Arabs viewed the Zionists as interlopers without a legitimate claim. Arab riots in 1921 and 1929 and an armed revolt in 1936–1939 led British authorities to limit Jewish immigration and clamp down on Arab armed activity, angering Jews and Arabs alike.

Intercommunal violence in Palestine escalated after World War II. By 1947, British authorities determined that they could not feasibly prepare Palestine for independence, so they turned the Palestine question over to the newly formed United Nations, declaring that British forces would withdraw from Palestine in 1948. In November 1947, the UN General Assembly voted to create two states, one for Arabs and one for Jews. Violence in Palestine flared soon after, with Jewish militia in Palestine battling against local Arab armed groups. On May 14, 1948, Zionist leaders declared the establishment of the State of Israel, after which Egypt, Iraq, Jordan, Lebanon, and Syria attacked.

The Arab-Israeli Wars (1948–1973)

The 1948 War, also called the Israeli War of Independence, saw the Middle East conflict take on a more regional character. The question of how to confront the Jewish presence in Palestine had become the preeminent concern of Arab politics, and for Arab leaders not to have attacked Israel in 1948 would have branded them as cowards. Still, there was little operational coordination among the Arab armies, which contributed to Israel's victory in

1949, as did the better leadership and motivation of the poorly equipped Israeli forces.

The 1956 War, also called the Suez Crisis, resulted from the Egyptian President Gamal Abdel Nasser's decision to nationalize the Suez Canal. The British and French governments convinced Israel to attack Egypt, giving them a pretext to secure the canal themselves. As the three forces carried out this plan, an irate President Dwight D. Eisenhower pressured all three to withdraw, resulting in significantly diminished British and French influence in the region.

Israel's stunning victory in the 1967 War, also called the Six Day War, reshaped the Middle East. After Nasser remilitarized the Sinai and closed the Straits of Tiran, vital to Israeli shipping, Israel launched a daring air raid on Egypt, destroying the Egyptian air force on the ground and winning Israel the air superiority it needed to defeat Arab ground forces. Despite disadvantages in manpower and technology, Israel more than doubled the area under its control. In the

years after the war, the United States began a pattern of staunch diplomatic and material support, using its influence to deflect international condemnation of Israeli actions and extending unprecedented levels of humanitarian and military aid to Israel.

The 1973 War, also called the Yom Kippur or October War, took Israel by surprise. After the cross-canal raids, artillery duels, and air battles of the 1969–1970 War of Attrition, Egypt began intensive preparations to take back the Sinai, conscripting soldiers for indefinite terms and secretly practicing the canal crossing. On Yom Kippur in October 1973, Egyptian forces crossed the canal and used surface-to-air and antitank missiles synchronized with infantry and armor to drive a salient into Israeli-held territory. The Israelis eventually regrouped and achieved military victory, due in part to American materiel support. Despite this, it was an important political victory for Egypt, one that gave Anwar al-Sadat, Nasser's successor, the political capital necessary to negotiate with Israel.



Sinai Desert, Egypt—October 1973: Then Israeli Army Southern Command General Ariel Sharon inspects the Egyptian front in October 1973 in the Sinai Desert during the Yom Kippur War.

Source: Photo by Ministry of Defense via Getty Images.

Occupation, Resistance, and the Land-for-Peace Framework (1973–1987)

With the end of the 1973 War, the Middle East conflict passed from an era of regional war to one of localized conflict involving Palestinian insurgents and peace negotiations. The Arab League (also called the League of Arab States) had founded the Palestine Liberation Organization (PLO) in 1964 to organize Palestinian guerrilla activities against Israel. Yassir Arafat, who had founded the Fatah guerrilla movement, became PLO chairman in 1969, reducing the level of Arab League control over the PLO and increasing the number of cross-border attacks on Israel. After Israel's occupation of the Palestinian territories in the 1967 War, a homegrown Palestinian insurgency ensued. In 1970, Jordan forced the PLO out of its territory, and by 1972, Israel had largely contained the insurgency in the territories. In 1978 and 1982, Israel invaded Lebanon, the PLO's largest base after its expulsion from Jordan. PLO guerrillas then left Lebanon and began to focus on terrorism outside Israel.

American efforts to mediate an end to the Middle East conflict began in earnest after the 1973 War. Secretary of State Henry Kissinger helped negotiate a cease-fire, and after Sadat's 1977 speech to the Israeli Knesset, President Jimmy Carter brokered the 1978 Camp David Accords. The Arab League expelled Egypt for concluding a separate peace with Israel, and Islamists assassinated Sadat in 1981, but Camp David had established the land-for-peace framework for Arab-Israeli negotiations: Israeli-controlled land in return for Arab peace.

The 1980s saw the continuation of American mediation, this time in an effort to resolve the conflict over the Palestinian territories—the West Bank and the Gaza Strip. These efforts were based on Jordanian stewardship over the territories rather than Palestinian statehood and were received coolly. Furthermore, the PLO was considered the “sole legitimate representative of the Palestinian people” (League of Arab States, 1974), but neither the United States nor Israel would negotiate with the PLO due to its terrorist activities.

The First *Intifada* and the Oslo Process (1987–2000)

The situation changed dramatically in late 1987. On December 8, a traffic accident involving an Israeli truck driver killed four Palestinians in the Gaza Strip.

The next day, demonstrations broke out against the Israeli occupation. Eventually, these demonstrations spread to cities and towns across the West Bank and the Gaza Strip, and included tire burning and stone throwing. The Israeli response, condemned by many in the international community, involved deporting leaders and breaking the bones of demonstrators, which contributed to the spread of what became known as the *intifada*, Arabic for “shaking off.”

The *intifada* asserted the influence of Palestinian leaders who, unlike Arafat and much of the PLO leadership, lived in the territories and were more open to a negotiated settlement. When Arafat and the PLO returned to the territories in 1994, Palestinians made a distinction between those who had assumed power from abroad and those who had demonstrated against Israel during the *intifada*.

Despite this resurgence of local Palestinian influence, international actors continued to affect the Middle East conflict. Although the PLO was not directly implicated, the bombing of Pan Am flight 103 over Lockerbie, Scotland, in December 1988, precipitated an international backlash against transnational terrorism, which in turn pressured the PLO to change its ways. Arafat renounced terrorism and recognized Israel, meeting the two American preconditions for negotiating with the PLO.

The 1991 Madrid Conference, during which Israeli and Palestinian negotiators met face to face for the first time, was an important step forward. In 1994, Jordan and Israel signed a bilateral peace treaty. In the early 1990s, there were also secret, if unsuccessful, negotiations between Israel and Syria. Perhaps most important, the Madrid Conference began the Israeli-Palestinian dialogue that resulted in the Oslo peace process, a series of agreements between Israel and the PLO aimed at establishing an independent Palestinian state in return for an end to the Israeli occupation of the Palestinian territories.

The first agreement in the Oslo process, the September 1993 Declaration of Principles on Interim Self-Government Arrangements, usually referred to as Oslo I, was negotiated with Norwegian mediation. Based on the land-for-peace framework, it provided for Israeli withdrawal from most of the Gaza Strip and Jericho; the establishment of a Palestinian National Authority—also called the Palestinian Authority (PA)—to administer these areas; and a 5-year interim period during which the two sides would negotiate a final peace agreement.

By the signing of Oslo I, the *intifada* had lost momentum. Israeli occupation policies, including control over Palestinian movement, deportations, and an extensive intelligence network, contributed to the pacification of the territories, as did the decentralized nature of the *intifada* and the signing of Oslo I. However, Hamas, an Islamic social services organization founded in the 1970s, rejected negotiations with Israel in favor of violent resistance. From 1993 on, suicide attacks were the centerpiece of this resistance. This terrorist tactic, and the Israeli responses it engendered, played no small part in building Hamas's popular appeal.

The United States mediated agreements after Oslo I, but no final peace resulted. The Oslo process faced a challenging mix of growing support for Hamas, increasing PA ties to terrorist organizations in an effort to blunt Hamas's popular appeal, Israeli unwillingness to curb settlement growth, and growing Israeli and Palestinian disillusionment due to the lack of progress. The agreements signed in the 1990s, such as Oslo II in September 1995, expanded the area under PA administration while implementing measures to preserve Israeli security. However, the 5-year time period established in Oslo I expired, and in late 1999, both sides agreed to a September 2000 deadline for concluding final status negotiations.

In the summer of 2000, the Clinton administration made a dramatic push to conclude a final status agreement between the Palestinians and Israelis at Camp David, but this too failed. The Clinton administration and the Israeli government both criticized Arafat for rejecting the best offer that had been on the table to that point, while Arafat returned home a hero for not capitulating to Israel and the United States.

The Second *Intifada*, the Quartet, and Iran (2000 to the Present)

The actions of both Israelis and Palestinians contributed to the outbreak of the second *intifada*. On September 28, 2000, amid concerns that Israel might cede control over the Temple Mount to a future Palestinian state, the Israeli government allowed the opposition leader Ariel Sharon to visit the site, a location that holds special religious significance for Jews and Muslims alike. Many Palestinians viewed Sharon's visit as a provocation, and after Friday prayers the following day, rioting ensued throughout

the Old City of Jerusalem. When Israeli security forces used both live ammunition and rubber-coated steel bullets to quell the rioting, several Palestinians were killed, and rioting and demonstrations quickly spread to other parts of the territories.

The speed and coherence with which Palestinian violence escalated during the second *intifada* suggests a greater level of organization than there was during the first. Shooting attacks spread rapidly. Most of these attacks went without a claim of responsibility, but it is likely that PA security forces were involved, in particular those affiliated with Arafat's Fatah movement. In November 2000, Hamas started firing mortar shells at Israeli settlements in and around the Gaza Strip, and in May 2001, Hamas launched a series of suicide bombing attacks, a tactic that no Palestinian group had used in more than 3 years. Palestinian Islamic Jihad began using suicide bombers in July 2001, and the following November, Hamas began firing its Qassam rockets at Israeli population centers. In January 2002, the Fatah-affiliated al-Aqsa Martyrs' Brigades also began using suicide bombers. Intergroup competition for popular support led to suicide bombing campaigns that were much more intense than they had been in the 1990s.

Intifada violence reached a peak in 2002. Israeli tactics in the Palestinian territories—some of which members of the international community condemned—contributed to the dissipation of violence. Shortly after the outbreak of the *intifada*, Israeli security forces imposed strict restrictions on the movement of Palestinians. Later in 2001, they began demolishing the homes of suicide bombers' families, and in 2002, Israel began construction of a series of concrete walls, observation towers, electrified fences, razor wire, and trenches to separate areas inhabited by Israelis from those inhabited by Palestinians. In 2004, Israel began using air strikes to kill leaders of Palestinian groups, a tactic that resulted in significant casualties among bystanders. In 2005, the Israeli prime minister Ariel Sharon withdrew Israel's permanent presence from the Gaza Strip, which drew criticism from Israel's settler movement and which Hamas used to validate its policy of violent resistance.

By early 2006, the barrier had allowed Israeli security forces to conduct more thorough operations in the West Bank, and targeted killings had significantly diminished Palestinian groups' ability

to control their operations. Hamas essentially gave up on suicide bombings in 2006 to focus on launching rockets from the Gaza Strip. Palestinian Islamic Jihad continued using suicide bombers for another year and then made the transition to rockets as well. Rocket attacks did not elicit the immediate response from Israel that suicide bombings had until Israel's large-scale incursion into the Gaza Strip in Operation Cast Lead (December 2008 to January 2009), after which rocket attacks also dropped off considerably.

Internal Palestinian strife surged with the diminution of the second *intifada*. During 2006, Fatah did poorly relative to Hamas in municipal elections, and in January 2007 national elections, Hamas gained control of the Palestinian legislature. A political deadlock ensued, with the international community refusing to deal with a Hamas-led government and Fatah reluctant to relinquish its hold on power. Six months later, a Hamas takeover of the Gaza Strip resulted in Hamas control in the Gaza Strip and Fatah control in the West Bank.

Throughout the early 2000s, international efforts to mediate an end to the Middle East conflict continued, with as little success as before. In 2002, the Quartet of the United Nations, United States, European Union, and Russia proposed a road map that specified steps that Palestinians and Israelis could take to arrive at a final peace. More recently, the Arab League has proposed normalizing relations with Israel in exchange for withdrawal to the 1967 borders, and Turkey has sought to mediate between Israel and Syria. To date, these efforts have not borne fruit, although in August 2010, the U.S. secretary of state Hillary Clinton announced the resumption of direct peace talks between Israel and the Palestine. Still, the pivotal variables in these talks remain Palestinian and Israeli actions, not the actions of international actors.

There is one set of international actors, however, that could complicate a future Middle East peace: the Iran-Syria-Hizbullah-Hamas nexus. In particular, Iran provides funding, training, and materiel to both Hamas and the Lebanese group Hizbullah. Israel's 2006 war against Lebanon was mainly confined to fighting between Israel and Hizbullah, but any future war involving Israel and a member of the nexus runs the risk of involving all of them. Recent Egyptian efforts to control the border with the Gaza Strip have reduced but not cut off Iran's support stream to Hamas. A conflict that was

internationalized with World War I and had become localized by the end of the 20th century may very well become internationalized once again, but in a potentially more dangerous way.

Nathan W. Toronto

See also Egypt; Iraq War (2003); Israel; Libya; Persian Gulf War; Saudi Arabia; Syria; Terrorism

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MILITARY ADVISORS, U.S.

Throughout the 20th century, American military advisors, military personnel sent to a foreign country to advise and aid the local military forces, have followed the flag as the United States expanded both its territory and its influence well beyond American shores. At times, these forces were tasked with training indigenous forces to combat domestic insurgencies, while at other times, Washington dispatched advisors in order to strengthen relations and foster military cooperation. Although often successful in these roles, advisors have, more often than not, been unable to transplant core American military values in the ranks of their advisees. Nor have they generally succeeded in prompting their hosts to adopt the long-standing American “performance-based selection, training and promotion system.” This entry discusses the history and the role of U.S. military advisors.

The Philippines and Latin America, 1898–1930s

America’s first major experiment in foreign military advising came in the aftermath of the Spanish-American War, as the United States supplanted Spain and expanded deep into the Pacific and the Caribbean. After the Spanish-American War, a war fought in part to liberate colonial Cuba from Spanish rule, Spain ceded control of the Philippines to the United States. Faced with a growing rebellion in the Philippines, American forces created the Philippine Constabulary to combat a native insurgency led by Emilio Aguinaldo. Created in 1901, and composed of bilingual (Spanish and Tagalog) 18- to 25-year-olds trained and led by some 70 American volunteers, the constabulary grew to some 5,000 within 5 years. While a formidable fighting force, the constabulary also had a reputation for brutality that it shed only with further American training and guidance.

The U.S. Army also simultaneously created a second military force in the islands, the Philippine Scouts. The forerunner of the scouts, members of the Macabebe minority on the island of Luzon,

assisted the U.S. Army beginning in 1899, and within 2 years, they numbered some 1,400 troops. The scouts’ success, along with pressing manpower needs, led Congress to authorize the creation of a 5,000-man Philippine Scout force, which served with U.S. military units throughout the period of U.S. colonial rule and distinguished themselves during the Second World War.

While the army took the lead in the distant Philippines, closer to home on the island of Hispaniola, the U.S. Marines created both the Haitian Gendarme and the Dominican Republic’s Constabulary. (Hispaniola is divided politically into two countries, the Republic of Haiti and the Dominican Republic. To protect U.S. interests, the marines were sent to Haiti in 1915 and to the Dominican Republic in 1916.) The marines built forces to restore order and to fight growing guerrilla insurgencies, and in the Dominican Republic, the new U.S.-led force proved especially successful. The Dominican Constabulary and the U.S. forces battled a stubborn rural insurgency that crumbled in 1921, allowing U.S. forces to leave the country 3 years later. While U.S. advisors created a capable fighting force, they could not inculcate in either of the new armed forces the traditional American respect for civilian authority. This was particularly true in the Dominican Republic where Rafael Trujillo, leader of the constabulary, seized control of the country and ruled for more than 30 years until his assassination in 1961.

During the 1920s, U.S. advisors faced similar obstacles and achieved similar success in nearby Nicaragua, where U.S. Marines built a new national army to beat back a sustained insurgency directed against the U.S.-backed government. While the newly created Nicaraguan National Guard (Guardia Nacional) and the U.S. Marines fought the rebels to a draw, which persuaded their leader General Augusto Cesar Sandino to come to terms, the Americans could not keep their newly created military out of politics. After National Guard officers assassinated Sandino in 1934, their leader, General Anastasio Somoza, seized power. His family ruled the country, backed by the National Guard, until their ouster in 1979.

The Second World War and Early Cold War, 1941–1954

During and immediately following the Second World War, the work of U.S. military advisors expanded

worldwide as successive administrations dispatched U.S. forces around the globe to combat first the Axis and later the communist threat. During World War II, U.S. military advisors played an active role in training air, land, and maritime forces throughout the world, particularly those of the various Latin American republics. With the war's swift conclusion in the spring and summer of 1945, U.S. military advisors quickly took on new challenges, most notably in the Far East.

Japan

The American role in the construction of Japan's postwar military is a great, if little known, success story. As in Germany, the Allies quickly disbanded the Japanese military only to find that rising Cold War tensions required remilitarization. In July 1950, after initially opposing remilitarization, General Douglas MacArthur, as Supreme Commander for the Allied Powers, ordered Prime Minister Yoshida Shigeru, another opponent of remilitarization, to form a 75,000-man National Police Reserve. Despite Japan's rapid remilitarization, and the presence of former imperial officers in leadership positions, the American U.S. forces succeeded in making Japan's police reserves and its successor, the Japanese Self-Defense Forces, into a military committed to supporting Japan's fledgling postwar democracy.

Philippines

In addition to successfully rebuilding the Japanese military, U.S. advisors successfully strengthened the counterinsurgency capabilities of the Philippine army that, with the end of World War II, found itself locked in combat with a communist-led insurgency. Although the Philippine military's effort faltered initially, with Ramon Magsaysay's appointment to Secretary of National Defense in 1950, the situation quickly improved. In addition to weeding out corrupt and incompetent officers, Magsaysay increased the size of the army and emphasized classic counterinsurgency tactics, including increased use of night patrols and small unit hit-and-run actions. The Joint U.S. Military Assistance Group that had been active in the Philippines since 1947 nearly doubled in size during 1950–1951, as did U.S. material aid to Manila. In addition to aiding Magsaysay's expansion and reorientation of the military, the Joint U.S. Military Assistance Group also supported the highly

successful Economic Development Corps, which settled former rebels on islands other than Luzon, the principal area of guerrilla activity. These combined actions quickly turned the tide, and by 1954, Philippine forces defeated the insurgency.

South Korea

While successful in Japan and the Philippines, American efforts to build a South Korean police force, followed by a regular army, foundered. With the end of Japanese rule, U.S. authorities set about building a Korean Constabulary that, once activated in January 1946, grew to 15,000 men within 18 months. Given that Korea had been under Japanese control from 1905 to 1945, the vast majority of senior positions within the new paramilitary force went to graduates of either the Manchukuo or the Japanese military academies. Two years later, in March 1948, the United States responded to the formation of a Soviet-led military force in North Korea by transforming the constabulary, then numbering 26,000 men, into a full-fledged 50,000-man South Korean army.

From the start, political factionalism, infighting between the Japanese and Manchurian cliques, and inadequate supplies undercut the South Korean army, which also suffered from communist infiltration and the outright rebellion of some units in October 1948. The Republic of Korea's army could not beat back the North Korean advance in June 1950, and Seoul, the South Korean capital, fell within 3 days. Moreover, unlike the case of the Japanese Self-Defense Forces, U.S. authorities could not inculcate the newly constructed Republic of Korea's army with firm democratic principles, and in 1961, Major General Park Chung-hee, a 1942 graduate of the Japanese-led Manchukuo Imperial Army Academy and the Japanese Imperial Army Academy, led a successful military coup that kept the general in power until 1979.

Vietnam, 1950–1973

In many respects, Vietnam remains the quintessential story of the U.S. military advisor. The American advisory role in Vietnam began with the establishment of U.S. Military Assistance Advisory Group, Vietnam, which Washington tasked with overseeing the disbursement of aid to French forces. With the French defeat in 1954 and subsequent withdrawal from Vietnam and division of the former colony into

northern and southern zones, the United States took the lead in 1955 in training the South Vietnamese military. Despite their best efforts, U.S. advisors saw little improvement in the army of the Republic of Vietnam or ARVN, due largely to the obstructionist tactics of President Ngo Dinh Diem.

In response to growing insurgent strength, the United States vastly increased its aid to South Vietnam starting in 1961. With the formation of the U.S. Military Assistance Command, Vietnam, in February 1962, the American advisory role grew and focused on creating a capable counterinsurgency force within the ARVN and the various paramilitary forces, such as the Civil Guard and the Self-Defense Corps. The Americans also oversaw new initiatives such as the Strategic Hamlet program. Within 2 years, the number of American advisors had grown to 16,000, but Diem's continued machinations, combined with political infighting and corruption, stymied the counterinsurgency efforts. Early in 1963, at the Battle of Ap Bac, ARVN forces and American advisors suffered a stinging defeat at the hands of a much smaller Viet Minh force, highlighting the difficulty of the American mission. With the steady growth of U.S. forces, the U.S. Military Advisory Group, Vietnam, merged into the Military Assistance Command, Vietnam.

Despite the war's "Americanization" after 1965, advisors continued to play a vital role, numbering in excess of 8,000 by 1966 before peaking at more than 9,000 in 1969, the year in which Vietnamization or the policy of gradually turning over the war to the South Vietnamese military began. To ready Saigon to combat a combined Viet Cong and North Vietnamese threat, Military Assistance Command, Vietnam focused on expanding the South Vietnamese military from its 1969 total of 875,000 to just over 1 million by 1973, while simultaneously upgrading its leadership and equipment and curbing desertion. Although it successfully increased the size of the Saigon forces, Military Assistance Command, Vietnam could neither curb desertion nor improve leadership by 1973, when the United States ended its combat role in Vietnam. Left alone, the ARVN crumbled in early 1975, and Saigon fell to the victorious communists in April of that year.

Iraq, Afghanistan, and Beyond

Military advisors continued to operate around the globe following the conclusion of the Vietnam War,

most notably in the Middle East and Latin America. With the onset of the Global War on Terrorism and the extended U.S. military commitment in Iraq and Afghanistan, the work of U.S. military advisors increased. In both countries, military advisors train military and paramilitary units, and in both countries, advisors face difficulties that their peers from a generation earlier would no doubt recognize.

In both countries, advisors struggle with religious and tribal divisions, the unwillingness of their host governments to implement vital reforms, and desertion rates that in Afghanistan have reached 25%. To operate successfully in such a difficult environment, the various branches of the armed services have recognized that new training is required.

For decades, the upper echelons of the U.S. armed forces marginalized military advisors as their commanders were confident that American troops and firepower would decide a conflict far more effectively than U.S.-trained indigenous forces. Accordingly, advisors often lacked vital training in the history, culture, and language of their host country. For decades, rank, specialist, and branch qualifications were all that were required for advisor duty.

Assessments of the advisor mission in both Afghanistan and Iraq emphasized the need for greater language training, as well as more time spent on cultural studies. Recently, both the Marine Corps and air force have redoubled their efforts to prepare advisors for overseas assignments. The Marine Corps's new Training and Advisory Group, for example, based at Fort Story, Virginia, aims to strengthen the marines' ability to provide large numbers of advisors. The air force's Combat Aviation Advisor Course, conducted at Hurlburt Field, Florida, provides, among other things, 2 to 4 months of intensive language training. A second air force program, operating out of Fort Dix, New Jersey, provides 23 days of training in preparation for deployment to Afghanistan and Iraq. This innovative program includes daily language work and more than 2 weeks of intensive study of the Middle East's history and culture. Through innovative programs such as these, U.S. military advisors can gain the requisite knowledge to carry out successfully their tasks abroad and continue the tradition of over a century of service to America's allies.

Sidney Pash

See also Haiti, U.S. Intervention in; Nicaragua Intervention (1920s); Philippines Insurrection; Vietnam War

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MILITARY COMMAND STAFFS

To manage the complicated nature of military organizations, the armed forces of the United States utilize a staff system to simplify the control of day-to-day operations. The modern command staff attempts to facilitate command and control by enabling a clear line of information, easing a commander's decision-making process. To accomplish this, related tasks or duties are grouped together under a single administrator who then reports directly to the commanding officer. This compartmentalization ideally provides better advice and allows for a more efficient coordination of personnel, equipment, and other resources. These staff sections are found within all branches of the armed forces and at all unit levels, including operational, departmental, and joint commands. While the overall duties at each level may vary, the basic responsibilities are generally similar. This entry describes the historical evolution of the staff system within the U.S. armed forces and briefly discusses the organization of staff responsibilities at various levels within military commands.

The Origins of the U.S. Military Staff

The origins of the modern U.S. military staff can be traced to the American experience in the

First World War. In 1917, the commander of the American Expeditionary Force (AEF), General John J. Pershing, decided to adopt a command staff similar in composition to that used by the French army. Pershing's decision was a direct result of the lack of formal structure within the U.S. Army as well as the need for close cooperation with the French military. The AEF staff, officially created in February 1918, contained four separate sections, each analogous to those contained within the French system, or *État-Major*. Pershing also developed a fifth section for his staff with an emphasis on training due to Allied pressure for the rapid deployment of American troops. Additionally, to maintain an uncomplicated working relationship with the other Allied Powers, the AEF adopted British nomenclature when referring to staff officers. For example, the officer in charge of administration was referred to as G-1, in reference to the British custom of referring to GSOs, or General Staff Officers, as "Gs." The final AEF command structure contained the following sections: administrative (G-1), intelligence (G-2), operations (G-3), supply (G-4), and training (G-5).

The army officially adopted the structure used by the AEF in 1921. The 1932 *Staff Officers' Field Manual* further clarified the staff roles by prescribing the specific functions and designations of the general staff officers while also outlining organization and functions at the brigade, regiment, and battalion levels. Since the responsibilities of the lower level staff officers mirrored those within the general staff, their numerical designation remained the same. However, to distinguish them from the higher echelon commands, the field manual assigned the alpha character "S," which simply stood for "staff." For example, while the general staff intelligence section carried the G-2 moniker, at the lower levels of command the intelligence section was classified as S-2. The Department of the Army utilized this basic structure into the Second World War.

The passage of the 1947 National Security Act and its subsequent amendments represented yet another evolution of the staff structure within the U.S. military. In addition to the establishment of the Department of Defense, the legislation laid the groundwork for the creation of unified and specified commands that included elements from each of the three (later four) services, such as the U.S. European Command or U.S. Northern Command. The commander in chief of each of these operational

commands oversees a joint military staff composed of officers from various branches assigned according to their area of specialty. In addition, the U.S. Joint Chiefs of Staff, formalized in 1947, also employ a joint staff, which assists with the advisory and planning functions of the Joint Chiefs of Staff.

The Modern Command Staff Organization

At each level of command, the staff is essentially the same with regard to basic functioning and structure. The chief of staff or executive officer assists the commander with coordinating the administration and activities of the staff. Each section, whether it be at the joint level (J staffs), major command level (G staffs), smaller units (S staffs), or even within the U.S. Navy (N staffs), is then subdivided into specific areas of responsibility and categorized numerically (1, 2, 3, 4, etc.). The contemporary staff structure contains most of the World War I-era divisions. Personnel, intelligence, operations, and logistics groupings are usually found at all levels of command. In some instances, additional sections may be added or even combined into a single area of responsibility. For example, due to the highly technological nature of the modern military, most staffs contain a communications section (G-6, S-6) or, as in the case of U.S. European Command, J-5/8 combines planning functions with resource management and coordinating activities. At the higher levels, such as major or unified commands, a civil affairs section is often included to enhance relations with civilian organizations. The commander's willingness to delegate and the availability of resources ultimately determines the structure of the command staff at any level. However, the specific delineation of responsibilities within each section theoretically allows for better communication between sections as well as ease of coordination involving additional commands.

John Sager

See also Command and Control; Leadership; OODA (Observe, Orient, Decide, and Act); Staff Relationships

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MILITARY COURTESY

Military courtesy is an elaborate and ubiquitous code of etiquette that governs relationships between service members. It focuses on the proper conduct between superiors and subordinates and, thereby, reinforces discipline and the chain of command. Each service has its own specific elaboration of military courtesy based on the way its members relate to one another. Military courtesy encompasses every aspect of a military member's life to include the proper times for saluting, wearing headgear, and rules for smoking or riding in cars, planes, and boats, among other things. Military courtesies are based on traditions or customs developed over time that determine what a military may and may not do. Military study guides usually group military customs and courtesies together as the two go hand in hand. This entry describes some of the customs and courtesies common in military life.

Personal Military Courtesy

Over the long history of the services, many traditions have developed, but saluting is the most easily recognized of them all. There are two dominant thoughts on the origins of the salute. One traces the custom back to armored knights in the European Middle Ages raising their visors to identify themselves as friends. The chivalric custom demanded the junior knight raise his visor first and the senior knight returned the gesture. A second line of thought traces the custom back to the Italian Renaissance when the Borgia family dominated Rome. Assassinations were so frequent that men began greeting one another with open palms to show they had no weapon.

Today, the salute is a basic gesture of respect to rank given by an enlisted soldier or junior officer to a superior officer, and each service has detailed rules that prescribe when and where to salute. The salute is rendered with the right hand rigid and fingers extended to touch the head cover visor or

the forehead at the top corner of the right eye. The palm is turned slightly toward the face while the upper arm is extended and held parallel to the ground. The arm is dropped to its original position after the salute is returned. A greeting usually accompanies the salute and is specific to each unit. Salutes are also rendered under arms in a position called "present arms," which is taught during drill instruction.

Other personal courtesies include subordinates addressing superiors as "Sir," "Ma'am," or by rank and last name. Superiors return the courtesy by referring to subordinates by their rank and last name. Removing headgear indoors, calling "attention" for the commanding officer or "at ease" for the unit sergeant major entering a building, and walking behind a senior rank while walking are all additional forms of military courtesy. This minutia works together within a broader framework of discipline to reinforce obedience of orders, a critical function in combat. Military members become immersed in military courtesy as soon as they arrive at initial entry training. Courtesy is reinforced through a combination of classroom lecture, corrective training for mistakes, and drill and ceremony instruction.

Drill, Ceremony, and Military Etiquette

Military courtesy, and thus mutual respect between service members, is reinforced by drill and ceremony instruction. The historical purpose of drill was to train commanders to maneuver men on the battlefield, but in the 20th century, drill instruction focused on the disciplinary function. Today, individual military members drill on specific physical tasks to build the muscle memory required to operate the weapons and technology that are part of the battlefield. Unit drill retains its relation to military courtesy through its instruction on parades and ceremony where proper courtesies to symbols are taught and the chain of command is reinforced.

The national flag is the most important symbol to which military members render courtesy. Martial music also plays a role in the courtesy rendered to the flag. The two most important songs are Reveille, played in the morning as the flag is raised at post headquarters, and Retreat, played in the evening as the flag is lowered. Military members are alerted by the music to assume the position of attention and render a salute at the appropriate time.

Military etiquette is the common courtesy given by military members to each other as members of a professional organization. It includes basic manners such as being on time, saying thank you, and not keeping people waiting. Military members are expected to provide honest assessments of situations, and to exercise candor, but always within the limits of proper etiquette and formal courtesy.

Military courtesy and etiquette also extends to the various social engagements military members are a part of. The three most common events are the military ball, the dining in, and the dining out. Military balls are formal events for unit members and their spouses that include many courtesies between military members as well as symbolic courtesies such as the moment of silence for the table setting for fallen comrades. Dining in events are less formal than military balls and only involve members of the unit. They follow a strict format and emphasize unit and military traditions to build esprit de corps. Dining out events are also less formal than military balls but include the spouses of unit members. These events are intended to introduce family members to some of the traditions and courtesies of the military.

Military courtesy is inextricably linked to discipline and etiquette and reinforces obedience to orders. This lies at the root of all customs and courtesies. Troops on the battlefield must obey the orders of their commanders to achieve success, and immersing them in the proper courtesies between themselves and their superiors is the first step in conditioning this response. Parades, ceremonies, formal events, and the minutia of military etiquette all serve to reinforce this basic precept and are so ubiquitous that they become routine.

David Glenn Williams

See also Customs and Traditions; Morale

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MILITARY DECISION MAKING

See OODA (Observe, Orient, Decide, and Act); Staff Relationships

MILITARY JOURNALS AND NEWSPAPERS

Newspapers and journals, whether in print or in electronic versions, provide an avenue of communication that builds cultural and social bonds. People enjoy reading about other people, and men and women of the military are no different in their quest for news and information about the world and their profession. There are a number of newspapers, journals, and magazines covering activities of the professional armed service branches, both historical and current, from military and nonmilitary sources. The style of the publications runs from scholarly to news reportage. This entry offers a selection of magazines available in the field. Each selection lists circulation, publisher's address, website, and whether it is produced by a military or nonmilitary source. A nonmilitary source may be an association or commercial publisher.

Air & Space Power Journal. This quarterly began in 1947 and has undergone several title changes but remains the official publication of the Air University, the U.S. Air Force's professional military educational institution. The articles are scholarly in nature written by academics and military personnel of the Air University. Circulation: 20,000. Publisher's address: Air University, Maxwell Air Force Base, 401 Chennault Circle, Montgomery, AL 36112. Military. Website: <http://www.airpower.au.af.mil/>.

Armed Forces & Society. An interdisciplinary journal on military institutions, civil-military relations, arms control and peacekeeping, and conflict management. Articles range from family issues to peace issues. Circulation: 1,700. Publisher's address: Sage Publications, 2455 Teller Road, Thousand Oaks, CA

91320. Nonmilitary. Website: <http://www.sagepub.com/journalsProdDesc.nav?prodId=Journal201730>.

Armed Forces Journal. Originating in 1863, this monthly periodical has weathered name changes to remain a viable organ of news. Short articles cover issues of tactics, strategy, and procurement. Circulation: 27,000. Publisher's address: Defense News Media Group, 6883 Commercial Drive, Springfield, VA 2159. Nonmilitary. Website: <http://www.armedforcesjournal.com/>.

Army. Since 1950, this slick monthly magazine is aimed at soldiers currently serving. Civilians and senior army officers write the articles dealing primarily with current military events. Circulation: 85,000. Publisher's address: Association of the U.S. Army, 2425 Wilson Boulevard, Arlington, VA 22201. Nonmilitary. Website: <http://www.ausa.org/publications/armymagazine/>.

Defense Monitor. Appearing 10 times a year since 1972 and produced by the Center for Defense Information, this journal can be highly critical of military operations. It is intended for both military and general audiences. Circulation: 35,000. Publisher's address: Center for Defense Information, 1779 Massachusetts Avenue, North West, Washington, DC 20036. Nonmilitary. Website: <http://www.cdi.org>.

Fortitudine: Bulletin of the Marine Corps Historical Program. Covering military history for the Marine Corps as well as other branches of service, this quarterly bulletin has been published since 1970. Circulation: 18,000. Publisher's address: Marine Corps History Division, 3078 Upshur Avenue, Quantico, VA 22134. Military. Website: http://www.tecom.usmc.mil/HD/Home_Page.htm.

Infantry: A Professional Bulletin for the U.S. Army Infantryman. A long-time (since 1921) bimonthly periodical devoted to battle operations and the army that fights them. Articles are written by senior officers for teaching and training purposes. Circulation: 13,000. Publisher's address: U.S. Army Infantry School, P.O. Box 52005, Fort Benning, GA 31995. Military.

Joint Force Quarterly. Publishing since 1993, this relative newcomer among service publications

integrates viewpoints and multifaceted maneuvers of all branches of the military. Highly regarded, it is the chief publication of strategic military policy. Circulation: 36,622. Publisher's address: National Defense University, Fort Lesley J. McNair, Washington, DC 20319. Military. Website: <http://www.ndu.edu/press/jointForceQuarterly.html>.

Journal of Military History. A scholarly journal published quarterly since 1937, each issue also features many book reviews. Circulation: 3,200. Publisher's address: Society for Military History, George C. Marshall Library, Virginia Military Institute, Lexington, VA 24450. Military. Website: <http://www.smh-hq.org/>.

Leatherneck: Magazine of the Marines. Throughout its long history (since 1917), the mission of this monthly magazine remains the same: to be the magazine of Marines—yesterday, today, and tomorrow. Circulation: 94,000. Publisher's address: Marine Corps Association, 715 Broadway Street, P.O. Box 1775, Quantico, VA 22134. Nonmilitary. Website: <http://www.mca-marines.org>.

Marine Corps Gazette: Professional Journal of United States Marines. Since 1916, its mission has been to provide a forum for the exchange of ideas that will advance knowledge, interest, and esprit in the Marine Corps. Circulation: 30,880. Publisher's address: Marine Corps Association, 715 Broadway Street, P.O. Box 1775, Quantico, VA 22134. Nonmilitary. Website: <http://www.mca-marines.org/gazette/>.

MHQ: The Quarterly Journal of Military History. Aimed at a general audience, this well-illustrated magazine focuses its articles on great battle and campaigns over the last 5,000 years, from ancient warfare through modern Iraq. Circulation: 39,700. Publisher's address: Weider History Group, 741 Miller Drive, South East, Suite D-3, Leesburg, VA 20175. Nonmilitary. Website: <http://www.history.net.com/magazines/mhq>.

Military History. One of the oldest and most popular magazines devoted to the history of warfare. Articles examine commanders, campaigns, battles, and weapons that made history. Circulation: 176,000. Publisher's address: Weider History Group, 741 Miller Drive, SE, Suite D-2, Leesburg, VA

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Military Review: The Professional Journal of the United States Army. Written for the professional soldier, this bimonthly periodical has provided for the open exchange of ideas about military matters of importance to the U.S. Army with a focus on the concepts, doctrine, and warfighting at the tactical and operational levels of war since 1922. Circulation: 27,000. Publisher's address: U.S. Army Combined Arms Center, 290 Grant Avenue, Building 77, Fort Leavenworth, KS 66027. Military. Website: <http://usacac.army.mil/CAC2/MilitaryReview/index.asp>.

National Guard. Since 1947, this monthly publication has featured articles on Guard-related issues, programs, and activities at home and abroad. Circulation: 45,000. Publisher's address: National Guard Association of the United States, 1 Massachusetts Avenue, North West, Washington, DC 20001. Nonmilitary. Website: <http://www.ngaus.org>.

Naval War College Review. Established in 1948 as a forum for discussion of public policy matters of interest to the maritime services, this quarterly periodical presents articles on the academic and professional activities of the Naval War College. Circulation: 9,500. Publisher's address: U.S. Naval War College, 686 Cushing Road, Newport, RI 02841. Military. Website: <http://www.nwc.navy.mil>.

Parameters: The United States Army's Senior Professional Journal. As its title implies, this quarterly journal serves as a vehicle for continuing education for Army War College graduates, other senior military officers, and academia concerned with national security affairs. It features a forum for mature thought on the art and science of land warfare, national and international security affairs, military strategy, military leadership and management, military history, ethics, and other topics of significant and current interest to the U.S. Army and the Department of Defense. Circulation: 13,500. Publisher's address: U.S. Army War College, 122 Forbes Avenue, Carlisle, PA 17013. Military. Website: <http://www.carlisle.army.mil/usawc/Parameters/>.

Soldiers: The Official U.S. Army Magazine. This publication offers news and features about members

the States and Stri

**By and For
the Soldiers
of the A. E. F.**

PRICE: 50 CENTS

A MESSAGE FROM OUR CHIEF

ARMY MEN BUILD AN OVER-SEAS PITTSBURGH



IN this initial number of THE STARS AND STRIPES, published by the men of the Quartermaster

These readers are mainly the men who have been honored by being the first contingent of Americans to fight on European soil for the honor of their country. It is an honor and privilege

which makes them fortunate above the millions of their fellow citizens at home. Commensurate with their privilege in being here, is the duty which is laid before them, and this duty will be performed by them as by Americans of the past, eager, determined, and unyielding to the last.

The paper, written by the men in the service, should speak the thoughts of the new American

can Army and the American people from whom the Army has been drawn. It is your paper
Good luck to it. (Signed) **JOHN J. PERSHING,**
Commander-in-Chief, A. E. F.

HUNGS STARVE	ville formed a little committee to supply to the soldiers of the army.	FREE SEEDS FOR
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**AND RIDICULE
U.S. CAPTIVES**

A.E.F. Soldiers Compelled to Clean Latrines of Crown Prince.

GIVEN UNEATABLE BREAD.

Photographed Sandwiched Between Negroes Wearing Tall Hats.

added, the American communists published later on by the Germans) had reported five men killed and seven wounded.

"How did you bring these addresses away without being discovered?" the

A.E.F. Garden Enthusiasts Speculate Upon Probability of Flower Pots in Tin Derbies.

EMBASSY HEARS THE FACTS.

Repatrate Smugglers Addresses of Prisoners' Relatives Into

—*Excess.*

"They were written," he replied, "on a piece of linen which a young girl who speaks English had sewed under the lining of a cloak belonging to one of my daughters."

"Black Misery" In Germany.

That's the song some of us will

Ridicule, degrading labor, insufficient food and inhumane treatment generally are the lot of American soldiers taken prisoner by the Huns. This is the ex-

Autumn by the German Army at the Canal de la Marne au Rhin, in the forest of Percy, near Lunerville. The deposition of M. J. Rollet, a repatriated Frenchman who was quartered in the very freely about conditions in Germany, and they said that life in all parts of the Empire is black misery. They all long for peace; and the soldiers are in dread of the British and French heavy artillery."

made before first Secretary Arthur Hugh Fraser of the United States Embassy in Paris, throws ample light on the methods of the Borbe dealing with his captives.

"How were the Americans treated?"

MARINES ADVISE SWIGGING.

For Hikers They Say, It Is Better Than Sleeping.

Quantico, Va.—The drinking of

Oul, Oul—Spuds and Beans!

No kidding; you know yourself you're grumbling now because all you get in the line of vegetables is spuds, and beans and tomatoes and beans, and spuds, and

standing between six negroes from Martintide; and when the photograph was taken the negroes were order to wear tall hats."

"Did the Americans have sufficient food?" Secretary Fraser inquired.

In Haiti, the Philippines and other countries where the Marines have been compelled to hike long and hard, men who constantly slipped at their canteens were the first to become exhausted. On the contrary, the men who drank their

Continued on Page 2

, by order of General John J. Pershing, the U.S.

s, Library of Congress.

of the U.S. Army, since 1946. Matter-of-fact articles for enlisted soldiers are included in this monthly magazine. Circulation: 1,000,000. Publisher's address: U.S. Department of the Army, 9325 Gunston Road, Suite S108, Fort. Belvoir, VA 22060. Military. Website: <http://www.army.mil/soldiers/>.

Stars and Stripes: The U.S. Military's Independent News Source. Earlier newspapers of the same name appeared during the Civil War. The current *Stars and Stripes* began during World War I, then ceased postwar. It began once more in World War II and has been published continuously ever since. This Department of Defense–authorized newspaper publishes four daily editions in the Mideast, Europe, Japan, and Korea. It prides itself on providing firsthand reporting on events in those theaters. In addition to news and sports, *Stars and Stripes* contains all the elements of an American “hometown paper,” from advice columns to comics, horoscopes, and crossword puzzles. It estimates readership at 420,000 daily. Circulation: 90,000. Publisher's address: Stars and Stripes, 529 14th Street North West, Suite 350, Washington, DC 20045. Nonmilitary. Website: <http://www.stripes.com/>.

U.S. Naval Institute Proceedings. A venerable publication (since 1874) highlighting articles on a central theme with additional news stories and book reviews. Circulation: 90,000. Publisher's address: U.S. Naval Institute, 291 Wood Road, Annapolis, MD 21401. Military. Website: <http://www.usni.org>.

War in History. International in scope and historical in nature, this quarterly periodical is a scholarly publication that intends that military history should be integrated into a broader definition of history, embracing economic and social themes. Circulation: 600. Publisher's address: Sage Publications, 1 Oliver's Yard, 55 City Road, London EC1 1SP, UK. Nonmilitary. Website: <http://www.uk.sagepub.com/home.nav>.

Rosemary Long Meszaros

See also Armed Forces Radio and Television Service; Internet; *Stars and Stripes* (Newspaper)

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MILITARY OCCUPATIONAL SPECIALTY

The U.S. military uses a system of codes to identify occupations within the military. Each branch of the military uses a different system, of which that of the U.S. Army and the Marine Corps are most similar: the Military Occupational Specialty code, or MOS. Despite their similarities, the two services do retain certain unique aspects in their categorization of those who serve. In fact, each of the separate armed forces handles and categorizes personnel in a particular way, creating many differences between them. There are, however, broad aspects of personnel management that each system shares. This entry describes the classification systems of jobs in the U.S. armed forces.

Cross-Service Similarities

Each service uses a code, a mixture of letters and numbers, to denote the role of the service member within the organization. The services use codes of different lengths and compositions, but the specification of that service member's form of employment (e.g., fixed-wing aircraft maintenance) also delineates whether the organization assessed that particular posting to require an enlisted person or a commissioned officer to discharge the associated duties.

Those duties range from administrative to combat specialties, running a gamut that includes but is not limited to electronics repair, health care, construction and engineering, vehicle and machinery mechanics, public affairs, protective service, support staff, and transportation and load handling. Each of these fields contains jobs that are specified for enlisted personnel as well as tasks for commissioned officers.

The ways in which each service makes these specifications vary in the U.S. armed forces.

U.S. Army

The army uses a nine-digit code to describe a soldier's role in the organization within 37 major regions. The first three digits of the code—two numbers and a letter—constitute that soldier's Career Field Designator and range from 00A to 94Z. This Career Field Designator is the most common understanding of the MOS. The two initial numbers indicate the Career Management Field, and the third digit, the letter, specifies the role within that career field. For example, an 11B soldier lies within the Infantry career field and is a rifleman, the role specified within that field by the "B."

Commissioned officers within the U.S. Army are categorized by the same nine-digit code, save that the third digit (the first letter) is constrained. In every MOS, most officers will be specified with an "A," save in special cases such as the Military Intelligence career field, whose officers specializing in Human Intelligence are categorized as 35F.

For enlisted and commissioned soldiers, the next two numbers in the MOS fulfill different functions. For the officer, the fourth and fifth digits are numbers that, taken together, form a skill identifier denoting a particular ability or level of training required for the role. For enlisted soldiers, the fourth character is a number that indicates the skill or grade level within that MOS, while the fifth character denotes any special qualifications.

For each, the sixth and seventh characters denote some other secondary skill tied to the role within the MOS, while the eighth and ninth characters indicate a level of ability within a foreign language. Taking each of these into consideration, that same infantry rifleman could be categorized as an 11B300000, for an infantry sergeant without special skills.

U.S. Navy

The navy, on the other hand, uses a system of organization called the Naval Enlisted Classification within which it groups sailors as *ratings*. Each rating can be identified by the four-digit Naval Enlisted Classification code; for example, a surface rescue swimmer would be identified through BM-0170.

The navy organizes commissioned officers differently, with a four-digit "designator" to which an officer can add one or more three-digit Additional Qualification Designators. These Additional Qualification Designators may or may not be specific to certain designations; a regular submarine officer, 1120, could also hold an Additional Qualification Designators of CE5, identifying his position as a shore command.

U.S. Marine Corps

As a part of the naval organization, it is strange that the Marine Corps system closely parallels that of the army. Both use the MOS; the marines, however, make no distinction in their occupational fields between enlisted and officer ranks. The Marine Corps uses a different, though similar, set of numbers to fulfill the same nine-digit designator used by the army, such that the rifleman considered above would have a classification of 0311, while the remaining digits, as with the army, indicate special skills, language ability, and additional specialization.

U.S. Air Force

The air force utilizes a system of classification called the Air Force Specialty Code in which enlisted service members are classified with a five-digit alphanumeric code into their Air Force Specialty. A designation of 1A771 indicates an aerial gunner. The first digit places the job within the operations career group; the second specifies aircrew within operations; the third notes the position of aerial gunner; the fourth notes the skill level of the service member as a craftsman, a senior airman; the fifth is a skills designator specific to that AFS.

Air force officers are classified via a four-digit system, such that a fighter pilot would be designated 11F3. Again, the first digit denotes operations as the career group; the second specifies pilot, within operations; the third specifies the type of pilot, in this case fighter; and the final digit notes that the pilot is qualified.

Use of MOS in the U.S. Armed Forces

Within the U.S. services, certain aspects of their personnel management cross between services. For example, the career fields dealing with administrative

and support service functions are more widely distributed than the combat specialties. Every unit, everywhere, needs the personnel that allow it to function within the organizational bureaucracy—but M1A1 Abrams tank drivers are only needed where tanks are located.

Each service tests new recruits with a battery of aptitude tests before determining how to place that recruit within the organization; generally, the higher the score, the more opportunities are available to that recruit. The services, however, tend to husband their organizational needs and so will place recruits in areas of need, unless barred by contract.

The U.S. military classifies and organizes personnel by these codes so as to efficiently provide manpower to serve in defense of the nation.

Daniel I. Johnson

See also Air Force, U.S.; Army, U.S.; Defense, Department of; Navy, U.S.

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MILITARY OFFICERS ASSOCIATION OF AMERICA

The Military Officers Association of America (MOAA) is an association of military officers from the seven uniformed services of the United States. The seven services are (1) the Army, (2) the Navy, (3) the Marine Corps, (4) the Air Force, (5) the Coast Guard, (6) the Public Health Service, and (7) the National Oceanic and Atmospheric Administration. Membership is open to all those who hold or have ever held a warrant or commission in any component of the seven uniformed services and their surviving spouses. The association is an independent, nonprofit, and politically nonpartisan organization.

This entry describes the mission, structure, and activities of MOAA.

Headquartered in Alexandria, Virginia, the mission of the association is to advocate for a strong national defense; preserve the earned entitlements of members of the uniformed services, their families, and surviving spouses; and represent the interests of uniformed officers at every stage of their careers. Its focus is on monitoring and influencing military personnel matters and legislation affecting the MOAA community. The association is governed by a board of directors consisting of 36 officers from the seven uniformed services with four of the serving officers—the chairman of the board and three vice chairmen—being elected by the board. Also elected by the board from outside of its membership are the president, the chief financial officer, and the secretary, all of whom serve on MOAA's professional salaried staff and advise the board. The members of the board of directors all serve one 6-year term. Reporting to the board is the Auxiliary Member Advisory Committee, which reports on issues affecting surviving spouses of military members.

While MOAA is permitted by law to lobby, which it does actively, its status as a tax-exempt veterans' organization precludes it from participating in political activities defined as intervening directly or indirectly in any political campaign on behalf of or in opposition to any candidate running for public office. The association may advocate issues, but it may not advocate the election or defeat of participating candidates or political parties. While the association does advocate for a strong national defense, it does not become involved in matters pertaining to military strategy or individual weapons systems of the various services. MOAA's overarching goals are captured in the association's resolutions, which reflect the views of the entire membership. The membership provides input and votes on the organization's resolutions every 2 years.

The MOAA was founded in Los Angeles, California, on February 23, 1929, as The Retired Officers Association. The first leaders of the association hoped that by organizing and joining together, they could provide assistance and advice to other military officers. The concern for others fostered natural fraternal relations among officers from all the branches of the uniformed services. By 1944, its membership was more than 2,500. But by the beginning of World War II, the association's

leadership realized that it needed to reorganize to become a more effective force on behalf of its members. It moved the association's headquarters to Washington, D.C., in 1944. After a membership vote in September 2002, the association's name was changed from The Retired Officers Association to the Military Officers Association of America effective from January 1, 2003. MOAA now has more than 400 local chapters within the United States and many chapters overseas.

MOAA today is America's largest military officers' association lobbying on behalf of its membership and all officers within America's uniformed services. For its membership, it provides career transition assistance, member products for use and display, military benefit counseling, educational assistance to children of military families, and military professionalism activities. The association also offers a variety of publications for its members on financial planning, military retirement planning, military health care, survivors' benefits, and National Guard and Reserve benefits, all of which are available at no cost to the members. It publishes on a quarterly basis the journal *Today's Officer*, which is mailed to the members free of charge. Currently, it has eight full-time lobbyists dedicated to protecting the interests of all officers of the uniformed services, active duty or retired, and their families and survivors.

Paul E. Zigo

See also Association of the United States Army

Further Reading

Website

Military Officers Association of America: <http://www.moaa.org>

MILITARY ORGANIZATION, AIR FORCE

Established in 1947, the Department of the Air Force is administered by a civilian secretary who, like the navy and army counterparts, is appointed by the president with the consent of the Senate; the secretary of the air force (SECAF) is the senior authority in Headquarters Air Force (HAF), located at the Pentagon. The SECAF is not part of the operational

chain of command. Rather, in accordance with U.S. Code Title 10, the SECAF is responsible for all U.S. Air Force (USAF) affairs and functions. These include recruiting, organizing, supplying, equipping, training, servicing, mobilizing and demobilizing, administering, and maintaining. In addition, the SECAF oversees the construction, repair, and maintenance of the service's military equipment and real property. Civilian assistants and the air force chief of staff assist the secretary. This entry discusses the organizational structure of the USAF.

With the consent of the Senate, the president also appoints the chief of staff, USAF, choosing from among USAF generals. In addition to assisting the secretary and directing the Air Staff, the chief of staff, USAF, is a member of the Joint Chiefs of Staff. The air force chief of staff is also part of HAF. Thus, two staffs constitute HAF—the Secretariat and the Air Staff.

The USAF is structured so that the various units and organizations can transition immediately from peacetime activities to deploying for war. The chain of command flows up through standardized levels of organization that include establishments, units, and nonunits. An establishment comprises a headquarters unit and all of its subordinate units. The highest establishment is HAF. Staff functions are the responsibility of Major Commands (MAJCOM), wings, and squadrons. Numbered or named air forces (NAF), groups, and flights serve only operational functions. A MAJCOM is immediately subordinate to HAF, with NAFs subordinate to MAJCOMs and so on with wings, groups, squadrons, and flights.

MAJCOMs report directly to HAF. In 2011, the air force had 11 MAJCOMS, including the two reserve components. They were the following: (1) Air Combat Command, (2) Air Education and Training Command, (3) Air Force Global Strike Command, (4) Air Force Materiel Command, (5) Air Force Reserve Command, (6) Air Force Space Command, (7) Air Mobility Command, (8) Air National Guard, (9) Pacific Air Forces, (10) U.S. Air Forces in Europe, and (11) Air Force Special Operations Command.

Direct Reporting Units (DRUs) report directly to the chief of staff, USAF. Although a DRU is similar to a MAJCOM in its responsibilities, its mission does not fit into any of the MAJCOMs. For instance, the United States Air Force Academy is a DRU. The

other DRUs are Air Force District of Washington and the Air Force Operational Test and Evaluation Center.

A Field Operating Agency is another subdivision of the air force that reports directly to HAF. The air force has 25 Field Operating Agencies: (1) Air Force Agency for Modeling and Simulation; (2) Air Force Audit Agency; (3) Air Force Center for Engineering and the Environment; (4) Air Force Civil Engineer Support Agency; (5) Air Force Cost Analysis Agency; (6) Air Force Flight Standards Agency; (7) Air Force Historical Research Agency; (8) Air Force Inspection Agency; (9) Air Force Intelligence, Surveillance, and Reconnaissance Agency; (10) Air Force Legal Operations Agency; (11) Air Force Logistics Management Agency; (12) Air Force Manpower Agency; (13) Air Force Medical Operations Agency; (14) Air Force Medical Support Agency; (15) Air Force Office of Special Investigations; (16) Air Force Personnel Center; (17) Air Force Personnel Operations Agency; (18) Air Force Petroleum Agency; (19) Air Force Public Affairs Agency; (20) Air Force Real Property Agency; (21) Air Force Review Boards Agency; (22) Air Force Safety Center; (23) Air Force Security Forces Center; (24) Air Force Services Agency; and (25) Air Force Weather Agency.

The most familiar units are NAFs, wings, groups, squadrons, and flights. NAFs are the tactical units that report to MAJCOMs, with responsibility for operational leadership and supervision. There are 24 NAFs. The echelon immediately below a NAF is a wing. There are three types of wings. Operational wings have an operations group and an associated mission. An air base wing has a support function, such as operating and maintaining a base. The third type of wing is the specialized mission wing. As its name implies, such a wing has a specialized mission such as training and typically does not have assigned aircraft.

The air force defines a group as a tactical echelon between wings and squadrons, comprising multiple lower echelon units to fulfill a broader role such as mission support. A squadron is the building block of air force organization and has a specific operational function, such as a flying squadron, or a support function, for instance a civil engineer squadron. If squadrons require further subdivision so that personnel may perform a specific mission, the unit is called a flight, the lowest level unit recognized by

the air force. Because flights are numbered or named, they are assigned to a group rather than to a squadron.

Units are named or numbered, and are typically constituted by HAF, USAF, or by a MAJCOM. There are eight types of units: (1) active, (2) inactive, (3) disbanded, (4) parent, (5) provisional, (6) attached, (7) detached, and (8) primary subordinate. An active unit is an organization constituted and activated by HAF. Inactive units are organizations that are constituted by HAF but not yet activated, or having been active are inactivated. A disbanded unit is a retired unit. Parent units administer organizations assigned to them. Temporary units created to perform specific tasks receive the designation of provisional unit. An attached unit is removed from its parent unit's control and is placed under the control of another organization for specific functions such as logistic support while remaining officially assigned to the parent unit. All air force personnel must be assigned to a unit.

Any organization that is not constituted by HAF, USAF, is a nonunit. There are five types of nonunits: (1) named activity, (2) detachment, (3) operating location, (4) squadron section, and (5) air force element. Named activities are parts of units that are given designations clearly identifying their mission, for instance, the Civil Engineer School that is part of the Air Force Institute of Technology. Detachments are not located with their parent units, and a detachment commander has nonjudicial punishment authority over detachment personnel. An operating location is also geographically distant from its parent unit, but its commander does not have nonjudicial punishment authority. A squadron section has administrative control over all unit members. Higher level organizations such as groups and wings also have sections. Air Force Element identifies USAF personnel who are on duty with organizations outside of the air force.

Janet G. Valentine

See also Air Force, Department of; Air Force, U.S.; Air Force Command

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MILITARY ORGANIZATION, ARMY

The dictionary defines a *hierarchy* as a graded or a ranked series in which objects are above, below, or equivalent to one another. This definition readily applies to most human systems from business to religion to government. The military organization of the U.S. Army represents one of the more rigid examples of a hierarchical organization. From higher-level national command structures through basic unit building blocks, the army culturally, traditionally, and legally has maintained a chain-of-command organizational structure throughout its many historical changes. Gaining a clear understanding of the army as a military organization requires an understanding of its mission, command structure, the current modular transformation, how the organization as a whole is managed, and its component units. This entry discusses the organizational structure, mission, and management of the U.S. Army.

The mission of the U.S. Army, derived from the Constitution and mandated by Congress under Title 10 of the U.S. Code, is to organize, train, and equip forces for sustained land combat operations in defense of the United States and the accomplishment of national objectives and policies. The army organizes its forces based on the capabilities required to carry out the national military strategy of the United States—protect the country against external acts and aggression, prevent conflict and surprise attacks, and prevail against adversaries.

Major Commands

As a military organization, the army does not exist in a vacuum but rather participates as one service in the National Command Structure running from the president as the commander in chief through the secretary of defense to the secretary of the army and the chief of staff of the army. A parallel line in the chain of command extends directly from the president to the various unified combatant commanders. These four-star-equivalent officers command the U.S. forces oriented to different geographic regions throughout the world. In a similar bifurcated structure, the army

consists of an operating force and a generating force. The operating force is composed of all numbered armies, corps, divisions, brigades, and other subordinate and support units that deploy to conduct military operations. The generating force is those army organizations that are force providers; they develop, train, and sustain the operating force. Under the Headquarters, Department of the Army, are three subordinate organizational levels that constitute the operating and generating force: (1) Army Commands, (2) Army Service Component Commands, and (3) Direct Reporting Units. There are three army commands—Training and Doctrine Command, Army Materiel Command, and Forces Command—that, respectively, recruit, equip, and train/sustain army units as part of the generating force. The nine Army Service Component Commands, such as U.S. Army Central, are responsible for oversight and control of all army operations in their assigned geographical or functional area. Direct Reporting Units consist of commands with very specialized functions such as the Installation Management Command, the Criminal Investigation Command, and the Test and Evaluation Command. As of 2011, there were 11 Direct Reporting Unit organizations.

To effect its “organize” mission, the army conducted a decade-long transformation to a modular force concept beginning in the mid-2000s. Prior to the attacks of September 11, 2001, the army’s combat organizations and support structure centered on 18 divisions. Conducting stability operations in the Iraq and Afghanistan Wars after the conventional defeat of large enemy formations required a mix of capabilities that division deployments could not meet. Coupled with the need for a more robust force rotation schedule, the army developed the modularity concept that focused on brigade-sized units as the primary warfighting formations instead of divisions. Under this concept, like units are scalable and can be broken down into smaller blocks with the same capabilities. Elements of varying sizes and capabilities are thus assembled under a headquarters element, correctly building the resulting unit for joint and expeditionary military operations.

From Fire Team to Army Group

Building, training, and equipping these army forces requires many processes that are managed through an eight-function organizational life cycle model

applying equally to personnel, units, equipment, or facilities. First, a *force management* decision is required to determine what the army will look like and what capabilities it must have. In this representative example, a single infantry soldier is needed. Through the function of *acquisition*, the soldier, a woman for this example, is recruited from the national populace. She must then receive *training* that provides the critical skills and competencies required by a soldier. Then, the soldier is *distributed* to a unit with an identified claim or personnel shortage. At this point in the cycle, resources are applied to both the individual soldier and the unit with the goal of increasing their readiness to carry out the function of *deployment*. In a deployment, the soldier and the soldier's unit are projected anywhere in the world to support national policies and objectives. Whether deployed or at a home station, the soldier must be *sustained*. This requires providing additional resources such as food, clothing, and shelter as well as equipment, training areas, and support facilities. The soldier may decide that she likes being part of a military organization and may decide to make it a career. To be of long-term beneficial use to the army, the soldier requires further *development* of skills and education. Finally, at some point and time, the soldier's career is over, and she must *separate* from the army, though the service and the soldier may retain some postseparation responsibilities to each other.

Though described sequentially in the previous example, the functions of the organizational life cycle model are actually interrelated in practice. One soldier is added with others to form the units that make up the forces of the army military organization. The smallest military unit is a fire team or a crew. The fire team consists of 4 or 5 soldiers organized for combat. A crew is similar but is based around a particular military vehicle such as a tank or artillery piece. A squad, or section, is composed of between 8 and 16 soldiers and is usually led by a noncommissioned officer (NCO) with the rank of sergeant or staff sergeant. The combination of two to four squads forms a 20- to 60-soldier organization known as a platoon. The platoon is the first level of military organization where an officer is designated as the primary leader. Either a first or second lieutenant serves as a platoon leader, assisted by a platoon sergeant at the rank of sergeant first class.

A company-level organization is formed from the addition of a headquarters section to the combined strength of three to five platoons with an end number of 70 to 250 soldiers. While a majority of organizations of these sizes are called companies, some are called batteries or troops corresponding to their special association with the branches of field artillery (fires) and cavalry (armor). This is the first organizational level where the army designates the leader of the unit as a commander. The commander of a company, battery, or troop holds the officer rank of captain and is assisted by a senior NCO known as a first sergeant.

Combining anywhere from four to seven companies along with a headquarters company and a staff forms the organization known as a battalion (or a squadron if a cavalry unit) consisting of between 500 and 1,200 soldiers. The companies within a battalion can be of a similar or separate nature. For example, an infantry battalion could consist of a headquarters company, a medical company, a sustainment company, and four infantry companies. Because of these robust tactical and support capabilities, a battalion is the lowest organizational unit capable of limited independent action. It is commanded by a lieutenant colonel with a senior NCO advisor known as a command sergeant major.

The next organizational level is known as a regiment or group. This terminology is largely from the army's past but is still used at some administrative and training levels like Special Forces groups. The more current term in use to represent the combination of several battalions is a brigade or, more commonly, a brigade combat team. Consisting of 3,200 to 4,200 soldiers, a brigade combat team is the main deployable combined arms organization of the U.S. Army. Commanded by a colonel with a command sergeant major as the senior NCO, a brigade combat team is capable of independent, sustained combat operations when organized as an Infantry (light), Stryker (motorized), or Heavy (armor) brigade. Other types of brigade provide support such as Sustainment Brigades (supplies, transportation, and maintenance), Maneuver Enhancement Brigades (engineers and military police), Fire Brigades (artillery), Combat Aviation Brigades (attack helicopters), and Battlefield Surveillance Brigades (military intelligence, signals, and unmanned aerial vehicles).

A division is commanded by a two-star major general and consists of a headquarters element of

300 to 500 soldiers. Depending on its mission and configuration, a division's strength is 12,000 to 24,000 soldiers when between two and seven brigades are assigned. Once the primary maneuver force at the tactical level, divisions serve as mission command headquarters to direct brigade-centric operations.

Two to five divisions are organized into a corps between 20,000 and 50,000+ soldiers and are commanded by a three-star lieutenant general. When augmented by additional personnel from other services, the 1,000-person corps staff can form the nucleus of a joint task force. A joint task force is composed of units from two or more services (*note*: the U.S. Marines and Navy working together are considered "sea" services and not joint). Some Joint Task Forces are standing headquarters for specific missions such as prisoner of war accountability, though most form just to solve a crisis in a geographical region and disband on mission completion. The joint task force structure is very flexible and is frequently the "face" to international governments and nongovernmental organizations.

An army, sometimes called a field army, consists of 2 to 4 corps and may number in excess of 100,000 soldiers. It is commanded by a four-star general officer who may also assume the role of the land component commander in a theater (in charge of all ground forces). The army currently has only three numbered armies that are primarily planning and administrative headquarters with no troop units assigned.

Out of all the aforementioned military organizations, it is the division that holds the most affinity for soldiers and is probably best recognized by the average civilian. The current transformation of the army from a division-centric force to a brigade-centric force is just one point on a long time line of historical developments concerning divisions. The modern division originated in the early 1900s after a poor performance by combat formations in the Spanish-American War of 1898. Planners designed a combined arms organization with no specific fixed strength, but with a movement factor of 14 miles per day as determined by the infantry marching speed of the day. Over the next 50 years and three wars, changes to the division structure were initiated because of the introduction of new technologies (e.g., the tank), new capabilities, and in reaction to new enemy weapons. Frequently,

these changes were categorized by modifications to the number of combat formations within the division. U.S. divisions deployed to France in World War I were known as square divisions due to their four infantry regiments. Interwar discussions concerning the structure of divisions resulted in a reduction of one combat regiment while adding other specialized units, and the triangular division was created. Though some structural adaptations were made during World War II, including the development of a new airborne division, the triangular division lasted through the end of the Korean War. During the late 1950s, the army reorganized its divisions with each containing five smaller battle groups to ensure dispersal on the atomic battlefield. This pentomic division proved both unwieldy and unsuitable for other operations and was abandoned in the early 1960s in favor of the ROAD structure—Reorganization Objective Army Divisions. ROAD returned to three combat formations, now labeled brigades. Additionally, many other combat battalions and support organizations were allocated into a division base from which support could be tailored into task forces. ROAD formations were first employed in Vietnam along with a new type of organization, the air assault division, where soldiers flew into battle aboard helicopters. Though renamed as the Army of Excellence, the flexibility of the ROAD enabled this design to endure through the remainder of the Cold War with only slight modifications. In 1994, the army began a project titled Force XXI and designed to create military organizations for the 21st century. It is from this project that transformation and modularity arose.

Though the military organization of the U.S. Army is hierarchical, it is not static. To remain relevant, the army must constantly change to reflect the strategic environment of today and tomorrow. Organizational change is rarely easy, especially so for a military organization like the army, but the structures, units, and processes described here have withstood the test of time and allowed the army to effectively carry out its mission of defending the nation.

Allan S. Boyce

See also Army, Department of; Army, U.S.; Brigade; Defense, Department of; Division; Modular Army; Regiment

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MILITARY ORGANIZATION, MARINE CORPS

The U.S. Marine Corps is organized into four components: Headquarters Marine Corps, the Operating Force, the Supporting Establishment, and the Marine Corps Reserve. Headquarters Marine Corps entails the offices of the commandant, the assistant commandant, their staffs, and all personnel who are assigned to assist these senior officers in the formulation of Marine Corps doctrine, equipment, basing needs, relations with other U.S. military services and U.S. government agencies, liaison with the political leadership of the country, and contact with foreign military forces for activities such as joint training and maneuvers.

Even more important is the composition and organization of the Operating Force, especially the fact that in both peacetime and war, it is more clearly organized into what the Marine Corps calls the Marine Air-Ground Task Force. This is what is often called “combined arms” unit organization such that at any level—Marine Amphibious Unit, Marine Expeditionary Unit, Marine Amphibious Brigade, or Marine Expeditionary Force (MEF)—Marine Corps forces always have at the ready a mix of forces that include infantry, field and air defense artillery, armor and amphibious assault, combat engineer, intelligence, medical, administrative, and both fixed- and rotary-wing assets. This mix of combined arms forces has been the reality of Operating Force organization since the Second World War, though without all of the nomenclature. This entry

discusses the organizational structure of the U.S. Marine Corps.

Three divisions of Marine Corps ground forces and three air wings of Marine Corps aviation assets (both fixed and rotary winged) constitute the Operating Force. These units are organized into MEFs, each of which consists of a ground division grouped with an air wing, totaling approximately 46,000 marines and sailors. These MEFs are stationed on the east coast of the United States, the west coast of the United States, and in the Okinawa Prefecture of Japan. The Operating Force also consists of the 1st Marine Amphibious Brigade, which is stationed in Hawaii. The Operating Force in turn is very often organized and deployed in smaller combinations of units such as Marine Expeditionary Units or Marine Amphibious Units, which typically consist of a ground force battalion or regiment married to a squadron or air group of aviation assets. Typically, three battalions plus support forces constitute a regiment, and three regiments with support forces make up a division. Along the same lines, three squadrons of aircraft with support forces will constitute an air group, while three air groups and support forces will make up the air wing. Also, very typically, especially in peacetime, these smaller units such as the Marine Expeditionary Units will deploy aboard U.S. Navy amphibious assault ships as part of a carrier battle group or some other deployed U.S. Fleet organization. The logic here is that major groups of American naval vessels that are deployed to far reaches of the globe will have on hand Marine Corps forces that can be deployed at the discretion of the battle group or fleet commander for missions such as fast response power projection ashore, stabilization operations, or the evacuation of American or allied military or civilian personnel.

The Supporting Establishment ties in quite significantly with Headquarters Marine Corps, in that it is the part of the Marine Corps that ensures that the Operating Force has the logistical capability to perform its missions. This, in turn, translates into the offices and personnel who ensure that the marines have the uniforms, equipment, weapons, supplies, and support from Headquarters Marine Corps, other services, other U.S. government agencies, and even foreign governments when necessary.

The Marine Corps Reserve represents a fourth division of ground forces and a fourth air wing, all with similar if not identical equipment, numbers,

and training as the Operating Forces. In a full mobilization, this fourth MEF would take its place alongside the three active-duty MEFs for whatever duty it was assigned. Short of full mobilization, individual Marine Corps reservists or their units can be mobilized to reinforce active-duty units.

The Marine Corps has had a long relationship with the U.S. Navy, dating back to the late 1700s when the marines guarded naval bases, performed security and gunnery functions on naval vessels, provided small landing parties for operations ashore, and performed even more ceremonial duties such as orderlies for ship's captains and flag officers. As the Marine Corps grew into a larger force with a more specialized mission of amphibious assault against hostile-held shores in the 1900s, Marine Corps presence on U.S. Navy ships shrank, though Marine detachments were not entirely removed from American warships until the late 1990s, when the end of the Cold War and budget and personnel cuts demanded that shipboard marines be retained in the Marine Corps Operating Force. Moreover, during the 1990s and 2000s, marines have remained on some American warships, especially marine air wings assigned to the Fleet's aircraft carriers. The marines in this case have been employed to backfill shortages in naval aviation, and at times, the marines have provided a significant percentage of carrier air assets for the Fleet, sometimes approaching 20% to 30% of the air wings serving deployed with the U.S. Navy's carrier groups.

The Marine Corps' focus on amphibious operations has also entailed refinement in command relationships. During World War II, for instance, it was not always clear in the context of amphibious operations when the authority of the naval commander ceased and the authority of the Marine Corps commander became active. The same controversy plagued army-navy relations in these types of operations. Eventually, it was decided that the naval force commander was in charge of all forces until a majority of embarked ground troops were ashore, by which time, the amphibious force commander would take over ashore. This system has persisted through the Cold War and post-Cold War eras.

Finally, it needs to be emphasized that a key to Marine Corps organization is the infantry squad and that Marine Corps organization also entails a very strong emphasis on both small and large unit training, tactics, leadership, and cohesion. The marines

have prided themselves on the idea of the squad of rifle-wielding infantry as the basic building block of the corps, with noncommissioned and junior officers as the key personnel in these situations. In addition, the Marine Corps has focused on the building of *esprit* in larger units such as battalions and regiments. Present-day Marine Corps doctrinal publications, such as *Warfighting*, and publications from the past, such as the *Marine Corps Manual* and the *Small Wars Manual*, attest to this central role for both small and large cohesive units that continue as part of the Marine Corps ethos into the early 21st century.

Hal M. Friedman

See also Force Reconnaissance, Marine; Navy, Department of; Reserve, Marine Corps

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MILITARY ORGANIZATION, NAVY

A navy is the branch of the armed forces designated for operations conducted at and from the sea. The nature of this military organization and the manner in which it operates is very different from either armies or air forces. This depends on the unique features of the maritime environment, which in turn affects the characteristics of naval platforms.

The sea is a vast, freely accessible and, for the majority of time, empty realm that covers more than 70% of the world's surface. It offers a single continuous global medium for mobility and access, with currently more than 90% of global trade (by volume and value) transported in large container ships. As an operating environment, the sea does not offer the conditions to host a permanent human population; ships sailing through it do not leave footprints in the ground and tend to cover large distances. Last but not least, the sea is a tridimensional realm that, throughout the 20th century, has become increasingly more accessible not merely on its surface but also below and above it.

This unique working environment has had an enduring impact on naval organizations in terms of attitude toward innovation, science and technology, platform design and functions, organizational culture, and structure. This entry examines these features of modern navies and provides an overview of naval organization, focusing on both sea- and shore-based institutions and the rationale for this organization.

Innovation, Science, and Technology

Seamanship—the art of sailing—is based on the practice of highly technical and science-based skills at sea. These are necessary to enable professional sailors to take advantage of hydrography, marine topography, and astronomy. Science and technology are equally crucial for the development of combat systems. Similarly, an in-depth technical knowledge is instrumental to possessing the means to limit the impact of weather conditions and navigation on ships and people. As such, throughout history, naval organizations paid particular attention to matters of innovation, science, and technological development. From the adoption of the first compass to the testing of the sonar system, to the development of well-balanced, vitamin-rich diets, and to the introduction of nuclear engines, navies firmly stood at the forefront of scientific and technical innovation. Today, navies remain as technology-intensive military organizations, and their officer corps and enlisted personnel continue to be preeminently trained in scientific matters.

Platform Design and Functions

Warships are the most defining feature of a naval organization, though today's navies have grown to include air, underwater, and amphibious assets. They are different from any other military platform used by armies or air forces, in that they are not merely designed for combat. To any sailor, a ship is home. In fact, unlike a tank or an aircraft, warships are designed to perform all routine functions of daily life and to sustain themselves at sea for lengthy periods of time. Indeed, there is a symbiotic relationship linking combat effectiveness, quality of living standards, and endurance. From the building of an oar-propelled ship to the blueprints of a nuclear-powered aircraft carrier, the design of a warship represented a crucial balancing between combat

performance and sustainability at sea. Galleys were limited in operational endurance by their food (and water) supplies as much as a submarine in World War II, and battleships could operate only as far as their coal and oil supplies allowed them in a fashion similar to a modern frigate or a destroyer.

Organizational Culture

As a result of the nature of the naval profession, navies developed a distinct organizational culture. This permeates aspects of life beyond the professional sphere, and it is often influenced by regional seafaring customs. At sea, a ship's company is therefore a reproduction in scale of a nation's social fabric, both in terms of its state institutions and of its people. It is no coincidence that major capital ships have often risen to be iconic symbols of national power and status, with warships like HMS *Victory* and USS *Constitution* representing enduring embodiments of national achievement. Concurrently, warships are places where accommodation, food, drink, and recreational activities follow preferences that are specific to national habits; and for this reason, they become a showcase of national culture in interaction with other navies and nations overseas. Ashore, naval personnel tend to live in relatively isolated communities usually close to bases and local seafaring areas. As such, naval communities are at times considered closed or even parochial. In this respect, during the interwar period, the U.S. secretary of state Henry Stimson is reported to have described the navy leadership to be responsible for

the peculiar psychology within the Navy Department, which frequently seemed to retire from the realm of logic into a dim religious world in which Neptune was God, Mahan [America's foremost naval strategist] his prophet, and the United States Navy the only true church. (Stimson & Bundy, 1948, p. 506)

Structure

In the age of sail, navies conducted operations at sea and were tasked to land forces ashore. They were structurally composed of two main branches: (1) the fleet, which included frontline combat forces; and (2) the shore establishments, which provided the technical, maintenance, education, and other administrative functions to support the fleet. The

introduction of new platforms and specializations, most notably the submarine and the aircraft, led to the expansion of the original fleet structure centered on the surface ship to accommodate the specificities of operations conducted above and below the surface of the oceans.

Modern navies are complex military organizations controlling a large variety of capabilities and conducting very different types of missions, from convoy escorts to power projection and from strategic deterrence to commando operations. Navies are the only military organizations to operate at sea, on land, and in the air. This complexity notwithstanding, their organizational structure is still preeminently based on the distinction between fleet and shore establishments.

The commander in chief of the fleet is responsible for all the fleet's components and responds to the navy's chief of staff—the head of the organization. Fleets are usually subdivided according to the branch of specialization. These can include surface, air, submarine, mine warfare, amphibious, special, and training forces and refer to a “type commander.” These commands are responsible for the readiness of the assets. In more recent times, the need to profit from the development of advanced communication systems to foster integration and effectiveness among different naval assets and capabilities, and among the different armed services, prompted naval organizations to venture into a “fourth dimension” of naval warfare. In the case of the U.S. Navy, a naval “network warfare” command was established to deliver “information dominance” in naval and joint operations.

Operationally, each fleet's assets are under the responsibility of specific groups that vary in size, ranging from a small division or a squadron of two units to a flotilla or a battle group—depending on the type of vessels assigned to them. In the case of the United States, the navy operates multiple fleets, some forward deployed or forward based. For this reason, it has an additional organizational layer over the fleet structure represented by two main theater-level fleet commands, Atlantic (recently renamed Fleet Forces Command) and Pacific.

In the U.S. Navy, air assets and platforms have a uniquely central role within the fleet structure. Since World War II, the ability of aircraft carriers to project striking power beyond the line of the horizon has transformed them into the centerpiece of American

naval power. Today, the U.S. Navy has a dedicated command. The Commander Naval Air Forces operates 11 nuclear-powered aircraft carriers (6 assigned to the Pacific fleet and 5 to the Atlantic fleet), each with a displacement of more than 100,000 tons and manned by approximately 3,200 crewmembers. Carriers have an additional 2,500 members of the air wing, essential to operate their air groups composed by 90 fixed-wing aircraft and helicopters. They are the single most complex naval platform ever to set sail, possessing the ability to perform all the functions of the modern navy, from power projection and forward presence to deterrence, sea control, and humanitarian assistance. Aircraft carriers are powerful enablers, and for this reason, they are at the center of modern fleet structures. They are, however, also vulnerable to enemy attack. As such, all other surface and submarine assets operating within the fleet contribute to their defense.

Shore establishments support the functioning of the fleet. They perform key functions such as the management of human resources and personnel, and they hold responsibility for all institutions and facilities concerned with repair and maintenance, such as dockyards, education, meteorology and oceanography, legal matters, intelligence, naval and air bases, communication systems, and supplies. Among the different offices ashore, the office of the chief of naval operations covers the vital plans and policy functions of the navy. The head of the navy, the chief of naval operation, is usually a four-star admiral and is responsible to civilian authorities for the conduct of the service.

Navies and the Marine Corps

Navies have been involved in amphibious warfare since the days of the Greek siege of Troy. The landing of forces ashore in support of land operations to establish an initial foothold on a territory, or to insert small groups of forces to gather information and intelligence, remained firmly in the repertoire of naval organizations from ancient to contemporary times. Marine Corps units undergo very intense training to operate from the sea or land, and for this reason, they tend to possess a strong subculture and consider themselves as different from the rest of the navy. In contemporary navies, marine corps are assigned a type command under the fleet structure in a fashion not dissimilar to other branches of

the navy. In the case of the United States, the Marine Corps is a particularly large organization—roughly the same size of the entire British military—and therefore has a military structure that is independent from the U.S. Navy; though in terms of civilian administration, it is a part of the Department of the Navy.

Navies and Coast Guards

Coast guards are paramilitary maritime forces with law enforcement powers concerning a country's territorial waters and Exclusive Economic Zone. They can be an integral part of the navy or, as in the case of the United States, they can be an independent branch of the armed forces. Coast guards operate to guarantee safety, security, and stewardship at sea, and to prevent illegal acts to be carried out within a country's territorial waters. In peacetime, as a result of their law enforcement powers, coast guards operate under the authority of civilian authorities responsible for internal affairs. In countries where the coast guard is part of the navy, the latter oversees the administration and structural organization of the former, while coast guard operations remain under civilian authority. Responsibility for their operational activity is usually transferred to the navy during time of war. In the United States, peacetime activities of the coast guard were under the responsibility of the Department of Transportation from 1967 to 2002, when the Coast Guard was transferred to the newly established Department of Homeland Security.

Navies and Joint Command Functions

During the 20th century, and increasingly more in the post-Cold War era, the complex nature of military operations prompted the creation of unified or joint commands. These served to foster effectiveness and system integration among the different armed services at the operational and command levels. In terms of operations, in many military organizations, joint commands are created ad hoc, based on specific operational needs. In the case of the United States, the existence of broad and continuous missions across the globe entailed the creation of permanent unified commands. Some are regionally based, such as the Africa, Southern, European, and Pacific commands. Others are thematic, like the Special Operations and Strategic

commands. Joint commands of this kind can be described as “force users” in that they have operational control over naval (and other military) forces, with the navy in a role of “force provider,” retaining responsibility over organization, training, and equipment.

Alessio Patalano

See also Antisubmarine Warfare; Coast Guard, U.S.; Marine Corps, U.S.; Navy, U.S.; U.S. Pacific Command

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MILITARY SCIENCE

Military science is the study of military processes (decision making, etc.), institutions (units, armies, training organizations, etc.), and behavior (by individuals and units in war and peace), along with the study of war and warfare, and the theory and application of organized coercive force. It is a field of study, rooted in the humanities, that focuses on the study of the use of organized coercive force in history and in the international community through the theoretical study of military processes (decision making, etc.), institutions (units, armies, training organizations, etc.), war and warfare (meaning

armed conflict and the application of organized coercive force within armed conflict), and behavior (by individuals and units in war and peace); how the military aspect of national power relates to the other instruments of national power (diplomatic, informational, economic, and cultural); the theory and application of organized coercive force as an instrument of national power; and other issues specific to national armed forces.

Military science is broadly concerned with the use of organized coercive force in history and the international community and the study of warfare. The study of warfare is the study of human interaction, since wars are fought by armies composed of and led by human beings. As such, an accurate characterization of it should place it among the other humanities, all of which are connected by the study of some aspect of the human condition. The humanities reveal how people, living collectively, have tried to make moral, spiritual, and intellectual sense of a world in which irrationality, despair, loneliness, and death are as conspicuous as birth, friendship, hope, and reason; and military science is related to the humanities in many of these areas and instances. As a science, however, military science (like political science) is able to offer clues about the human condition but never a complete answer.

Military science often addresses related issues including international relations, foreign policy, diplomacy, military history, military theory, psychology, leadership, management, cultural studies (including the study of languages), and ethical studies. Work in military science influences and is influenced by the related work in the fields of history, philosophy, literature, conflict and peace studies, anthropology, political science, geography, and law. Work in military science is often associated with work in military history, military leadership, cultural studies, and other theoretical aspects of martial studies. While scholarly activity in military science is principally found in humanities departments and publications (in areas such as history, military history, cultural studies, political science, and other conflict studies), it is also found in social-scientific areas such as anthropology, sociology, and psychology. This entry addresses the theory, definition, scope of the field of study, etymology, contemporary components, and recent developments in and of the field of military science.

Definition

Military science is defined as a systemized body of knowledge regarding and relating to the theory, application, and employment of military units and weapons in land warfare (i.e., the conduct of war on land) and armed conflict encompassing issues related to the following areas: military leadership, military organization; military training and education; military history; military ethics; military doctrine; military tactics, operations, and strategy; military geography; and military technology and equipment. Within the Dewey Decimal System, military science is classified within the social sciences class and the public administration division, and it is a recognized section identified by the number 355.

As a Field of Study

Military science has always had a narrow, limited, and technical connotation and is considered to be a subset of the larger body of knowledge known as the *military art* (defined as the judgmental application of military science to the conditions at hand). Military science, like many other fields of study, does not possess a unified theory and is rather a diverse field of study encompassing many different approaches, methods, and academic perspectives. As in any academic discipline, military science scholars and practitioners frequently debate the scope and parameters of the field among themselves. However, some scholars from other fields have criticized the discipline as a whole for lacking legitimacy as a true academic endeavor. It has been popular to treat military science as not being worthy of being called a legitimate academic field of study. Army Major General Edward B. Atkeson (Ret.) has been an outspoken supporter of the military studies model of academic inquiry. Critics, however, see military science as simply a vocational body of knowledge akin to plumbing, as opposed to promoting its utility to the public by studying conflict, war, and the organized application of coercive force in a world that has been characterized far more by conflict than by peace.

Etymology

The term *military science* entered the American lexicon via the French military theorist Baron Antoine-Henri Jomini in the late 1840s and through the

writings of Henry Wager Halleck and Dennis Hart Mahan. The first recorded use of the term appeared in an obscure French work by Francois Robichon in 1742 as *science militaire*, followed by its appearance in a 1773 work by Jacques Antoine Hippolyte, Comte de Guibert, and a 1775 work by Guillaume LeBlond. Jomini, however, popularized the term in the introduction to his extremely influential 1838 work *Précis de l'Art de la Guerre*. Although not translated into English until 1854, Jomini's work was undoubtedly read in French by his two most ardent American admirers, Henry Wager Halleck and Dennis Hart Mahan, both of whom were comfortable reading French and who were famous Francophiles. In their own publications, which were largely reworkings of Jomini and which appeared within the next decade, including Halleck's 1846 *Elements of Military Art and Science* and Mahan's 1847 *Elementary Treatise on Advanced Guard, Outposts, and Detachment Service of Troops*, they used the term *military science* extensively, indicating the high level of Jomini's influence. Given the influence of Jomini's work on Halleck and Mahan and that Halleck's and Mahan's works were the most influential 19th-century military texts available in America, it is reasonable to conclude that the term *military science* entered the American lexicon in this manner.

The first official use of the term occurs in conjunction with the 1866 Army Bill, directing the assignment of selected officers to teach military science at civilian colleges and universities. After considering the 1866 Army Bill, army leaders determined that students at civilian colleges and universities would have approximately 2 hours each week to devote to military subjects. Given this relatively small amount of time, especially when compared with the amount of time spent on such topics at military schools, leaders determined that students would be able to learn only aspects of small unit military drill and the rudiments of small unit tactical employment. University administrators also expressed their desire that the students' military training consist primarily of physical activity, thus allowing it to satisfy physical education requirements (which is still the case on many campuses). These two concerns combined to create the general program of instruction for military training on civilian campuses. Since this training did not encompass the entire scope of the military art, the

term military science was used to refer to military training on civilian colleges and universities devoted primarily to drill and tactics.

By the time the ROTC program was established under the National Defense Act of 1916, the convention of referring to military training on civilian colleges and universities as military science had been established for 50 years, making it the logical choice for adoption by ROTC. American ROTC was based largely on an analogous British program, and the most influential post-World War I British military thinker, J. F. C. Fuller, also championed a similar term, adding to the logic of its adoption. The appellation of "science" also fit nicely with the Progressive Era's focus on progress and technology, further enhancing its appeal. Military science retained its attractiveness during the interwar period and especially during the Cold War, when the American academy again turned its attention to technical subjects, and the term helped provide ROTC departments with legitimacy within academe.

The restricted nature of the topics addressed by military science also supported its retention, especially during periods when ROTC was required to produce large numbers of officers. These instances occurred during the pre- and post-Vietnam War periods of the Cold War, especially during the periods 1950–1965 and 1980–1992, which coincide with the peak strengths of America's Cold War army.

Despite its utility, there have been repeated calls to expand the scope of military science. The first occurred during the World War II period, when it became evident that the training associated with military science was too narrow. The next came as a challenge from academics during the Vietnam era as a result of their assessment that military science consisted largely of vocational training rather than academic education. In response, military and academic educators expanded the breadth of the military science curriculum taught on university campuses far beyond the traditional elements of drill and tactics. Most recently, members of the military and civilians have issued a call to establish an academic field of study related to the military to better prepare soldiers for the challenges of the post-Cold War period and to help them make more substantive contributions to the development, implementation, and execution of military policy in the tremendously complex environment of the 21st century.

Components of Contemporary Military Science

In contemporary times, military science addresses the following areas: military leadership, military organization; military training and education; military history; military ethics; military doctrine; military tactics, operations, and strategy; military geography; and military technology and equipment.

Military Leadership

Military leadership addresses the theory of leadership, the leader-follower relationship, and ethics. Military leadership also encompasses learning about the dynamics and behaviors of effective leaders and followers, including how to work as a team, how to think critically, and how to solve problems. Education for leadership mandates development of critical and analytical skills, along with the development of basic leadership skills to allow for participation in meaningful opportunities to lead and thereby learn by doing. Education for leadership requires the enhancement of interpersonal skills as well. This component of military science provides both training and education to give practitioners a deeper knowledge of leadership to use as a foundation on which they can build their professional identities and competencies.

Military Organization

Organizational structure, behavior, and effectiveness constitute the main aspects of this area. Practitioners work to understand how military units can and should be formed, how they react in peace and conflict, and how best to arrange personnel and forces to achieve maximum effectiveness when employed. Of particular importance in this area are the concepts of hierarchy, span of control, organizational behavior and effectiveness, and teamwork.

Military Training and Education

Military science includes aspects of both military training and military education. Military training may be defined as the instruction of personnel to increase their capacity to perform specific military skills and associated individual and collective tasks. Training involves a student learning how to “do” a concrete task, and the product of such an endeavor is the relatively rapid acquisition of a particular *skill*

or *set of skills*. Military education, in contrast, may be defined as instruction designed to impart and increase a learner’s knowledge. Education involves learning how to “know” an abstract concept, which may take substantially longer than acquiring a skill, and the product of education is *knowledge*.

The scholars Joseph D. Noval and D. Bob Gowin have determined that effective learning requires an active interplay between training and education. They contend that the processes of training and education begin with an event and/or an object. But training focuses on gathering data and transforming them into comprehensible information to produce knowledge that can be applied, whereas education takes the knowledge and comprehension, analyzes it to develop new concepts, synthesizes it to develop new principles and conceptual systems, and evaluates it to develop new theories and perhaps new philosophies.

The distinction between training and education and the necessity for active interplay between the two approaches for effective learning to occur are critical to the effectiveness of any such system. While it is generally true that all members of a military organization receive some sort of training to acquire a modicum of military skills, military education is largely reserved for officers and senior noncommissioned officers, who tend to be longer serving than the average soldier and are thus able to spend the time necessary to acquire advanced military knowledge.

Military History

The study of military history provides practitioners with a basis of knowledge in the conduct of military operations and military leadership as well as serving as a “laboratory” to examine the other components of the military science discipline, including leadership; military tactics, operations, and strategy; and the impact of culture on war and warfare. While the study of military history is losing relevance in traditional academe, it is nonetheless essential for soldiers to study; so it makes sense to include it in the field of military science to help it survive and to focus on the military-utilitarian aspects of it as an academic discipline. Serving as it does as a laboratory of experience for soldiers, it is a critical component of the military science field of

study because it allows one to experience the chaos of battle vicariously and also aids in developing one's decision-making abilities.

Military Ethics

Ethics is a branch of philosophy covering the analysis and employment of concepts such as right, wrong, good, evil, and responsibility, and it consists of three primary subfields: (1) metaethics, (2) normative ethics, and (3) applied ethics. Military ethics is mostly associated with applied ethics, helping soldiers make moral and ethical decisions for themselves and their units in the chaos of battle and the stress of war. The study of applied ethics—the use of ethical values in actual situations—is thus essential to the consideration and application of coercive force within society, as well as for the development of future practitioners and leaders.

Military Doctrine

Military doctrine encompasses the analysis, development, dissemination, and application of doctrine, which may be defined as the approved and sanctioned method for the application of military science in a general and generic sense. Stated more simply, military doctrine describes how a military organization fights. Doctrine is not dogma, meaning that it is not intended to be applied blindly, but it does represent the most scientific aspect of military science in that it is based on hypotheses, developed, tested, and codified in a standardized method. The application of doctrine, however, is more associated with the practice of military leadership and represents the creative aspect of the military art. The design and development of doctrine is, however, the most intellectual aspect of military science.

Military Tactics, Operations, and Strategy

This aspect of the discipline, grounded in a solid understanding of military history, addresses the military and the use of organized coercive force in the international community and encompasses learning about the role of armed force in society and the international community, the theories of application of force, the components of military force, and the methods and techniques for applying military force across the entire spectrum of conflict. This aspect of

the discipline also relates to international relations, foreign policy, diplomacy, conflict and peace studies, and ethics.

Military Geography

Linked closely with military tactics, operations, and strategy, and military doctrine, this aspect of military science involves the study of geography from a military perspective in terms of the deployment, employment, and sustainment of military forces, units, and equipment. It involves learning to analyze and assess areas and terrain from the physical, cultural, and political-military perspectives in order to understand specific time-space relationships and to determine the best method of application of military doctrine and the selection of military tactics, the design of military operations, and the determination of military strategy. A keen understanding of military geography is essential to maximize the three key elements of land warfare: (1) firepower, (2) maneuver, and (3) sustainment.

Military Technology and Equipment

This aspect involves the study and employment of available technology and equipment within the dictates of military organization, military doctrine, and military geography. Less concerned with the actual design of weapons and other implements, this area encompasses expertise in the employment capabilities and use of available technology and equipment as force multipliers and to maximize the application of coercive force in given situations. It also involves developing and sustaining partnerships with civilian and military contractors to ensure technology and equipment function as required and are acquired in the necessary quantities. Logistical and sustainment operations are also included in this aspect of the field of study.

Recent Developments

Two somewhat recent developments have or have the potential to have a substantial impact on military science as a field of study: the increased importance of cultural studies to the conduct of warfare and the development and adoption of the concept of officership by the U.S. military in general and especially the U.S. Army.

Cultural Studies

Cultural studies, which include the study of languages, is rapidly becoming another fundamental component of military science. When added, this aspect of the discipline, grounded in a solid understanding of history, geography, culture, and language of areas around the world, will address the impact and applicability of the military and the use of force in the international community. It will encompass learning about other cultures and regions in the international community to better prepare individuals for serving in and making decisions regarding the use of force in such areas. In particular, the impact of culture on war and the conduct of warfare has become especially relevant in the contemporary operating environment, and the discipline is making a deliberate attempt to embrace and incorporate this aspect into its field of study. With its addition, cultural studies will allow the field of study to better address elements of international relations, foreign policy, diplomacy, conflict and peace studies, regional and cultural studies, and the study of languages within its curricula and pedagogies.

Officership

The U.S. Army has recently developed and embraced the concept of officership to describe and distinguish the actions and activities of its officers. Defined as the practice of being a commissioned officer imbued with a unique professional identity, the concept addresses four distinct domains, including Military-Technical (which is largely military science); Human Development (which includes leadership, human motivation, and physical training, all of which, except physical training, are addressed primarily in the humanities and/or social sciences); Moral-Ethical (which includes ethics, values, officership, just war, and law of war/armed conflict, all of which are addressed primarily in the humanities and/or social sciences); and Political-Cultural (which includes military history and civil-military relations, both of which are addressed primarily in the humanities and/or social sciences). Officer responsibilities include the ability to function effectively in all of these domains in the four accompanying roles of Warrior (Military-Technical), Member of the Military Profession (Human Development), Leader of Character (Moral-Ethical), and Servant of the Nation (Political-Cultural).

These new concepts suggest the need for an expanded conception of the military science field of study, based solidly in the humanities and social sciences and perhaps dubbed *military studies*, which would be more in line with current academic practice and which would be a much more accurate characterization of this immensely interesting and far-ranging field of inquiry.

Kelly C. Jordan

See also Ethics; Jomini, Antoine-Henri; Leadership; OODA (Observe, Orient, Decide, and Act); Staff Relationships

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MINES, LAND

A land mine is broadly defined as any explosive device or munition that is placed under, on, or near the ground or other surface area and that is designed to be detonated or exploded by the presence, proximity, or contact of a person, vehicle, or animal. This entry traces the development of land mines and discusses types of land mines and their uses during the two World Wars and up to the present, including “terror mining.”

The Origins of Land Mines

The linear ancestor of land mines is regarded as the caltrops—a metal device with four sharp pronged points intended to pierce a horse’s hoof or a soldier’s foot, first employed during the time of Alexander the Great. Early gunpowder mines were used by the Chinese against the Mongols in the 1200s. By the 1600s, European military engineers had invented the fougasse—a gunpowder-filled buried device that, when ignited, blasted scrap into oncoming enemy sappers (combat engineers)—for defensive use in siege warfare. Flame fougasses occasionally are still used as field-expedient defensive weapons in modern warfare and can be devised out of 55-gallon steel drums filled with napalm or similar flammable substances.

Although the Russians used a few extemporaneous land mines and fougasses in the Crimean War of 1853–1855, the modern land mine’s first historically significant use is usually dated to the American Civil War. Confederate forces experimented with land mines during the 1862 Peninsula Campaign, in the 1863 defense of Fort Wagner, and at Forts McAllister and Fisher near the war’s end. Several of these types were purpose-made, but most were converted artillery shells. The psychological power of this weapon was immediately apparent. One soldier

who fought at Fort Wagner wrote that land mines “attack both matter and mind.” Major General George McClellan, commanding the Union’s Army of the Potomac, asserted that the Confederates’ use of land mines was “the most murderous and barbarous thing I ever heard of” (Perry, 1965, p. 22).

The Rise of Antipersonnel and Antitank Mines

While some purpose-made land mines were used in the First World War, most were improvised from artillery shells. More advanced land mine technology flourished in the 1930s in two overall types: (1) antipersonnel (AP) and (2) antitank (AT).

Generally pressure-activated, AT mines are intended to cripple a vehicle’s mobility (an “M-kill”) by blowing off a track or wheels or, for smaller vehicles, to cause catastrophic damage (a “K-kill”) by the blast effect. A representative precursor of modern AT mines is the German *Teller* mine. This 13-pound cylindrical mine was activated by the pressure of a 125-kilogram weight and had fittings for antihandling igniters that were used to detonate the mine if someone attempted to remove or disarm it. Later types of AT mines, known as full-width-attack mines, are detonated by a tilt rod that, when bent down by movement of a vehicle passing overhead from any direction, triggers the fuse.

AP mines were originally used largely for defense of AT minefields but found wider application. Types ranged from grenade-like, fragmenting models like the Soviet POMZ-2, still found in many arsenals, to the German S-mine. Activated by pressure on prongs emanating from its fuse or via tripwire, a small primary explosion launched the S-mine to chest height; then, a larger explosion detonated the mine, which was filled with ball bearings.

As electromagnetic mine detectors became prevalent, the world’s combatants invented nonmetallic AT and AP mines. The German *Schu* mine was a wooden-boxed mine, the only metal components of which were in its fuse assembly. It was nevertheless powerful enough to destroy a soldier’s foot or leg.

During World War II, both Axis and Allied forces frequently sowed mines as a routine, integral part of defensive operations. To prepare for the Germans’ Kursk offensive of mid-1943, the Soviets planted an average of 2,400 AT and 2,700 AP mines per mile to channelize German movements into well-prepared defensive zones. To strengthen the Atlantic

Wall's fortifications, German troops had emplaced 4,193,167 mines by May 1944. Germany's usage of AP mines to thwart the Americans' assault crossing of the Rapido River in January 1944 is considered a classic example of the defensive use of land mines.

Several nations have devised poison gas-filled mines, including the United Kingdom, the United States, and the Soviet Union, but none has been used in combat. The United States and the Soviet Union also developed nuclear "backpack" mines called atomic demolition munitions, or ADMs, during the Cold War period.

Modern Land Mines, the Cold War, and Arms Proliferation

Following the advent of land mines, armies quickly learned to prepare and maintain accurate minefield markers and maps. This became regarded as an established legal norm and practice under the laws of land warfare and was reflected in U.S. military doctrine and field manuals.

The United States produced its own versions of the *Teller* mine and the S-mine, the M14 and M16; a small AP mine, the M14 "toe-popper"; and the M18 Claymore directional mine, which can either be command detonated by a user for an ambush effect by pressing a hand-operated detonator ("clacker") or by tripwire. When detonated, the Claymore spews hundreds of small steel pellets forward like a giant shotgun blast.

To help neutralize any Warsaw Pact invasion of Western Europe during the Cold War, U.S. forces pioneered the development of scatterable mines and area denial artillery munitions. Air-delivered versions of these weapons were first used extensively in the Vietnam War. To provide field commanders with greater tactical advantages—and partly to counteract increasing legal concerns, discussed in more detail below—the United States and other nations have developed various models of self-destructing mines. These include the U.S. Air Force's GATOR air-scatterable system, which dispenses a mix of BLU-91/B AT and BLU-92/B AP mines. Each BLU-91/B has a microelectronic fuse that can detect and differentiate between different types of vehicular targets and then explodes the mine when the vehicle is most vulnerable. Both the BLU-91/B and the BLU-92/B have programmable self-destruct switches that are activated before the dispensing aircraft takes off.

The U.S. Army's M139 VOLCANO dispenses 960 self-destructing mines in a pattern 1,100 meters long by 120 meters wide. Many self-destructing mines' self-destruct systems, however, are not foolproof and do not always work properly.

During the 1970s, arms manufacturers marketed inexpensive, plastic AP mines with very low metal content, such as the mass-produced Valmara VS-69 and VS-50 and Soviet-designed PMN "Black Widow." By the 1990s, 5 to 10 million mines were produced annually. As these weapons were increasingly acquired by military and guerrilla forces with little training in their traditional usage, Western norms of mapping and marking minefields were ignored in many cases. What had hitherto been a largely defensive weapon of battlefield denial now became an offensive weapon that could be used to terrorize civilian populations. Even traditional armies expanded their use of land mines outside traditional battlefields during this period. The Soviets dispersed at least 10 million mines—including the air-dropped PFM-1 "butterfly" or "green parrot," which resembled a child's plastic toy—across Afghanistan. Soviet mines victimized perhaps as many as 1 million Afghans during the 1979–1989 war.

"Terror Mining" and the Laws of Land Warfare

In the late Cold War era, land mines' usage spread beyond traditional military forces to guerrilla and insurgency forces. Land mines were sown by both sides during the Angolan Civil War to sever farmers' access to arable land and strangle transportation links. Saddam Hussein's Iraqi troops extensively and randomly mined Kurdish territories without mapping the minefields. More than 4 million mines were planted across Cambodia—approximately one mine for every two Cambodians. The traumatic wounds inflicted by "terror mining" against civilian populations has left many survivors destitute and exceeds the capabilities of many developing nations' health care and social welfare systems to care adequately for victims and their families.

At least 56 nations have now been heavily mined, including Colombia, El Salvador, Nicaragua, Libya, Egypt, Chechnya, the Falkland Islands, Kuwait, Somalia, Serbia, Croatia, Bosnia and Herzegovina, Georgia, Iraq, Iran, Pakistan, India, Sri Lanka, Laos, and Vietnam. The demilitarized zone between North

and South Korea remains extensively mined since the 1953 cease-fire; U.S. forces continue to stockpile approximately 1.1 million M14 and M16 AP mines for potential use on that peninsula.

Land mine warfare has never been wholly banned under international law, but its legality has been circumscribed by several treaties. Protocol II to the Conventional Weapons Convention (1980s) made illegal the indiscriminate use of any weapon, the use of weapons that cause “unnecessary suffering,” or intentionally using any weapon against civilians. Due to increasingly indiscriminate use of AP mines against civilians and the long-term consequences for many nations, international efforts were pursued to tighten the Conventional Weapons Convention’s restrictions on AP land mine usage. These resulted in amendments in 1996 to Protocol II, and in 1997s Ottawa Treaty to prohibit the usage, sale, and stockpiling of AP mines. Based on concerns that adherence to such a treaty would weaken its defense of South Korea, the U.S. government has refused to ratify the Ottawa Treaty, although it adheres to the 1996 Protocol II amendments.

Improvised Explosive Devices and the Future of Land Mine Warfare

The high civilian casualties caused by land mines since the 1980s and the large number of American victims of improvised explosive device (IED) attacks in Iraq and Afghanistan seem at odds with the numbers of casualties inflicted by these weapons on more traditional battlefields. Two Canadian researchers have concluded that the number of casualties actually produced by mines typically averaged only between 2% and 6% of all battlefield casualties, but this study recognized that casualties alone were not always crucial in determining the impact of AP mines in combat environments. Their psychological potency in sowing fear and in slowing the tempo of offensive operations remains difficult to challenge. The costs of removing land mines are also substantial: One UN report estimates the cost of training for only one worker skilled in mine removal as between \$300 and \$1,000 per mine. Other estimates of worldwide costs of land mine clearance range from \$200 billion to \$300 billion over 25 years.

Although not strictly land mines, IEDs have been identified by U.S. Army leaders as the single greatest source of U.S. casualties in Iraq and Afghanistan.

IEDs reportedly caused 60% of all U.S. combat casualties in Iraq and 25% of the combat deaths there and 50% of U.S. casualties in Afghanistan.

While mine location and disposal technology has advanced beyond probing with rods and bayonets and sweeping with electronic mine detectors, land mines and their ilk still have enormous capacity to impede operations and inflict casualties. Active countermeasures like armored combat earthmovers and mine plows, mine flail-equipped vehicles, and explosive-filled “snakes” work better for large minefields but less well for randomly sowed mines and



A group of U.S. Air Force Explosive Ordnance Disposal personnel from the 506th Expeditionary Civil Engineer Squadron unload a truck of live munitions, including SB-81 land mines, as they prepare to destroy them at Kirkuk Air Base, Iraq, on October 28, 2004.

Source: U.S. Air Force photo by Staff Sergeant Adrian Cardiz (released).

carefully emplaced IEDs. Passive defensive measures, like “up-armored” HMMWVs (High Mobility Multipurpose Wheeled Vehicles) and mine-resistant, ambush-protected vehicles, have limitations as well. Continued usage of land mines and IEDs in conflicts like Iraq and Afghanistan ensures that such weapons still have a significant role to play in 21st-century combat and peacekeeping operations.

Jack H. McCall Jr.

See also Engineers, Combat; Ottawa Land Mine Treaty

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MINES, NAVAL

The United States and other nations have used naval mines offensively since the invention of the “Bushnell Keg” during the American Revolution, but their largest impact has been as the weapon of choice for many smaller nations and forces, even those without an established navy. The world’s premier naval forces have therefore been forced to focus on mine countermeasures (MCM) as a basic tenet of sea control and power projection. This entry provides a brief history of the use of naval mines and provides a basic primer on general types and classifications of mines as well as specific definitions associated with mine warfare.

History and Background

The Bushnell Keg was invented by David Bushnell during the American Revolution. It was a watertight

keg packed with gunpowder, with a floating flint detonator designed to drift down the Delaware River and explode against the hull of a British ship. What we now would term *drifting contact mines* were taken as more of a nuisance than threat by the British navy. That perception would last for over a half century.

By 1810, Robert Fulton had built a bottom-moored contact mine from a design that survived with surprisingly few significant changes through World War II, but the sea powers of the day showed little interest in his research. Early in the American Civil War, however, the Confederates formalized the mine warfare paradigm that garnered attention worldwide and survives today. They invested heavily in mine research like Fulton's to develop and deploy a cheap, effective alternative to building and maintaining a large navy and utilized several different types of mines very successfully throughout the war.

On the Union side, Admiral David Farragut's famous "damn the torpedoes [mines] Captain Drayton go ahead" clearly echoed the disdain most naval officers held for mine warfare. But even Farragut had to admit that it was an advantage one could not concede exclusively to the enemy. During the era of the two World Wars, the United States established itself as the dominant naval power in the world but continued to demonstrate Farragut's disdain for mine warfare. Other, smaller nations would pay closer attention to the mine warfare lessons of the American Civil War.

During the Korean War, just 1 month after the stunningly successful amphibious landing at Inchon in September 1950, the U.S. Navy prepared to conduct another amphibious landing at Wonsan near the southern tip of the peninsula to relieve and reinforce Allied forces. In a somewhat embarrassing turn of events, the South Korean army captured the city before the amphibious force, delayed by mine-removal operations, could make it ashore. To paraphrase the commander, Amphibious Task Force Rear Admiral Allan E. Smith, control of the sea had been lost to a nation without a navy, using antiquated weapons and Christ-era vessels.

Forty years later, during the Persian Gulf War, the mine threat again prevented a planned U.S. amphibious landing in Kuwait. In March 2003, the opening of the port of Umm Qasr was delayed for more than 36 hours for the same reason during Operation

Iraqi Freedom. In both cases, just as at Wonsan, the world's premier naval forces were denied command of the sea by a nation without a significant navy, utilizing relatively cheap naval mines. Modern research has produced continually more sophisticated sea mines, but the plentiful supply of simple, cheap World War II-era mines remains the major concern of any nation wishing to preserve freedom of, or control of, the sea.

Naval Mines: Terms, Types, and Classification

Naval mines are classified by their position in the water, method of delivery, and method of actuation. These classifications are used in combination to provide a more specific description of the mine itself, the threat, and the countermeasures required to neutralize it.

Position in the Water

Bottom mines are used in waters less than 200 feet deep. Beyond that depth, they pose little threat to shock-hardened vessels. As the name implies, they lay on the bottom of the ocean (lake, river, etc.) and are normally influence activated. (See "Method of Actuation" below.)

Moored mines are designed to be effective against submarines and surface ships in deeper water but may be used in shallow water also. The explosive charge and firing mechanism are housed in a positive-buoyancy case attached to a cable anchored to the sea bottom. Moored mines may be influence, contact, or control activated.

Drifting mines float freely on or near the surface due to positive or nearly neutral buoyancy. Although their use was severely limited by the Hague Convention of 1907, large stockpiles are suspected to still exist either for sale by illicit weapons dealers or in the possession of rogue or Third World nations such as North Korea or Libya. Simple, cheap, and easily deployed, these mines remain a formidable deterrent against even the most capable naval forces of the modern world.

Method of Delivery

Aircraft-delivered mines are dropped from the aircraft in the manner of bombs and may require some aerodynamic modification to standard casings. This

method of delivery offers the advantage of speed. Many mines can be planted in a short period of time, which may be particularly desirable during offensive mining operations.

Submarine-delivered mines are specially configured to be launched from torpedo tubes and offer the best method for laying minefields covertly.

Surface-delivered mines may be delivered by any ship or boat.

Method of Actuation

Influence mines are actuated by the magnetic, acoustic, seismic, or pressure signatures of ships or countermeasure devices. The detector may have one or a combination of magnetic search coils, magnetometers, hydrophones, or pressure devices.

Contact mines are the oldest, least expensive, and most common type of naval mine. Physical contact between the mine and the target is required to detonate the mine, which in turn requires very little sophistication or expense.

Controlled mines receive firing signals from external control centers. They require monitoring to be effective and are traditionally associated with defensive minefields. Controlled mines have no destructive capability until affirmatively activated.

Armed mines either are emplaced with all safety devices withdrawn or are armed following emplacement so as to detonate when preset parameters (if any) are satisfied. This is a specific distinction made under international law to group all noncontrolled mines into one definitive category.

Mine Warfare

Mine warfare is the strategic, operational, and tactical use of sea mines and their countermeasures encompassing the total capability of laying, employing, locating, and neutralizing mines. As with most other warfare specialties, mine warfare includes both the protection and use of one's own assets and capabilities and the destruction or defeat of the enemy's.

Mining is the emplacement of mines and can be offensive or defensive in nature.

Offensive mining is typically associated with attacking enemy ships, supplies, and assets or planting mines in enemy waters to prevent the free movement of enemy vessels.

Defensive mining is used to guard selected waters from enemy intrusion and is historically the most prevalent use of mines (e.g., Umm Qasr, Kuwait, Wonsan, Mobile Bay). Mines used for defensive purposes can be of any type, classification, or vintage, and inexpensive simple contact mines are often as effective as more complicated expensive ones because it is often the threat of a minefield that stops the attacking force rather than actual damage inflicted. Defensive minefields can be specifically designed to cover vast sea areas, selected approach lanes, or choke points or employed to protect viable enemy beach landing sites. They can be placed in deep or shallow water and can be designed to harass, inflict maximum damage, restrict maneuverability, or channel enemy ships into a range of friendly shore batteries.

Mine countermeasures may be either offensive or defensive in nature and include all methods, procedures, and practices to prevent or reduce friendly force damage or danger caused by naval mines.

Offensive MCM, sometimes referred to as antimining operations, includes those actions taken by friendly forces to destroy enemy mines and/or mining capability before the mines are deployed. Offensive MCM is the most proven and effective method of defeating enemy naval mines simply because they are much more easily detected and destroyed before they get in the water.

Passive MCM includes those actions, operations, and practices taken after enemy mine deployment to protect friendly assets and personnel, and it may be further divided into active and passive measures. Passive defensive MCM measures include surveillance, avoidance, deperming (demagnetizing a ship's hull using electrical current), degaussing (reducing a ship's magnetic signature), noise reduction, and other forms of ship protection such as installing special mechanical devices. Active defensive MCM involves tactical-level actions designed to locate, neutralize, and/or deceive mines into detonating on false targets to include mine hunting, mechanical or influence minesweeping, mine disposal, and countermining.

Conclusion

Although mine research has continued to produce more sophisticated, high-tech weapons, the use of mines either offensively or defensively by modern naval powers is rare. The United Nations, international law, and various multinational treaties have set severe limits on the use of both land and sea mines, and rightfully so. Unfortunately, those organizations are usually ill equipped to ensure compliance from even the member nations, let alone the rogue and Third World countries that view mines as their best, most cost-effective deterrent against sea attack.

Modern naval powers such as the United States, France, and England therefore tend to focus on the MCM aspect of mine warfare, particularly mine-sweeping capability. But as always, limited budgets often require prioritization, and MCM is seldom at the top of the list. As a result, U.S. Navy minesweeping operations—after the war—in conjunction with other nations' military and civilian assets, are fairly good. Given enough time and a benign operating environment, most sea mines can be policed up. In a hostile environment, however, "in-stream" during an amphibious assault, minesweeping capability remains severely limited.

Arthur A. Adkins

See also Korean War (1950–1953); Mines, Land; Warfare, Amphibious

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MISSILES, AIR-TO-AIR

An air-to-air missile (AAM) is a guided missile powered by one or more rocket motors and with some type of guidance system to detect and/or direct it to an opponent's aircraft. This entry examines the development of AAMs and describes their features.

General Description

AAMs usually have long, thin cylinders that contain the radar system, radar homer, or infrared (IR) detector at the front, followed by the avionics that control the missile. Typically, the center of the missile contains the warhead, usually several kilograms of high explosive surrounded by metal that fragments on detonation. The missile's fuel tanks and rocket motor are in the missile's rear. Most AAMs use solid-fuel rockets, but some longer range missiles are liquid fueled. The AAM usually has dorsal and/or tailfins to provide flight stability. Most aircraft carry their AAMs externally on wing contact points, launch rails, and/or pylons.

After a pilot detects an enemy aircraft, the pilot launches the AAM, which uses radar or IR, sometimes laser, guidance, or optical tracking, to guide it to the target. If the AAM is radar or laser guided, the launch aircraft "paints" the enemy aircraft with a radar or laser beam, and the missile's seeker detects the reflected beam and then homes in on the enemy aircraft. If the missile is IR guided, its IR seeker detects the enemy aircraft by its heat "signature," usually the heat emitted from the aircraft's jet engine(s), and homes in on the heat source. The missile destroys or damages the target aircraft with fragments of the warhead detonated by a proximity fuze or by a direct hit from an impact fuze.

A missile's effective range, the "no-escape zone" in which the target cannot evade the missile once launched, depends on a variety of factors, such as altitude, speed, position, and direction of the target aircraft. Often, the stated range of an AAM is only accurate for a head-on, nonevading target at high altitude.

Origins

Today's AAMs developed from World War I unguided air-to-air rockets. The French air service lieutenant Yves Le Prieur invented an incendiary air-to-air rocket, essentially a cardboard tube filled with 200 grams of black powder with a wooden conical head, for use against observation balloons and airships. The rockets had an effective range of about 115 meters (383 feet). The pilot fired the rockets, attached to the struts supporting the biplane's wings, simultaneously with an electric cockpit switch. However, the pilot had to continuously keep the target in his

gun-sight and dive at his target until the last rocket discharged since the ignition and discharge of each rocket did not occur immediately and the delay varied slightly from one rocket to another. The rockets were first used in the 1916 Battle of Verdun.

During World War II, Germany, faced with growing Allied air superiority, put considerable effort into missile development. The Luftwaffe developed the R4M rocket, a simple steel tube with flip-out fins on the tail for flight stability. Luftwaffe pilots usually fired the R4Ms in four salvos of six missiles from a range of 600 meters (1,995 feet). The Germans had two warheads for the R4M, one for use against aircraft and a larger shaped charge for use against tanks. Generally, only the Messerschmitt Me 262 and the ground attack version of the Focke Wulf Fw 190 utilized the R4M.

The Luftwaffe also developed the Ruhrstahl X-4, a wire-guided AAM. The pilot corrected the missile's direction of flight and maintained its stability by operating control surfaces on the tail through two wires attached to the missile body. Developmental work on the X-4 began in June 1943. Because of the problems in simultaneously guiding both the missile and the launch aircraft, only multiseat aircraft would have used the X-4. It did not become operational before the war ended, but it did become the basis for the postwar development of experimental, ground-launched antitank missiles.

After the war, several air forces began developing AAMs. In 1955, the Royal Air Force introduced the radar-guided Fairey Fireflash. This missile had a pair of solid rocket boosters on the forward fuselage that provided initial forward motion and then were jettisoned 1.5 seconds after launch, leaving the missile to coast into its target. However, because of poor operational performance, the Royal Air Force replaced the Fireflash with the de Havilland Firestreak IR missile in August 1958.

Current Air-to-Air Missiles

In 1956, the U.S. Air Force introduced the radar-guided (later IR) AIM-4 Falcon, and the U.S. Navy deployed the medium-range semiactive radar-guided AIM-7 Sparrow. The air force later adopted the navy's Sparrow AAM. In 1991, the U.S. Air Force deployed the AIM-120 advanced medium-range air-to-air missile to succeed the Sparrow, and it entered service with the U.S. Navy 2 years later. This is a

beyond-visual-range, all-weather, day-and-night, fire-and-forget missile with active radar guidance. This feature allows the missile, once it "locks" on to an enemy aircraft, to follow its evasive movements without additional inputs by the launching aircraft.

The U.S. Air Force also deployed the short-range IR AIM-9 Sidewinder in 1956. Since then, the AIM-9 in its several variants has become the most widely used missile in the West with more than 110,000 missiles produced for the United States and 27 other nations. The latest IR AAMs can lock on to a target from various angles, not just from behind, where the heat signature from the engines is strongest.

Because of advances in AAM technology, air-to-air combat today consists almost entirely of AAM firing. By the early 1960s, machine guns had disappeared from American fighters. During the Vietnam War, the United States reintroduced cannons and traditional dogfighting tactics. However, AAMs remain the primary weapon for air-to-air combat.

Presently, the air forces of 15 countries utilize domestically developed AAMs, most of which utilize active radar or IR guidance and export most of these designs to other countries. Over time, some countries have modified and/or improved on the original imported design.

Robert B. Kane

See also Air Force, U.S.; Training, Air Force Pilots; Training, Naval Aviators

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MISSILES, CONVENTIONAL

While expensive and technical in nature, the missile is an essential part of today's combat and superiority in air, ground, and sea. The concept of the missile alone has spurred advances in aviation, avionics,

and communications while forcing militaries to consider the possibility (and strategic value) of lightning fast attacks from airborne opponents or long-range devastation from far away enemies. This entry discusses the history, guidance systems, and types of missiles and examines their role in recent conflicts.

What Is a Missile?

Missiles can only be classified as such if they meet two criteria: First, they must have some kind of a propulsion system, whether it be a rocket motor, a jet engine, a ram jet, or some other source of thrust besides gravity; and second, they must have a guidance system, which could include the combination of fins, flaps, ailerons, laser guidance systems, infrared sensor guidance, optical lens guidance, or Global Positioning System (GPS) signal guidance. The nature of missiles also considers the launch platform and payloads, also known as warheads. Launch platform refers to either a mobile (e.g., an aircraft or ship) or fixed (e.g., a surface-to-air missile, or SAM, site or silo) platform from which the missile successfully launches against a target. Payloads could include conventional explosives, nuclear materials, biological agents, or chemical agents. The target of a missile could be any threat that must be eliminated, including enemy aircraft, enemy tanks, or other armored vehicles; command centers; communication towers; or, in the case of very large missiles, even entire military bases or cities. Thus, the capability and destructive power of missiles has redefined warfare, especially in the modern age. This redefinition has included the fear of missile attacks and spurred on developments into countermissile technology, which consists of missiles to target other missiles in their path to their target (e.g., the Patriot missile system) to experimental, high-powered microwave emitters such as the CHAMP project currently under way by the U.S. Air Force.

The History of Missiles

The desire of striking an opponent from a safe distance while producing the force to eliminate the threat has been around since the dawn of man. The bow and arrow could arguably be the first kind of “missile” as it has propulsion from a bow string, a payload in the form of an arrowhead, and the guidance system of the skilled archer. The ancient Chinese originated the precursor to modern missiles

following their discovery of gunpowder. Using nothing more than overpowered fireworks, Chinese guardsmen implemented a rocket filled with powder against Mongol invaders. Nearly 1,000 years later, modern missile technology would truly come into existence with World War II. Adolf Hitler and his Nazi party had the ambition of conquering the British Isles in an attempt to guarantee a hold over Europe. To aid in his attack, Hitler commissioned the creation of the devastating V-2 rocket: the world’s first guided missile system. While Nazi Germany did not win the war, the V-2 left an enormous impression on the world that would never be forgotten. From that time on, missile technology became a major arms race. The United States and the USSR most notably began ambitious projects to create a stronger and faster missile system that would eventually lead to the nuclear missile system that highlighted the Cold War. In the post-Cold War era that we live in now, missile technology has fused with computer and space technologies to create fascinating new methods of striking opponents from a distance (or continent) away.

The Mind of a Weapon: Guidance Systems

Simply put, a guidance system is any device—often a combination of devices—that aids the missile in reaching the target. With the advent of computers, satellites, and radio communication, guidance has become more than just fins and special shapes: It has become a controlling device to ensure near-exact precision for hitting targets. Several techniques of modern missile guidance exist, such as command and homing guidance. Command guidance uses a fiber optic wire that connects a missile to its launcher; a computer then operates the missile and guides it toward its target. Homing guidance breaks down into three types: (1) active, (2) semiactive, and (3) passive. All three function by using radar to “paint” a target and lead the missile toward the target. Active homing missiles have a radar within their cone that paints the target, while semiactive homing missiles rely on a ground radar to paint the target for them; with regard to passive homing missiles, the missile does not use a radar beam but rather tracks the electromagnetic emissions put out by the target (e.g., an aircraft’s engines or radio communications). While command and homing guidance are intended for air-to-ground or ground-to-ground

missiles, there are navigational guidance systems that rely on GPS satellites and terrain matching intended for powerful ground-to-ground missiles. GPS navigation requires at least three to four GPS satellites to send positions to a missile's guidance computer; the missile then knows, based on this triangulation, where it is located and where the target can be found. Terrain matching involves the computer scanning and analyzing the terrain around it until it finds a match on the terrain it is looking for. Guidance is an essential part of a missile's design and has enabled almost true accuracy in today's missile systems.

Types of Missiles

Considering the wide uses of missiles in a combat situation, many different forms of missiles have come into existence. The many forms of conventional missiles that exist can be broken down into two families: (1) ground-to-ground missiles and (2) air-to-ground missiles. Ground-to-ground missiles include everything from hand-fired antitank missiles to the infamous nuclear intercontinental ballistic missile. Air-to-ground missiles consist of powerful cruise missiles launched from an aircraft to antiradiation missiles such as those used by the notorious Wild Weasel squadron of the U.S. Air Force against SAM sites during the Vietnam War.

The Ground-to-Ground Missile

Ground-to-ground missiles (GTGM; also known as surface-to-surface or SSM) are simply missiles that are launched from a platform on the ground and hit a target on the ground. They become airborne right after launch and remain propelled for a set amount of time depending on the type of missile. To reach the target successfully, several factors have to be considered. First, how much fuel is needed to propel the missile without making it too heavy to fly correctly? Second, how powerful a payload (the size of the explosive on board) will be needed to destroy the target without hurting innocent civilians or civilian structures like homes or schools? And third, what kind of angle should the missile be launched at so the trajectory (or the path that the missile takes from its liftoff to its impact—it appears as an arch or parabola) puts it on course? Once these questions are answered (and often thoroughly tested in the development phase of a missile), the missile can

make its way successfully to a target with the right explosive capability.

There are four basic types of SSMs: (1) ballistic missiles, (2) cruise missiles, (3) antitank guided missiles, and (4) antiship missiles. Ballistic missiles have a high trajectory and their motor burns out throughout the flight. Types of ballistic missiles include tactical (150–300 kilometers range), battlefield range (less than 100 kilometers), theater (300–3,500 kilometers), short-range (1,000 kilometers or less, often with the capability of carrying nuclear munitions), medium-range (1,000–3,500 kilometers), intermediate-range or long-range (3,500–5,500 kilometers), and intercontinental (5,500 kilometers or more; called a submarine-launched ballistic missile if launched from a submarine). Ballistic missiles are often launched from fixed installations (e.g., silos) on the ground or a mobile vehicle launcher; however, some can be launched from ships or submarines (like the U.S. Navy's Trident I C-4 or Trident II D-5).

Cruise missiles have a low trajectory, their motor burns throughout the flight, and their range greatly varies. Three speeds of cruise missiles exist that effect their abilities: (1) subsonic (below the speed of sound, which is under Mach 1), (2) supersonic (above the speed of sound, Mach 1.2–5.0), and (3) hypersonic (far above the speed of sound, Mach 5.0–10.0). For subsonic cruise missiles, short-range varieties can reach targets up to 300 kilometers away, medium-range can travel less than 1,000 kilometers, and long-range can hit targets between 1,000 and 2,500 kilometers. This does not include the ultra long-range Russian Kh-55 with a range of 3,000 kilometers while still being subsonic. Supersonic cruise missiles usually travel at ranges between 100 and 500 kilometers but make up for a lack of range with their incredible speed. Hypersonic missiles are still in the developmental stages but are certainly the way of the future. The joint Indian-Russian built missile called the BrahMos-2 is a precursor of this type, with a 290-kilometer range. While the missile is still currently in development, it has achieved hypersonic flight successfully by reaching Mach 7. No matter what speed or range, cruise missiles can be launched from fixed ground installations, vehicles, aircraft, or ships. Also, cruise missiles can be launched from submarines instead, providing enormous tactical capability.

Antitank missiles have a low trajectory, their motor may or may not burn throughout the flight, and they only have a range of 5 kilometers. As the name implies, these short-range missiles are intended for destroying armor units such as tanks and mechanized infantry. Antitank missiles include launchers mounted on armored vehicles, tanks, or from defensive fighting positions to handheld tube launch systems that require no setup prior to use.

Finally, antiship missiles have a low trajectory, their motor burns throughout their cruise, and they have a wide range from as low as 25 kilometers to as high as 3,000 kilometers. Depending on the type of missile, some missiles pop up to hit their target, others either skim just over the water or form a trajectory through the sky to reach their target. Also, many antiship missiles are not just intended to attack ships but can also be used to attack land targets as well, such as the U.S. BGM-109 Tomahawk cruise missile or the Turkish SOM (Stand-off Mühimmat Seyir Füzes) cruise missile. Launch platforms for these missiles could be aircraft or vehicle mounted, trailer mounted, based out of a fixed ground installation, or ship/submarine based.

The Air-to-Ground Missile

Air-to-ground missiles (AGM or ATGM; also known as air-to-surface or ASM) encompass missiles launched from an aircraft to hit a target on the ground. Since the aircraft is already airborne, missiles launch either from under aircraft wings, from missile launch devices affixed to the side of aircraft, or from under the aircraft body itself and take flight toward the target. Aircraft could include any military aircraft such as jets, propeller-driven aircraft, or helicopters.

AGMs include antitank guided missiles, cruise missiles, antiship missiles, and antiradiation missiles. Antitank guided missiles are intended to strike tank units and are usually launched by attack helicopters within 5 kilometers of their target. Cruise missiles and antiship missiles, no different from their SSM counterparts, use an aircraft as a launch platform. Finally, the antiradiation missile is specially designed to destroy energy radiation signatures from radar towers or SAM sites.

While not an air-to-ground missile, but rather a ground-to-air missile type, the SAM is worth understanding as it functions much like an air-to-ground

missile. The SAM site is a fixed or mobile ground turret with missile chambers that point up toward the sky. A radar device sends out beams across the sky that search for potential enemy aircraft, and once one is found, it locks onto the target. The missile fires once the aircraft is confirmed to be an enemy and tracks the aircraft using its guidance system (usually based on homing guidance). Take, for example, the RIM-174 Extended Range Active Missile, a SAM operated by U.S. Navy ships. The RIM-174 relies on active homing guidance technology once it has launched against a confirmed enemy aircraft.

Missiles in Recent Conflicts

The Persian Gulf War: 1990–1991

Apart from powerful intercontinental ballistic missiles with nuclear capability, many other missile types have held enormous value in recent conflicts. In Operation Desert Storm, the cruiser USS *San Jacinto* fired the first two combat-tested BGM-109 Tomahawk cruise missiles against key Iraqi targets. Soon after, the battleships USS *Missouri* and USS *Wisconsin* fired Tomahawk missiles as well. The Tomahawk system proved a success as the strikes destroyed important Iraqi command and control units, as well as communication centers. The submarines USS *Louisiana* and USS *Pittsburgh* also fired Tomahawk cruise missiles (called submarine-launched cruise missiles, or SLCMs) in support of Operation Desert Storm. In total, 288 Tomahawk missiles would be fired from U.S. ships against Iraqi targets by the end of the Gulf War.

Starting in January 1991, the United States began an extensive bombing campaign on Iraqi soil. Before the war began, Iraq had stated that should it be directly attacked, missiles would be fired against Israel. The Iraqi leadership under Saddam Hussein held to their promise—mere hours after the first bombings, Iraq launched Al Hussein missiles (upgraded Soviet-made Scud missiles). During the remainder of the war, Iraq would launch 88 Al Hussein missiles against both Israel and Saudi Arabia. To intercept and prevent the Al Hussein missiles, the United States launched its Patriot missiles—a missile interception system. While the system was not wildly effective, it did manage to provide defensive value as it prevented some missiles from reaching their intended targets.

During the Persian Gulf War, the U.S. Air Force and the U.S. Navy deployed F-4 Phantoms and F-18 Hornets, respectively, each equipped with AGM-88 HARM missiles, an antiradiation missile that can reach speeds up to Mach 2, against Iraqi SAM sites. This tactic greatly limited Iraq's air defense, drastically weakening its military defensive posture. With air superiority in the U.S. Air Force's and U.S. Navy's hands, the U.S. Army employed AGM-114 Hellfire missiles fired from AH-1 SuperCobras and AH-64 Apaches against Iraqi Republican Guard tanks. The Iraqi armor divisions had little ability to resist the aerial attacks and as such faced heavy losses. This total force effect—with American-operated missiles giving a clear tactical advantage—defeated the Iraqi forces and sent them into retreat.

Operation Enduring Freedom: 2001 to the Present

Within Afghanistan, the United States used a combination of old and new missile technology to accomplish its intended mission. Aircraft launched missiles, including the AGM-114 Hellfire, AGM-88 HARM, and the AGM-158 joint air-to-surface standoff missile. The AGM-158 is a cruise missile with standoff capability—this means the missile can be fired from a far distance, ensuring that the launch platform and operator are not within an opponent's reach. The missile can be carried by the F-15, the F-16, the F-18, the F-35, the B-1, the B-2, and the B-52, making it a highly versatile missile system. AGM-114 Hellfire missiles were increasingly deployed on unmanned aerial systems (UAS for short; includes aircraft such as the MQ-1 Predator and the MQ-9 Reaper), a development that has increasingly shaped missile use in the continuing war against al Qaeda.

On the ground, the U.S. Marine Corps employed the FGM-172 Short-Range Assault Weapon. The FGM-172 can be hand carried and requires little to no assembly as it is a shoulder-mounted tube containing a single missile that altogether weighs only 21 pounds. The effectiveness of the short-range assault weapon has been proven time and again against insurgent forces in Afghanistan, especially since it has been widely upgraded to the FGM-172B, which specializes in urban combat. As the conflict in Afghanistan and other regions continues, the types and upgrades to missile designs will follow for both the U.S.-led coalition and the terrorist threat standing against them.

Operation Iraqi Freedom: 2003–2011

During the war in Iraq, a variety of missile weapon systems proved their effectiveness against the Iraqi military and the insurgency that followed. The AGM-65 Maverick is one such AGM. The AGM-65 is used primarily to eliminate armored ground targets and is operated by a combination of assault helicopters, such as the AH-1 or the AH-64, as well as fighter-bomber type aircraft, including the F-15, the F-16, the F-18, and the A-10.

When the U.S. Army had to handle Iraqi ground forces during the initial invasion of Iraq in 2003, they employed the FGM-148 Javelin antitank missile. The missile was quite effective against Iraqi Type 69 and Lion of Babylon tanks. Once Baghdad was secured, the Javelin missile system further aided U.S. Army troops with holding the key city.

The missile technology used by air- and land-based forces has been quite effective in recent conflicts. The greatest development in conventional missile technology during recent conflicts, however, has been the rise of the UAS. The UAS allows for conventional missile systems to be launched from an unmanned aerial position, affording the United States and its allies the ability to keep airmen out of harm's way and maintaining stealth while still posing a tremendous threat to the opponent. UASs including the MQ-1 Predator, the MQ-9 Reaper, and the MQ-1C Warrior have been utilized to attack ground targets in Afghanistan, Pakistan, and Yemen in recent years and appear destined to play an increasing role in continued U.S. operations. Many missile systems used on manned aircraft can also be deployed on UASs, including the AGM-114 Hellfire and the AGM-88 HARM missiles, both of which aid ground forces in attacking targets and can take out key structures to ensure air superiority.

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See also Missiles, Air-to-Air; Missiles, Cruise; Missiles, Nuclear

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MISSILES, CRUISE

A cruise missile is a guided missile, usually propelled by a jet engine, armed with a conventional or nuclear warhead, that attack targets over long distances with high accuracy. This entry describes the development and features of cruise missiles worldwide.

General Description

Cruise missiles generally have a guidance system, warhead, and propulsion system inside of an airframe that has small wings and a tail assembly for lift and stability. The propulsion system is usually a turbofan jet engine. Cruise missiles can carry a conventional, nuclear, chemical, or biological warhead or submunitions, weighing about 1,000 pounds, at supersonic or high subsonic speeds on a nonballistic, extremely low-altitude trajectory. Cruise missiles have a range of less than 105 kilometers (65 miles) up to 3,000 kilometers (1,864 miles).

Cruise missiles utilize a variety of navigation systems to guide them to their target. The “low in” systems consist of a radar altimeter, barometric altimeter, and clock to navigate a digital strip map. More advanced systems use inertial guidance, NAVSTAR Global Positioning System satellite signals, or terrain contour matching guidance. These highly accurate guidance systems enable the cruise missile to conduct highly precise strikes.

Origins and Development

The cruise missile originated with the “aerial torpedo,” developed by Lawrence Sperry in 1916. He placed an explosive charge, an autopilot, and a barometric altitude control in a small biplane. The next year, Charles Kettering developed the Kettering Bug, similar to Sperry’s device, for the U.S. Army Signal Corps. The war ended before the “Bug” could enter combat. Kettering continued development until 1920 when the Army Air Corps terminated funding.

Between 1927 and 1929, Britain tested the Larynx (Long Range Gun with Lynx Engine) as a guided antiship weapon. The Soviet Union experimented with the GIRD-06 cruise missile from 1932 to 1939. Both the U.S. Army and Navy conducted limited testing of radio-controlled aircraft in the interwar years.

During World War II, Germany developed the *Veltungswaffe* (Vengeance Weapon 1 or V-1), the immediate ancestor of today’s cruise missile. The V-1 used a gyroscopic guidance system. The buzz-like sound of its pulse-jet engine earned the weapon the nickname of “buzz bomb.” Between June 1944 and March 1945, the Germans launched 9,521 of the highly inaccurate V-1s at southeast England and western Belgium, causing nearly 23,000 casualties. In 1943, a German submarine delivered a pulse-jet engine to Japan, which developed a design for a piloted V-1, called the *Biaka* (“Blossom”). However, it never left the design phase.

Between 1944 and 1949, the U.S. Army Air Forces worked on 21 different guided missile projects, including the Jet Bomb 2, nicknamed “Loon,” an American version of the V-1. By 1948, the newly created U.S. Air Force had cancelled all of these projects except for the BANSHEE, the SM-62 Snark, the SM-64 Navaho, and the MGM-1 Matador. Over the next decades, advances in transistor and computer technology produced self-correcting avionics and aeronautical designs that allowed ground stations to guide missiles in flight and, eventually, the modern cruise missile.

During the Cold War, both the United States and the Soviet Union continued to develop increasingly more advanced cruise missiles. The U.S. Air Force operated its first operational surface-to-surface missile—the winged, mobile, and nuclear-capable MGM-1 Matador—between 1953 and 1962. The U.S. Navy

deployed the submarine-launched SSM-N-8 Regulus missile from 1955 to 1964.

The Soviet Union preferred ballistic missiles to strike land targets, but it developed heavy nuclear- and conventional-tipped cruise missiles to attack U.S. carrier battle groups. It developed large submarines to carry these weapons and shadow U.S. battle groups at sea, and large bombers, such as the Backfire, Bear, and Blackjack, to carry the air-launched cruise missile variant.

Current Cruise Missiles

Today, the United States possesses several types of cruise missiles. The navy's BGM-109 Tomahawk, costing about \$600,000 each and launched from ships and submarines, is an extremely accurate, long-range, conventional land attack weapon. U.S. Air Force bombers carry the conventional- and nuclear-tipped air launched AGM-86 version. U.S. military forces used both the BGM-109 and AGM-86 extensively during Operation Desert Storm in February 1991.

The AGM-84 Harpoon cruise missile comes in air-, ship-, and submarine-launched variants for use against ships and land targets. The Harpoon has a low-level cruise trajectory with an over-the-horizon range that makes it less susceptible to radar detection.

In the late 1970s, the U.S. Air Force developed the AGM-109 ground-launched cruise missile for launch from trucks and deployed them to Europe to offset the Warsaw Pact's numerical superiority. In 1987, the U.S. president Ronald Reagan and the Soviet premier Mikhail Gorbachev signed the Intermediate-Range Nuclear Forces Treaty, which resulted in the removal from Europe and destruction of the ground-launched cruise missiles (as well as the U.S. Army's Pershing II missiles and the Soviets' SS-20 intermediate-range ballistic missiles).

The United States also developed the AGM-129 advanced cruise missile with a small nuclear warhead for external carry by the B-52 Stratofortress. The navy acquired a sea-launched version. The United States has since placed these missiles in storage.

The nuclear submarines of the Royal Navy carry the U.S.-made Tomahawk. Several fired conventional versions during the 1999 Kosovo War. The Royal Air Force uses the Storm Shadow cruise missile on

its Tornado GR4 aircraft. The Mirage 2000 and Rafale aircraft of the French air force also carry the Tomahawk, known in France as SCALP EG.

India and Russia jointly developed the BrahMos ship-, land-, air-, and submarine-launched supersonic cruise missile. Russia also operates the SS-N-12 Sandbox, SS-N-19 Shipwreck, SS-N-22 Sunburn, and SS-N-25 Switchblade cruise missiles. Germany and Spain use the Taurus missile, and Pakistan developed its own cruise missile, the Babur, which is somewhat similar to the Tomahawk. The People's Republic of China, the Republic of China (Taiwan), France, Israel, Italy, Japan, Norway, and Sweden have also developed their own cruise missiles. Most of the countries that have produced their own cruise missiles have exported their versions to numerous other countries.

Because cruise missiles are among the most expensive single-use weapons today, military planners usually use them to attack high-value or heavily defended targets. As a result, commanders normally avoid using them on low-value targets, such as certain targets during Operation Enduring Freedom. When such instances did occur, critics have questioned the weapon's efficiency versus cost. Cruise missile proponents use a similar argument about unmanned aerial vehicles in comparison to manned aircraft. Additionally, with their small radar cross section, cruise missiles are much more difficult to detect and intercept than manned aircraft, making them particularly suited for attacks against static air defense systems or heavily defended targets.

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See also Air Force, U.S.; Aircraft, Bomber; Bombs, Nuclear; Bombs, Smart; Persian Gulf War; Strategy, Air Power; Training, Air Force Pilots; Weapons, Nuclear

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MISSILES, NUCLEAR

Nuclear missiles are self-propelled rockets used to deliver nuclear warheads. Although the term can be applied to any missile equipped to carry nuclear warheads, *nuclear missiles* are most commonly associated with ballistic missiles. Ballistic missiles are missiles that are launched into suborbital space and then free fall on their preprogrammed targets with inertial or stellar guidance systems. The most common nuclear missiles are (a) intercontinental ballistic missiles (ICBMs), (b) intermediate-range ballistic missiles (IRBMs), (c) medium-range ballistic missiles (MRBMs), and (d) submarine-launched ballistic missiles (SLBMs). ICBMs and SLBMs make up two thirds of the nuclear triad—the collection of land-, ground-, and sea-based nuclear weapons used to conduct nuclear war. This entry examines the design and delivery systems of U.S. and Soviet Cold War-era nuclear missiles and discusses present-day concerns regarding nuclear missile security.

Nuclear missile development originated from German rocket technology advances made throughout World War II. Bolstered by the capture of German missile facilities and engineers, both Americans and Soviets began their foray into ballistic missile development. It was believed that merging the power of atomic bombs with the benefits of a long-range missile could create a highly destructive weapon. Unfortunately, size and weight limitations posed by early atomic weapons made such missile delivery impossible. In addition to engineering limitations, a preference for manned bombers persisted within the U.S. military culture and created further bureaucratic delays in funding and development. Despite these obstacles, by the early 1950s for the United States and the late 1950s for the Soviets, technological developments in thermonuclear warhead design achieved lighter and more accurate warheads.

U.S. Nuclear Missiles

Early U.S. development of nuclear missiles focused on all manner of sizes, delivery systems, and warhead designs. However, most of these development efforts gave way to the ICBM. The ICBM had the advantage of striking long distances in a short amount of time (15–30 minutes) and traveled at upward of 15,000 miles per hour, making it nearly

impossible to defend against. Also, ICBMs had the advantage of being based domestically and required fewer personnel to operate, resulting in cost savings and increased security. The first U.S. ICBM was the Atlas (D, E, F) 1½ stage liquid-fueled missile with a single warhead. The next ICBM development was the Titan (I and II) missile, which was liquid fueled and carried warheads up to 10 megatons. The next and most enduring ICBM was the Minuteman (I, II, III). The Minuteman missile provided two significant technological advances over previous designs. First, it operated on a solid fuel propellant, which allowed the missile to remain fully fueled at all times. Due to the instability of liquid fuel, Atlas and Titan missiles had to be fueled once the launch order was given causing additional delay in launching and making them vulnerable to first-strike attack. The Minuteman also made use of the newly developed multiple individually targeted reentry vehicle (MIRV) technology. The MIRV allowed a single missile to carry multiple warheads, each programmed to hit a different target. The final ICBM development was the Peacekeeper (or MX). The Peacekeeper had many advances, most notably its ability to deliver 10 warheads. However, due to policy implementation, the Peacekeeper never made it into the operational force. The Strategic Arms Limitations Talks and Strategic Arms Reduction Treaty nuclear reduction treaties eliminated all but 500 Minuteman III missiles from the U.S. arsenal.

Advances in warhead design, fuel options, and a desire to remain competitive within the evolving nuclear strategy doctrine brought the U.S. Navy to develop sea-based nuclear missile capabilities in the latter half of the 1950s. This led to the development of SLBMs. The stealth nature and mobility of submarines gave SLBMs an advantage over land-based missiles in that they were not susceptible to a first-strike attack by an enemy. The drawbacks to SLBMs were that they were costly to maintain and had smaller and less accurate warheads than ICBMs.

Early U.S. attempts at SLBMs, based on liquid-fueled missiles, did not fare well. Dealing with highly unstable liquid fuel aboard a submarine proved to be difficult. However, the advent of solid-fuel propellants made SLBMs more practical. The navy developed several iterations of SLBMs. The first incarnation, the Polaris missile, which had a limited range and a small warhead, was completed in 1959. The second SLBM, the Poseidon, which



An LGM-30B Minuteman I intercontinental ballistic missile is launched during a test.

Source: U.S. Air Force photo.

contained a fully MIRVed warhead along with an increased range and better operational capabilities, became operational in 1971. The final development was the Trident I C-4 and the Trident II D-5. The Trident missile provided greater accuracy and a more powerful warhead, giving it the ability to penetrate strategically hardened targets. The Trident II D-5 remains the only active SLBM in service today.

Soviet Nuclear Missiles

Owing to competition with the United States and internal political struggles, the Soviet Union pursued a multifaceted approach to its nuclear missile development. Given the local threat from continental Europe, as well as the more distant United States, the Soviets developed a variety of both short- and long-range ballistic missiles. Soviet missile designer Sergei Korolyov is credited with developing the R-7, which can be considered the first operational ICBM with its first successful launch in 1957. The R-7

was not without its flaws as it was expensive and used a combination of kerosene and liquid oxygen that required 24 hours to fuel, thus making its use in a nuclear exchange somewhat impractical. The second generation of Soviet ICBMs included the R-9 and the R-16 ICBMs and the R-5M, the R-12 (featured during the Cuban Missile Crisis), and the R-14 IRBMs. These missiles used more stable fuel combinations and contained warheads of between 1 and 5 megatons. The next generation of Soviet missiles, the R-36 and the UR-100, sought to emulate the capabilities of the American Titan II and Minuteman missiles. These were liquid fueled and contained single warheads from 18 to 25 megatons. The fourth generation of Soviet missiles included the MR-UR-100, the R-36M, the UR-100N, the RT-23, the Topol, and the Topol-M. These missiles brought advances in both performance and accuracy with the ability to deliver between six and ten 550 kiloton warheads to just about any location. The current Russian land-based missile inventory includes 176 Topol, 15 RS-12M mobile launcher, 50 RS-12M silo launcher, 120 RS-18, and 104 R-36M missiles.

Soviet SLBMs went through several iterations of development and, unlike the American SLBMs, most were liquid fueled. The first SLBM (the R-11FM) debuted in 1959 with single warhead capability of up to 0.5 megaton. Subsequent SLBM development of the R-13, the R-21, the R-27, the R-29, and the R-31 versions brought greater distance, going from 150 to 9,100 miles, and warheads capable of up to 1.5 megatons. The R-29R, the R-29, and the R-39RM introduced MIRVed capability containing between 3 and 10 warheads per missile. The most modern Russian SLBM is the RSM-56, a solid fuel-based missile containing anywhere from 6 to 10 warheads. The current Soviet fleet of SLBMs consists of 96 R-29R, 40 R-29, 96 R29-RM, and 36 RSM-56 missiles.

The Current Outlook

Although the United States and the Soviet Union were the pioneers in nuclear missile development, they are not the only owners of this technology. Other countries have devoted considerable resources and incurred great risk developing these capabilities. The current list of countries that possess nuclear missiles includes the United States, the Russian Federation, the United Kingdom, France, China,

Israel, India, and Pakistan. However, since the turn of the century, the United Kingdom and France have scaled back their nuclear programs to SLBMs and air-to-ground missiles (France only). Meanwhile, the United States and the Russian Federation have been working to reduce their arsenals, culminating with the signing of the 2010 Nuclear Disarmament Treaty. A key provision of this treaty involved reductions in nuclear missiles. In stark contrast, India, Pakistan, and North Korea have made significant investments in their nuclear missile programs. India and Pakistan possess both IRBM and SLBM capability. North Korea is suspected to have IRBM capabilities, though confirmation remains difficult. They have, however, conducted several high-profile, yet

unsuccessful, ICBM tests. China and Israel, both possessing nuclear triads, continue to invest heavily in their respective arsenals. Iran is the most high-profile country to be actively seeking, if not actually developing, nuclear missile capability.

The detonation of a dirty bomb or suitcase-sized nuclear bomb remains the most likely method of nuclear attack these days. However, nuclear missile security presents an altogether different and perhaps greater risk. The biggest challenge is political stability. When a nuclear capable country's political and military control is unclear or deteriorating, it makes securing nuclear weapons difficult. An unclear leadership structure creates inadequate command and control directives, leaving questions as to who can



A North Korean soldier stands guard in front of a military vehicle carrying what is believed to be a Taepodong-class missile, an intermediate-range ballistic missile (IRBM), about 20 meters long, during a military parade to mark the 100th anniversary of the birth of the country's founder Kim Il Sung in Pyongyang on April 15, 2012. The commemorations came just 2 days after a satellite launch timed to mark the centenary fizzled out embarrassingly when the rocket apparently exploded within minutes of blastoff and plunged into the sea.

Source: Photo by Pedro Ugarte/AFP/Getty Images.

authorize nuclear weapons attacks and under what conditions. This breakdown has serious implications for mobile and dispersed nuclear forces, such as SLBMs and IRBMs, where local commanders may not adhere to the commands of a central government. Similarly, if a government suddenly ceases to operate, as happened with the dissolution of the Soviet Union, the physical security of nuclear weapons becomes an issue. Again, mobile-based nuclear missiles are particularly vulnerable to theft or illegal sale.

Another growing concern with nuclear missiles is digital security. Most of these systems were built prior to the public Internet and when computing technology was rudimentary. Consequently, there is some question as to what digital vulnerabilities may exist in the underlying computing systems. It is conceivable that a foreign hacker could gain unauthorized network access to the launch control facilities or broader communication network. There is some question if digital security systems could hold up to brute force attacks, similar to the ones that cripple public websites. An attack like this, at minimum, could limit or disable nuclear readiness and at worst trigger an unauthorized launch. Finally, perhaps the greatest threat to security remains accidental launch. Without the proper safeguards in place, confusion, malfunction, or misinformation can lead to unintended weapon launches. More than once during the Cold War, global nuclear catastrophe due to equipment malfunction or communication problems was narrowly averted. With more systems and less governance, the potential for accidental disaster is on the rise. While treaty reductions in the number of weapons are desirable, greater security and oversight on the weapons themselves will be a challenge in the years to come.

Of all the countries that have developed and deployed nuclear weapons, there is one thread of commonality. Due to the advantages of cost, speed, and security, nuclear missiles are the preferred method for delivering nuclear warheads.

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See also Bombs, Nuclear; Nuclear Proliferation; Strategy, Nuclear; Weapons, Nuclear

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MOBILIZATION

Mobilization is the organization, preparation, and deployment of a nation's manpower and materiel for war or national emergencies. Mobilization encompasses myriad organizations, including all active branches of the armed forces, the reserves, and other federal agencies involved in disaster relief or "whole-of-government" operations in overseas stability missions. Manpower considerations also include training new personnel and maintaining individual and unit combat effectiveness. Material preparation includes all aspects of logistical support to the armed forces, including industrial production. Mobilization efforts have increasingly included private contractors for logistical support both in the United States and overseas. One of the main uses of contractors in mobilization is to provide training on and maintenance of newly fielded equipment. The United States maintains a high level of readiness for contingency operations around the world across a wide spectrum of conflict. The government is also working to improve cooperation between the Departments of Defense and Homeland Security to improve responses to natural and human-made disasters.

U.S. Mobilization, 1776–1898

Until World War I, the U.S. Army maintained a small force of regulars, and in wartime, it relied on U.S. volunteer regiments to provide the soldiers necessary support to wage a major war. This process entailed the president, as commander in chief, to issue a proclamation calling for volunteers followed by the secretary of war providing quotas to state governors who in turn mobilized volunteers

for federal service. In contrast, continental European nations maintained large standing armies filled with conscripts and supplemented by reservists who could be called into service in times of crisis. The term *mobilization* was first used in public discourse in the 1850s to describe the planning processes of the Prussian General Staff. By the late 19th century, elaborate plans allowed major European powers to mobilize quickly and send vast armies to their borders within a matter of days. The United States lacked this capability to raise such forces quickly and traditionally required significant time to raise, equip, train, and deploy a large standing army. Of course, these limitations mattered little in a period when strategic threats would have to attempt a long and arduous overseas mission. To combat a potential overseas invasion, the United States undertook systematic efforts to strengthen coastal defenses, and by the late 19th century, it maintained relatively large naval forces to meet overseas threats.

The Civil War marked a change in mobilization as it established the authority of the federal government to raise armies directly through the draft. Initially, the federal government relied on volunteers to fill the ranks with the troops necessary to suppress the Southern rebellion. In the end, however, these volunteers proved inadequate, and the U.S. Congress responded by passing the Enrollment Act of March 3, 1863. Conscription raised relatively few troops for the North and was met by massive resistance in places such as New York City, but it did establish an important precedent.

The federal government developed no systematic plan for industrial mobilization in wartime during the Civil War. The North's industrial base remained sufficient to supply the Union war effort, especially in providing sufficient weaponry and naval vessels. Technological advances in armaments tended to be the work of private capitalists, and not until the Cold War did the federal government systematically underwrite the cost of research and development in peacetime.

The brief war with Spain in 1898 underscored the problems of wartime mobilization. Although the United States had little problem raising a sufficient number of volunteers, it proved much more difficult to equip, train, and deploy them overseas. Volunteer units that converged on Tampa were supplied by a single railroad line. Soldiers died from consuming contaminated rations, and the U.S. Navy struggled

to find enough vessels capable of deploying expeditionary forces to Cuba.

The trials of the Spanish-American War prompted calls for reform in the organization of the War Department and helped further the adoption of a general staff that would oversee planning and mobilization. That general staff was miniscule in comparison to those of Germany, France, and other European powers, but its creation established another important precedent.

U.S. Mobilization During the Age of the World Wars

World War I marked a shift in how the United States raised military forces by abandoning the volunteer system and implementing a conscription-based selective system. The United States raised an army of 3 million, but it continued to face problems in training, equipping, and deploying these forces overseas. Although the United States declared war in April 1917, most combat divisions did not enter battle until the summer of 1918.

World War I represented the first systematic effort to mobilize the entire American economy in support of a war effort. Most of these responsibilities rested in the hands of civilian agencies of the Council on National Defense and the War Industries Board. Industrial mobilization efforts proved inadequate. American shipbuilders were unable to build enough vessels, forcing the United States to rely on British and French ships to supply their forces in Europe. The United States never deployed an American-made aircraft to France during the conflict, and American aviators flew European models for the duration.

A number of institutions were established during the interwar years that allowed military leaders to consider ways to effectively mobilize for another major war. The National Defense Act of 1920 authorized mobilization planning by the Assistant Secretary of War, and the War Plans Division was established as part of the General Staff in 1921. In 1924, the War Department created the Army Industrial College that studied in-depth questions of mobilization.

Mobilization planning was stifled during the interwar years by sharp cuts in defense spending in the 1920s and early 1930s that stemmed in part from strong pacifist sentiment within American society. When Franklin D. Roosevelt assumed the

presidency, he funded the construction of several naval ships using funds appropriated from public works projects; however, the political climate prevented him from increasing defense spending appreciably.

The beginning of World War II and the fall of France led to the most dramatic peacetime mobilization in American history. At the behest of Roosevelt, Congress implemented peacetime conscription in 1940 for the first time in American history. Using executive authority, Roosevelt mobilized the National Guard into federalized service. Industrial production soared even before the United States entered the war after the attack on Pearl Harbor, as the United States purchased weapons and materiel to outfit a growing military as well as provide support to Great Britain and the Soviet Union under lend-lease. To coordinate economic mobilization, the Roosevelt administration created a series of mobilization boards to integrate war plans with industry. Although unprecedented compared with earlier conflicts, these efforts remained insufficient to fully prepare the United States for a global war that ultimately required the raising of armed forces numbering more than 15 million.

Once the United States entered the war, manpower, housing, and equipment shortages plagued reception and training centers, especially with the influx of new recruits. Supply and shipping problems continued even as the army began operations in North Africa in 1942. Problems continued throughout the war, but the United States eventually shipped an unprecedented amount of men and materiel to both the European and Pacific theaters through 3 years of Herculean efforts by the government, the U.S. industry, and the American populace.

Cold War Mobilization

To a degree, the United States never fully demobilized from World War II. Major structural changes were made to increase military preparedness under the National Security Act of 1947, which created the National Security Council, the Department of Defense, and the Joint Chiefs of Staff. Although the budget for ground forces and the navy was dramatically reduced after World War II, national leaders invested substantial resources in the air force, viewing the atomic bomb as the most effective and cost-efficient way to defend the United States. Moreover,

the United States maintained a significant presence in Europe and, under the North Atlantic Treaty Organization of 1949, committed itself to defending Western Europe. A reliance on nuclear weapons and air power resulted in massive peacetime spending on weaponry that became evermore technologically sophisticated and expensive. In an age of nuclear weapons, the idea of free security vanished, and national and military leaders recognized that the United States must be prepared to mobilize quickly for a possible war with the Soviet Union.

The United States was unprepared for the Korean War and lacked adequate ground forces in the early months of the conflict. When North Korea invaded South Korea on June 25, 1950, President Harry Truman intervened without hesitation. The Pentagon ordered the Eighth Army, on occupation duty in Japan, to Korea to halt the communist offensive. The army cannibalized stateside units to provide for the Eighth Army, which had suffered from interwar cuts. Truman purposely decided to keep the war as small as possible to reduce its effect on the U.S. home front. He saw the events in Korea as a conflict rather than a war, a small part of a much bigger fight against communism. U.S. industry never converted to full war production as it did during World War II, but within a year, the United States and its allies moved enough manpower and equipment to Korea to reach a stalemate that lasted from 1951 to 1953.

In the aftermath of the Korean War, President Dwight Eisenhower pursued cuts in conventional forces to reduce defense spending and relied on America's nuclear arsenal for deterrence. Beginning in the 1950s, America's nuclear forces could be mobilized in a matter of hours and American policymakers worked to strengthen command and control structures in order to allow the president and military leaders to meet an unexpected nuclear attack. By adopting the policy of flexible response, President John F. Kennedy continued to maintain large nuclear force structures but also oversaw a buildup of conventional forces.

The mobilization of materiel for the Vietnam War caused few problems since by this time the United States had become accustomed to a permanent overseas military commitment to stem the spread of communism. The military and its industrial support base developed a relationship that allowed the United States to mobilize for war without any

reduction in domestic consumption. The mobilization of manpower, however, created huge problems. High numbers of casualties and the escalation of the war forced the selective service to induct more middle-class White males by the late 1960s. This caused a huge backlash on the home front. Media attention and the proliferation of television sets in American middle-class households combined to draw more public attention to the negative aspects of the war. Opposition grew and included widespread protests, marches against the war, and, in some cases, draft dodging. Ultimately, the divisiveness of the Vietnam War and the tarnished reputation of the draft system led the U.S. government to end the draft and replace it with an all-volunteer military.

The All-Volunteer Military

The 1970s witnessed the development of the all-volunteer military and, initially, a substantial drawdown of American forces. This trend would be reversed by President Jimmy Carter, and under his successor, Ronald Reagan, the United States embarked on an unprecedented rearmament program. On the manpower side, the Department of Defense underwent reorganization that embraced the concept of joint operations between services, redefined the status and role of reserve and National Guard forces, and established liaison roles within the military to improve the acquisition process with the defense industry. Worldwide military commitments, the threat of communism, and the growth of the defense industry led, in the 1980s, to a permanent state of mobilization.

The Wars in Iraq and Afghanistan

The massive force buildup during the Cold War proved invaluable during the Persian Gulf War. Although it took the United States and its allies time to build up sufficient forces in the Persian Gulf to wage war against Iraq, the ground war ended with a stunning victory in only 48 hours. Moreover, the Persian Gulf War reaffirmed the decision of Pentagon planners to make greater use of reservists and National Guard units in the event of a major conflict.

The attacks of September 11, 2001, did not lead to a call for a major mobilization of American society in the Global War on Terrorism. In fact, Secretary of Defense Donald Rumsfeld implemented

a strategy that called for reduced force structures and a greater reliance on air power and Army Special Forces. Although the U.S. forces and allies managed to achieve quick conventional victories against the Taliban regime in Afghanistan and against Saddam Hussein in Iraq, they were ill prepared for the long-term insurgencies that subsequently developed. This placed a significant strain on both regular forces and reservists and National Guard units called into service. As a result, it was not uncommon for reservists and National Guard troops to undertake three or more overseas combat deployments.

Conclusion

Since their conversion to an all-volunteer recruitment military, U.S. forces have maintained a mobilized force around the world. The U.S. military has fought in numerous conflicts, some more controversial and problematic than others, over the past 30 years. The nature of mobilization is such that the home front has remained relatively unaffected by these commitments. The federal government's reliance on the defense industry to provide materiel and on defense contractors to provide service and supply chain management has prevented the need for wider industry to convert to wartime production. Regular industries simply no longer need to convert their production to war materiel, nor does the military require enormous amounts of manpower. Ten plus years of persistent conflict have stretched this system of mobilization to its limits, but there is currently more political support for reducing military commitments than there is to expand mobilization.

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See also Conscription; Contractors, Private; Economy and National Defense; North Atlantic Treaty Organization; U.S. Transportation Command

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MODULAR ARMY

Beginning in September 2003, Army Chief of Staff General Peter Schoomaker implemented a radical shift in the U.S. Army from its traditional division-based structure toward a brigade-based modular army. This ongoing transformation of the army resulted in the combined arms brigade combat team (BCT) becoming the centerpiece of army organization. BCTs will be attached to a higher, stand-alone headquarters—a division, corps, or theater army—as part of a formation tailored for operational requirements. BCTs as well as other modular multifunctional support brigades and single functional brigades will be pooled for use as part of expeditionary forces that enhance the flexibility and responsiveness of the army to joint and coalition task forces. This entry discusses the background, implementation, and assessment of the modular army.

Background

Between World War II and the 1990s, the army expected fixed-structure divisions to participate as key parts of large land forces operating in Cold War campaigns, mostly in Europe or Asia. These campaigns envisioned large forward-deployed forces in well-established theaters having significant nondivisional units providing support at specific echelons. By the 1990s, this organization made it difficult to deploy units apart from their divisional base and keep the rest of the division ready for other missions. Post-Cold War, the army needed to rapidly employ land forces at the outset of a contingency, resulting in deploying parts of divisions for specific missions. Force tailoring frequently rendered the residual portion of the parent unit incapable of continuing its full range of missions due to loss of key personnel or equipment. Consequently, the army wanted to reorganize around smaller, more versatile formations to ease deployment.

In January 1995, the army issued a “Concept for Modularity” that called for responding to an

increasing array of potential deployments with more efficient packaging of forces. That concept defined modularity as a force design methodology that established a means of providing force elements that are interchangeable, expandable, and tailorable to meet the changing needs of the army at echelons above division level. In the mid-1990s, some serving army officers, such as Douglas Macgregor, also recommended reorganizing divisions of the army on a brigade basis.

Operations in Afghanistan and Iraq finally convinced the army to consider extending modularity to the division level. The nature of modern land operations had become increasingly distributed in space while more simultaneous in time. At the tactical and operational levels, army subordinate units routinely operated in noncontiguous areas. This contrasted sharply with the contiguous and hierarchical arrangement of land forces prevalent in the past. In addition, the army increasingly provided the majority of land component command and task force headquarters for joint and multinational contingency operations. More agile forces, improvements in command and control, proliferation of satellite-based communications, and continuing integration of joint capabilities at lower echelons all contributed to the necessity for change.

Implementation

Shortly after becoming army chief of staff in 2003, General Schoomaker created 16 focus groups to make up Task Force Modularity. He charged the task force with redesigning the army from a division-based to a modular brigade-based force to achieve three primary goals:

1. To increase the number of available BCTs as capable as their predecessors to meet operational requirements
2. To create brigade-size combat support and combat service support formations of common organizational designs
3. To redesign all organizations to perform as integral parts of the joint force across a range of military operations and enhance their ability to contribute to joint, interagency, and multinational efforts

This modular force conversion converted all army units from Cold War formations to more

deployable and versatile modular formations based on standardized organizations for both the active and reserve components. As of 2011, this included 73 modular BCTs and approximately 229 support brigades and enabling organizations. This transformation of the army also reorganized the headquarters of the operational army, including theater army headquarters, theater support commands, and corps and division headquarters.

BCTs form the basic building block of the army's modular tactical force. They are the principal means of executing engagements. Three standardized BCTs exist: (1) heavy, (2) infantry, and (3) Stryker. Battalion-sized maneuver, fires, reconnaissance, and sustainment units are organic to BCTs. Higher commands can further task-organize BCTs for specific missions with capabilities not organic to the BCT. Augmentation might include aviation, armor, artillery, air defense, military police, civil affairs, psychological operations elements, or engineers. This organizational flexibility allows BCTs to function across the spectrum of conflict.

The modular army retains a mix of three higher headquarters that are not a rigid hierarchy and do not require a standard array of forces. The theater army focuses on combatant command-level landpower employment. It supports joint, interagency, intergovernmental, and multinational forces within a combatant commander's area of responsibility. The corps provides a headquarters that specializes in operations as a land component command headquarters, as a joint task force for contingencies, or as an intermediate tactical headquarters to supervise divisions. The division is optimized for tactical control of a mixture of brigades during land operations and is the army's primary warfighting headquarters. All three headquarters are stand-alone, modular, and designed to use forces tailored for specific operations.

Five types of modular multifunctional support brigades complement the BCTs: (1) the battle-field surveillance brigade, (2) the fires brigade, (3) the combat aviation brigade, (4) the maneuver enhancement brigade, and (5) the sustainment brigade. These brigades provide the expertise to command and control various unit types. More than one type of support brigade may be task-organized to a division or corps. In turn, commands may make these brigades available to support other services.

Assessment

Modular BCTs have proven themselves extremely powerful and effective on today's battlefields. However, under modularity, field artillery units have been reduced and support units have suffered due to piecemeal deployments that violate habitual assignments. In addition, BCTs with only two primary maneuver battalions have been criticized for a lack of combat power and engineers. The Government Accountability Office has also criticized the modular army due to the cost of converting all units, active and reserve component, to standard designs complete with modern enablers. Fourteen army division commanders surveyed in 2009 by Lieutenant General Mark Hertling agreed that while modularity is a great concept, the army has made being a Modular Brigade Commander the toughest job in the army. Exacerbating this has been the delinking of brigades from their higher headquarters and the lack of dedicated divisional troops, which has caused these commanders to recommend rebalancing brigade and division responsibilities and functions.

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See also Army, U.S.; Division; Global War on Terrorism; Military Organization, Army; Tactics, Ground Forces; War in Afghanistan

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MORALE

Combat soldiers experience varying degrees of emotions during their service. What initially drives a soldier to enlist is constantly shaped and changed by the physical, inherent, and material conditions the soldier faces during combat. Therefore, the larger events of the war such as battles, public opinion, and conditions affect individual soldiers and their overall motivation. The morale of soldiers is constantly in flux as several factors, both in the larger scope and at a microlevel usually known as the unit, affects their purpose and will to fight. According to the U.S. Army, *morale* is defined as the mental, emotional, and spiritual state of the individual. It is how he or she feels happy, hopeful, confident, appreciated, worthless, sad, unrecognized, or depressed. Collectively, psychologists, historians, and military leaders have analyzed how soldiers perceive morale and how the morale of individuals affects their performance in battle. Apart from the fact that different wars have different circumstances, these scholars came to a consensus that morale is an

inherent concept that is exhibited through a soldier's participation in a group. A recent scholar, Frederick Manning, synthesized the literature to argue that morale is built through a commonality built on and expressed through small group cohesion. Because morale is rooted in the soldier consciousness, it often runs parallel to the notion of soldier ideology and motivation. The larger question that dictates the concept of morale is what exactly motivates a soldier to fight. This entry examines morale—what contributes to it and what diminishes it.

Defining the Concept of Morale

Soldiers' motivation is their own ideological convictions and how these are interwoven into the larger narrative and cause of war. Motivation can be broken down into two stages: first, as initial motivation or, in other words, what drives the individual to enlist; second, as sustained motivation, or what pushes the soldier to continue. The initial motivation to fight is often challenged by the violence, hardship, and experience of war. However, soldiers and scholars alike argue that soldier ideology can sustain morale if the alternative to victory is severe enough. The Civil War historian James McPherson argues that a majority of soldiers felt an inherent sense of duty and honor that perpetuated good morale. In addition, Earl Hess argues that soldiers were able to synthesize a variety of ideologies such as family, ideology, manhood, and other cultural discourses to reshape the way they saw war in order to stay the course. Similarly, the historian of modern warfare Hew Strachan asserts that political ideology connects the armed forces to the home front and gives purpose to their duty and sacrifice. Thus, while at first, soldiers are often motivated by an ideological purpose, if that ideology no longer outweighs the deadly alternatives, the driving force behind their motivation evolves into a much more localized cause at a microlevel.

Small Unit Cohesion

Arguably, the most significant contributor of morale is the unit, or the cohesion between a soldier and those around him or her. For soldiers who are unhappy with material conditions, leadership, and loss, the small unit is the closest and the most visible source of empathy. In reflection of his own experience in World War II, S. L. A. Marshall

characterizes morale as an inherent feeling that allows an infantry soldier to keep going, despite eminent danger, because of the near-presence of a comrade. The relationships soldiers make throughout hours of training, travel, downtime, and experience play a crucial role in sustaining them in battle. Small group, or unit, cohesion arguably overshadows the larger causes and is what ultimately sustains the soldiers over the course of sustained periods of combat. While small unit cohesion allows soldiers to sustain motivation, what factors contribute to disillusionment and challenge morale?

Challenges to Morale

The most obvious factor that affects a combat soldier is the ever-present fear of the unknown, death, and the very nature of war itself. In other words, soldiers are constantly under the stress of danger, death, and loss. Even for soldiers who enlist and fight for the most ardent cause, the reality of war affects individuals to their very core during battle. Soldier ideology, whether initial or sustained, is often tested by both the exposure to bloodshed and length of their service. When a soldier is exposed to the horrors of battle, the first priority is survival, and often the need to endure combat is more important than any ideology. While soldiers' motivation for fighting is often warped by injury and loss of comrades, battle fatigue also plays a major role in morale. In the War in Afghanistan, some soldiers complained of tiredness and mental illness because of the longevity of the conflict.

The second factor that affects soldier's morale is their relationship with the higher command. According to military historians' and veterans' accounts, soldiers often feel as if there is a disconnect between their own goals and the aims of their leaders. Also, soldiers contemplate whether their commanders are more concerned about personal gain and promotion rather than the well-being of their troops. Historians who study soldier discourse and consciousness to understand what shapes soldiers' emotions often correlates low morale with the lack of faith or trust in their officers.

Along the same lines, public opinion and policy toward the war can affect soldier morale. Soldiers are not immune to newspapers and other forms of social media. Thus, if support for the war at home is dwindling or if public opinion of the war is negative,

soldiers can feel ostracized without the backing of the people they are fighting to protect. Scholars of the Vietnam War correlate antiwar activists and their movement's direct effect on the deterioration in U.S. troop discipline and morale in Vietnam. Also, with regard to policy, soldiers may feel that politicians who make decisions from a safe distance, known as "armchair generals," are making larger negotiations that will filter down to their level. Sometimes the phrase "rich man's war, poor man's fight" comes to mind when the soldiers feel that their safety and best interest are not at heart when politicians or senior military leaders make what they perceive as corrupt or misleading decisions. For example, during the Civil War, the Union Army of the Potomac experienced discouragement in the ranks because of the rise of the Copperheads, political bickering in Washington, and the controversy over emancipation. Similarly, during the War in Iraq, controversy arose over antiwar protesters and their effect on the morale of soldiers. These instances of policy and public opinion can affect soldiers' consciousness even in the event of victory. Some of these tensions are inevitable, given the civilian control of the military, with ultimate decision making regarding questions of war and peace in the hands of the elected officials and the American people.

Finally, material conditions can affect the morale of soldiers. Even if the army is winning battles, if soldiers' basic needs are not met, morale is deeply affected. For example, if the soldiers are uncomfortable and not satisfied with their conditions, regardless of how well the unit is performing, they will not be mentally or physically well equipped. For example, during the Civil War, Confederate soldiers throughout the war, especially during the Petersburg Campaign, were starved, struggled with disease, and lacked clothing and shoes. Also, if soldiers are not given proper medical treatment or equipment to prevent disease, they will not be comfortable and safe. While discontent with material conditions can be show obvious among the ranks, morale is not always as visible, and thus this inherent trait can be understood through soldier actions on and off the battlefield.

Measuring and Sustaining Morale

How then is soldier morale exemplified? Arguably, high morale is often seen through attention to detail, confidence, and success in battle. Most significantly,

victory perpetuates high morale. Victory in battle boosts soldiers' morale and gives them a more positive attitude toward the next battle, whereas defeat lowers morale and causes many soldiers to ponder if continuing to risk their lives is still worth it. Low morale is shown through dissent, mutiny, and desertion. However, desertion is not the only reaction to disillusionment; just because soldiers remain in their ranks does not mean high morale is prevalent. Often, the loss of comrades, homesickness, and battle fatigue all contribute to discouragement.

Currently, the military has considered strategies to elevate morale. While the military cannot control every individual's reaction to combat, modern tactics promote a plan for sustaining morale. The most notable of these implementations is training. The U.S. military has developed training, education, and preparation not only for sustaining the physical demands but also for coping with the mental and psychological stress and trauma that can happen. One of the major components to this training is demonstrated through vertical bonding, horizontal bonding, and commitment education. The U.S. military requires soldiers to form relationships vertically, as in similar rank, in order to lay the foundation for small unit cohesion. Also, to stimulate trust between soldiers and their commanding officers, commanders are required to get to know their soldiers on a personal level. Finally, training strives to instill a code of values and commitment in oneself that is clearly visible and mutually upheld. Each unit has its set of standards and trusts that every other unit holds one itself to the same principles. This mutual trust, founded soundly within the small unit, instills values of trust, loyalty, duty, courage, and honor and spans both vertically and horizontally among the ranks. This type of commitment education establishes a highly cohesive military unit that requires some degree of personal commitment by every unit member. Achieving continuity between units in regard to disciplinary actions, goals, routine inspections, social interaction, and communication can help in initially obtaining and thoroughly sustaining high morale during the challenges war brings.

Throughout history, Americans fought in wars at home and abroad for different ideological purposes, but one common thread embedded within these different circumstances is the concept of morale. While several factors affect a soldier's morale, it is difficult to measure an inherent trait that can change from day to day based on the material conditions,

sentiment on the home front, relationship with their commanders, and the tide of the war, to name a few. While victory and survival are the most obvious forces of motivation, small unit cohesiveness is the strongest attribute to morale for soldiers, regardless of the era. Small unit discourse and its role in sustaining a soldier's will to "keep going" aids in coping with the widespread loss, death, and fear of a combat soldier's experience.

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See also Courage; Desertion; Food; Leadership; Uniforms

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MOTION PICTURES

See War Films

MOTIVATION

No issue is more perplexing to military historians than why people fight. Soldiers have been asked this

question by family, media, and authors over the centuries and throughout the nations of the world, and it is difficult to answer because each individual possesses his, and in recent times her, own motivation. This entry provides background on the issue and explores the various ramifications of that question.

Background

Throughout history, most armies have included both conscripts and volunteers, officers and enlisted men, and combat and combat support soldiers. In the wars of the 20th and 21st centuries, only 10% to 20% of those who serve in military units actually fight. The vast majority of any unit performs tasks that logistically support those on the battlefield. The histories of the two World Wars provide evidence that conscripts from all sides were frequently trained to fight, because they did not possess the skills necessary to serve in noncombat roles. Thus, infantry units were often made up of the less educated, lower socioeconomic classes who, the leaders believed, could easily be trained to kill.

But the limited wars of Korea and Vietnam required a different kind of soldier, one who could adapt to the changing battlefield scenario and who could interface with local populations and “win the hearts and minds” of the people. Such a soldier had to be better educated than his predecessor, more culturally aware, and appreciative of his environment. Once on the battlefield, each soldier has to charge toward the enemy as part of a unit. It is on this issue that military historians have debated the motivation to fight.

Traditional Versus Cynical

The traditional but somewhat romantic view of combat motivation holds that people fight because they believe in a cause, the ideology of their nation, and that they are driven by what they believe to be the “right” side of an issue. Leaders who can motivate their soldiers by explaining the reasons why they are fighting will have the most battlefield success because their soldiers will “buy into” the mission and will accept their fate if ultimately they must die. And they would do so for the cause if their leaders, either civilian or military, can speak to the mission in terms that the average soldier can understand.

The more cynical but generally accepted explanation for “why people fight,” at least in the limited

wars of the 20th and 21st centuries, is that it’s for their “buddy” in the foxhole or next to them in an operation. They do not need to know why they were sent there, why their nation has chosen these people as the enemy, or what political circumstances necessitated the battle they are about to fight. Only the needs of their fellow soldiers are important. The “limited” wars of Korea, Vietnam, and Desert Storm and the wars of the 21st century, such as Operation Iraqi Freedom in Iraq and Enduring Freedom in Afghanistan, are examples that are frequently cited as not being ideologically driven wars.

A more focused examination of these two schools of thought on the motivation to fight reveals some overlap of the theories. The “cause” school places the burden of mission explanation on either the civilian or the military leadership. Those who fought in the American War for Independence knew that victory against Britain would bring the freedoms outlined in the Declaration of Independence. No cause could have been better defined, at least by 1776. But if the cause was so obvious, why did soldiers desert to return to their farms, and why were French mercenaries and officers needed to supplement and train colonial soldiers? Why did General Washington have such difficulty in obtaining the funds, arms, and clothing necessary to keep his army on the battlefield? Once President Abraham Lincoln found a general to lead his Union Army, he still was not able to effectively articulate the cause as the elimination of slavery. Had that happened, Union soldiers may have readily accepted Black soldiers into their ranks, thus improving the likelihood of a rapid defeat of the Confederacy. General William T. Sherman is often given credit for motivating his Union Army as they made their final push to the sea, but by the time that final assault was made, resistance from the Confederate Army had declined considerably. And General George Patton is given credit for successfully defeating Erwin Rommel’s forces in North Africa in Operation Torch, then quickly leading his men to reach Messina in Sicily. His men fought effectively in both campaigns, but the extent to which the cause motivated them is questionable.

If leaders are critical for the success of the mission, they become as important as the soldiers in defeating an enemy on the battlefield. Yet the leaders seldom fire a shot, advance into enemy fire, or risk their lives to save the wounded. Those responsibilities are on the shoulders of the fighting men

and, more recently, women. In the limited wars, we know that conscripts braved the cold and snow in Korea and fought bravely at Inchon and against the Chinese troops that leaders believed would not cross the border. In Vietnam, draftees fought alongside reluctant volunteers at Ia Drang and Khe Sanh. And the rhetoric of the leaders mattered little as they fought to save their buddy next to them when the cause did not seem relevant, pertinent, or supported by the society that sent them to war.

The debate continues toward the wars in Afghanistan and Iraq. With the all-volunteer force having been established in 1973, today's soldiers continue to be motivated to perform their duties to the satisfaction of those who serve with them.

Ron Milam

See also Leadership; Morale

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MUSEUMS, MILITARY

Military museums can be roughly divided into three categories. Governments operate museums of varying sizes to commemorate the accomplishments of their respective armed forces, and these can be considered to be national military museums. To commemorate particular engagements or locations, battlefield museums are located at, or near, particular historic sites. Finally, individual units such as regiments or batteries often maintain organizational museums. These might merely be collections of trophies located in the officers' mess (a tradition already well established in the British army by the early 19th century), or can take the form of more formal museums. Many of these sites are nationally or state owned and operated, although numerous

institutions are privately owned and operated. This entry discusses the origins and objectives of military museums, and describes U.S. armed forces museums and major world military and battlefield museums.

Origins

The capture and display of trophies by a victorious army have been recorded far back into antiquity. In England, public demonstrations of seized arms and armor in the White Tower of the Tower of London are documented to have occurred as early as 1489. The ceremonial display of these captured trophies, and triumphant return of these trophies to an army's home and consequential public veneration, can be considered to make up the first military museums.

Within the United States, artillery pieces from the British army of Lieutenant General Jonathan Burgoyne captured and surrendered at Saratoga in 1777 were carefully marked and, although remaining in active duty with the Continental army, were regarded as valued trophies. Beginning in 1782, the Continental army inscribed captured artillery pieces and presented selected cannon to distinguished officers such as the French commander at Yorktown, Lieutenant General Comte de Rochambeau, and the American general Nathaniel Greene. These cannon were proudly displayed at what became known as "Trophy Point" at West Point as early as 1780. By 1854, the U.S. Army opened the first purely military museum in the nation at West Point, at approximately the same time as the U.S. Navy began a committed effort to safeguard and preserve military relics and trophies acquired in engagements and excursions throughout the globe. Other nations rapidly followed this precedent.

Objectives

Regardless of their size and scope, military museums are typically established with consistent purposes and missions.

Museums serve as a venue for military history study. They serve as a repository for military weapons, uniforms, and equipment from previous campaigns and historic eras. Many collections may contain numerous pieces of equipment, thus providing a large representation of local variations and manufacturers. The U.S. National World War I Museum at Liberty Memorial, Kansas City, Missouri, contains hundreds of U.S. uniforms of

World War I. Many collections also contain the official patterns and samples of specific military uniforms, arms, and equipment. The U.S. Army Quartermaster Museum at Fort Lee, Virginia, contains all the official U.S. Army Quartermaster patterns. Museums may also contain focused collections obtained from foreign entities during conflicts. The West Point Museum contains one of the world's foremost Plains Indians collections, obtained by purchase or capture by the numerous West Point graduates who served and fought on the American Great Plains throughout the 19th century. Many of these museums contain highly focused libraries and archives to facilitate research and are among the foremost such institutions in the world. Examples of these are the World War I and World War II archives on the Canadian army located at the Canadian War Museum in Ottawa and the World War I-focused collection at the U.S. National World War I Museum at Liberty Memorial, Kansas City, Missouri.

Military museums provide venues for military history instruction and training and, in turn, facilitate modern military training and instruction prior to deployments. Numerous institutions such as the West Point Museum provide access to their collections to support cadet history classes. West Point, in fact, has a state-of-the-art classroom specifically configured for this purpose. The West Point Museum also maintains a collection of fully functional, well-maintained original arms to provide cadets with an annual opportunity to actually fire these rare historical weapons.

Military museums serve as important venues for commemoration of significant military and historic events and as sites for contemplation of sacrifice. The Canadian War Museum contains a chapel and memorial area and the tomb of Canada's Unknown Soldier from World War I. The spectacular Falklands Islands Memorial Chapel in southern England performs this service for the 255 British servicemen who died in the Falklands Conflict of 1982 in the South Atlantic. At the heart of the Verdun battlefield, the *Ossuaire de Douaumont*, surrounded by the marked graves of 15,000 known French dead, contains the remains of a horrific 130,000 unknown dead (French and German) in its vaults and provides visitors with a contemplative chapel.

Military museums, particularly regimental museums and collections in mess rooms, serve to preserve and commemorate unit esprit and traditions. The

Le Musée de la Légion étrangère, the Museum of the French Foreign Legion at Aubagne in southern France, contains the wooden hand of Captain Jean Danjou, whose hand was sacrificed at the Battle of Camerone on April 30, 1863. Arguably the most sacred relic of the French Foreign Legion, it is paraded annually by the Legion on the anniversary of the battle. Nearly every military organization possesses at least a handful of relics garnered on fields of strife in which it has participated, and that are proudly displayed in a hallway or orderly room in its garrison headquarters or billets.

Finally, in the case of private museums in particular, military museums support, facilitate, and encourage heritage tourism and attendant economic tourism benefits to the adjacent community. Fort Ticonderoga Museum, a privately owned and operated museum at Fort Ticonderoga (an 18th-century citadel) in upper New York state is a superlative example of this, and this museum has served as the principal economic factor within that community since the closing of numerous industrial plants following World War II.

U.S. Armed Forces Museums

U.S. Army

The U.S. Army currently does not have a dedicated U.S. Army institutional museum. The U.S. Army Education and Heritage Center is in the process of establishing an Army Heritage Museum and attendant living history facility at Carlisle Barracks, Pennsylvania. Primarily based on the library and archives of the U.S. Army Military History Institute, this facility was partially opened to the public in 2007. A private organization, the Army Historical Foundation, is currently performing fund-raising and planning for a National Museum of the U.S. Army to open at Fort Belvoir, Virginia. The United States Military Academy at West Point and two U.S. Army Commands operate a range of museums throughout the nation.

West Point Museum. Established at West Point as early as 1780, formal collections were established at Trophy Point and the Ordnance Compound shortly after the Mexican-American War as the repository for captured artillery pieces brought back by the academy graduates from the Mexican-American War of 1846–1848. The museum first opened to the public in 1854.

In 1989, it moved to Olmsted Hall on South Post in Highland Falls, where it remains. This off-post location ensures that the museum will remain accessible to the public regardless of security conditions.

Training and Doctrine Command (TRADOC). The U.S. Army TRADOC “develops, educates and trains soldiers, civilians, and leaders; supports unit training; and designs, builds and integrates a versatile mix of capabilities, formations, and equipment to strengthen the U.S. Army as America’s Force of Decisive Action” (<http://www.tradoc.army.mil/>). As its name implies, TRADOC is responsible for training soldiers (individually and organizationally) and for establishing army-wide military doctrine. TRADOC operates a range of tactical schools such as the Infantry School, Armor School, and Fires School; various support schools such as the Quartermaster School, Signal School, Medical School, Military Police School, and Aviation School; and a number of educational schools such as the Sergeant Major’s Academy, Command and General Staff College, and War College. TRADOC has always considered military museums to contribute to its training mission and has strongly supported the development, growth, and utilization of army museums as an integral component of its vigorous military history instruction and education program. Numerous TRADOC commands and installations operate superb military museums.

Forces Command (FORSCOM). The U.S. Army FORSCOM “prepares conventional forces to provide a sustained flow of trained and ready land power to Combatant Commanders in defense of the Nation at home and abroad” (<http://www.forscom.army.mil/>). Although FORSCOM operates numerous military museums, predominantly organizational museums such as the 82nd Airborne Division Museum, the Don F. Pratt Museum (101st Air Assault Museum), and 10th Mountain Division Museum, these have typically been constrained by inadequate funding and have not received command emphasis or attention. Those museums that are relatively large and modern have been forced to generate nearly all of their own revenue. The result has been that the U.S. Army organizational museums are generally neglected. This is considerably at variance with the British and Canadian model, where maintaining organizational history and relics is considered to be at the heart of regimental morale.

U.S. Air Force

The National Museum of the U.S. Air Force is the oldest military aviation museum in the world established at McCook Army Airfield near Dayton, Ohio, in 1923 following the end of the First World War, as a collection of U.S. and foreign World War I aircraft. In 1927, the collection was moved to Wright Field in Dayton, and in 1954, the museum began to display full-sized aircraft. It was formally designated the Air Force Museum in 1956 and moved into its current location at Wright-Patterson Air Force Base in 1971. It contains one of the foremost collections of military airplanes and aviation items in the world.

U.S. Navy

The U.S. Navy in the 19th century established learning schools, or Lyceums, at most of their large shipyards. The tradition of collecting naval artifacts and trophies in the United States began in the early 19th century under Thomas Tingey, the first commandant of the Washington Navy Yard. The initial artifact collected was a French gun, cast in 1793 at Lyons, captured during the Quasi-War with France (1798–1801). The various Lyceums and early trophy collections make up the core of the current U.S. Navy museum system.

National Museum of the U.S. Navy. This museum was formally established in 1961 at the Washington Navy Yard and opened to the public in 1963. It is a component of the U.S. Naval History and Heritage Command, which operates 12 official U.S. Navy museums throughout the nation, and the Navy Department Library and Naval Historical Center, also at the Washington Navy Yard.

Naval Academy Museum. The museum originated as the Naval School Lyceum, established in 1845 under the academy’s first chaplain. The Lyceum was a collection of historic and natural objects, scientific models and apparatus, and works of art brought together for study and discussion by the Naval Academy Cadets. In 1849, President James K. Polk directed that the navy’s collection of historic flags be sent to the new Naval School at Annapolis for care and display. Other trophies of war soon followed. A permanent museum building was subsequently constructed at Annapolis in 1939 and still remains in use.

USS Constitution. Still a commissioned ship of the U.S. Navy, continuously in commission since its construction in 1797, the *USS Constitution* is docked at the historic Boston Naval Yard, Charlestown, Massachusetts. It is a distinctive floating museum, and remains the most distinguished ship in the history of the U.S. Navy.

Major World Military Museums

Imperial War Museum, London. In 1917, it was determined that a National War Museum should be established to collect and display material relating to the Great War, then still being fought. Formally established by Parliament in 1920, although the museum's original focus was the "Great War" (subsequently known as World War I), it now serves to interpret all military operations in which the British and the British Empire's military forces have been engaged since 1914.

National Army Museum, London. The National Army Museum tells the story of the British army from its inception through the ongoing operations in Afghanistan, with the focus on the numerous imperial campaigns of the 18th and 19th centuries. It is located on the grounds of the Royal Hospital at Chelsea. Like most museums, it contains a particularly well-regarded archival and research facility.

HMS Victory, Portsmouth. A floating museum like the *USS Constitution*, *HMS Victory* was Lord Nelson's flagship at Trafalgar and has been maintained as a living monument to the 18th-century Royal Navy, the "Heart of Oak" that protected England's overseas Empire.

Canadian War Museum, Ottawa. This superb institution moved into a massive modern facility in 2005, located in a beautiful location in downtown Ottawa adjacent to the Ottawa River. A massive museum gallery interprets Canadian military history from the colonial era to the modern peacekeeping era. Its exhibit areas for World War I and World War II are particularly comprehensive. A mammoth basement arena contains scores of armored and wheeled vehicles, constituting one of the most extensive motorized military vehicle collections in the world. It also contains a research facility focused on the Canadian military experience, particularly in the two World Wars.

The Royal Museum of the Army and Military History, Brussels, Belgium. One of the major military museums of Europe is located at the center of Belgium, known as the "Cockpit of Europe" for its pivotal location of centuries of military contests. Its World War I collections, during which a small but gallant Belgium army maintained national survival, are particularly robust.

Musée de la Armée, Paris, France. The museum is contained in the Hall of the Invalids, originally constructed by King Louis XIV in 1641 to serve as a hospital for crippled or retired French soldiers. Today, it preserves centuries of French military traditions and accomplishments. Its most impressive and most frequently visited exhibit is the Tomb of Napoleon, still the site of an annual pilgrimage by cadets at the French Military Academy of Saint Cyr.

The Falkland Islands Memorial Chapel. Not properly a museum, this is predominantly a memorial chapel to the fallen British soldiers, sailors, and airmen of the Falklands Conflict. Dedicated by Her Majesty Queen Elizabeth II in 2000, it contains small but exceptional museum galleries within the wings of the chapel; a Library that allegedly contains every book written about the Falklands War; and a small, but continuously expanding, archive of primary source materials. It includes a spectacular and moving outdoor memorial garden. Every year, to commemorate the termination of hostilities on June 14, 1982, a special service of thanksgiving and remembrance is held at the chapel.

Central Armed Forces Museum, Moscow, Russia. First established in 1919, this museum is dedicated to the military history of the Soviet Union and Russia from the 1917 Revolution until today. It has a massive collection of 20th-century Soviet and Russian military historic items and holds more than 700,000 individual artifacts. The most valuable are displayed in the 25 exhibit galleries of the museum. The museum's particularly strong collections from World War II constitute one of the most significant such groupings in the world.

Battlefield Museums

These museums, more commonly called visitor centers, are typically located either on the periphery or,

in many instances, on hallowed ground at battlefields or significant military history sites.

Ossuaire de Douaumont, Verdun, France. Located in the midst of the battlefield of Verdun on the Ridge of Thiaumont, discernable and distinct battle damage such as trench lines and shell craters can be viewed while walking from the parking lot to the museum. In addition to the Ossuaire and adjacent military cemetery, the site contains a memorial chapel and a modern Visitor Center that interprets events at Verdun in 1916. A visit to the Ossuaire is both chilling and unforgettable.

Gettysburg Museum and Visitor Center, Gettysburg, Pennsylvania. The jewel of the U.S. National Park Service's several score military history sites, Gettysburg contains a newly opened (as of September 26, 2008) Gettysburg Museum of the Civil War, funded as a unique private-public partnership that interprets not only the 1863 battle but also places it in context within the Civil War. The Visitor Center is located on the periphery of the battlefield, and walking trails and driving routes of the 3-day engagement begin from the parking lot.

Waterloo Battlefield, Lion Mound Hamlet, south of Mont-Saint-Jean, Belgium. Although the battlefield is preserved by the nation of Belgium as a national treasure, attendant facilities are nearly all privately owned and operated. Interpretive facilities include the Waterloo Cyclorama, a Wax Museum, and a private Visitors Center. Battlefield landmarks such as La Haye Saint and Hougomont remain as privately owned working farms.

Isandhlwana and Rorke's Drift, Kwa-Zulu Natal, South Africa. A portion of the battlefield at Isandhlwana is preserved, and several small museums are available. Two local tourist concessions, the Fugitives Drift Lodge and Isandhlwana Lodge, provide meticulously researched guided tours of the two close battlefields.

Major U.S. Private Military Museums

Fort Ticonderoga. Fort Ticonderoga, originally restored by the prominent Pell and Thompson family of New York in the 20th century on the shores of

Lake Champlain, celebrated its centennial in 2009. This fort, a faithful reconstruction of the fortification originally constructed by New France in 1755, featured prominently in the Seven Years' War and American Revolution. It contains a well-regarded collection of 18th-century militaria and comprehensive research archives focused on 18th-century military treatises.

Pamplin Historical Park, Petersburg, Virginia. This park was established by the Pamplin family, a long-standing family with deep ties to Old Virginia. It contains a Civil War battlefield and Confederate fortifications, the scene of the initial breaching of the Confederate defenses of Petersburg by the Union Army of U.S. Grant in early April 1865. It contains a superb Visitor Center that complements the adjacent Petersburg National Military Park of the U.S. National Park Service, a number of original Civil War-era structures, and the recently opened National Museum of the Civil War Soldier, a state-of-the-art Civil War museum with modern multimedia capabilities dedicated to telling the Civil War soldier's story.

Conclusion

Military museums fill an integral role in military instruction and education and in the development of military organizations and institutions. There are thousands of military museums located throughout every nation, and one can nearly always be found in close proximity to any military installation. The availability of these military history focused resources constitutes a significant, and often untapped, potential for military training and knowledge.

Douglas R. Cubbison

See also American Revolution; Artillery; Civil War, American; U.S. Military Academy; War of 1812; World War I; World War II

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U.S. Army Training and Doctrine Command: <http://www.tradoc.army.mil/About.asp>

The U.S. National World War I Museum at Liberty Memorial, Kansas City, Missouri: <http://www.theworldwar.org/>

MY LAI MASSACRE

My Lai remains one of the most problematic episodes in the history of the Vietnam War and in the entire course of U.S. military history. Without question, American troops committed war crimes by killing unarmed civilians in cold blood. What has been disputed is who should be responsible for these acts and the degree to which the events that took place in a small village in South Vietnam were commonplace or an aberration. The events of My Lai and the aftermath offer an excellent case study of both officers and enlisted personnel on when and why war crime can occur. It also highlights the moral courage of some who refused to obey an illegal order and bystanders who sought justice.

The Massacre

On the morning of March 16, 1968, a group of American soldiers—Charlie Company of the 11th Infantry Brigade of the Americal Division—attacked the village of My Lai in Quang Ngai Province of South Vietnam. They had hoped to surprise the Vietcong 48th Battalion, which had been operating in the area with impunity. Tensions ran high. The Tet Offensive, launched by the North Vietnamese and National Liberation Front, was now in its sixth week, and the soldiers of Charlie Company had been on patrol almost constantly. They had lost a number of soldiers to mines and booby traps during that period,

but they had been unable to engage their Vietcong enemy, which seemed to melt into the local peasant population just before U.S. troops arrived at a prospective battle site. The soldiers had come to resent the local population, which seemed sympathetic to the Vietcong, making the jobs of American troops infinitely more dangerous. The 11th Brigade was under the command of Colonel Oran K. Henderson, who answered to General Samuel Koster, head of the Americal Division.

Oran Henderson wanted the 48th Vietcong battalion eliminated, a task he handed over to Lieutenant Colonel Frank Barker, who assembled several companies into “Task Force Barker.” Captain Ernest Medina headed C Company, or Charlie Company. He was an excellent combat officer highly respected by his troops. Barker told Medina that on the morning of March 16, they would attack an area dubbed “Pinkville,” home to the 48th Vietcong. Because the villagers would be at the local market, the troops could assume that everyone left behind was Vietcong. On the evening of March 15, Medina assembled his three platoons—one of them under the command of Lieutenant William Calley—for a preoperation briefing. Medina described the mission and reminded the men that the attack would provide an opportunity to avenge their fallen comrades, killed by the 48th Battalion’s mines and booby traps. The anticipated engagement would be intense, bloody, and deadly.

When the helicopters arrived, however, they attracted no small arms fire. Over the course of the next 4 hours, U.S. troops summarily executed more than 500 Vietnamese men, women, and children. The soldiers also raped and mutilated women in the village before killing them. At the midpoint of the slaughter, the troops stopped for lunch and then resumed the bloodletting. Calley’s platoon did most of the killing, with Calley participating.

At one point, the chief warrant officer Hugh Thompson, hovering in a helicopter above My Lai, noticed Calley shooting a huddled group of Vietnamese. Outraged at what he believed was a war crime, Thompson landed the helicopter between Calley and the villagers and told the lieutenant that unless the killing stopped immediately, he would machine-gun the platoon. Calley told the platoon to stop firing, allowing Thompson to evacuate a group of villagers to safety. After Thompson returned to brigade headquarters, he reported the incident to a chaplain and to Oran Henderson,

expecting a thorough investigation required by army regulations. Charlie Company experienced only one casualty—a self-inflicted leg wound—and recovered only two weapons, evidence that they had not engaged the Vietcong but only a group of civilian noncombatants. The 48th was nowhere in sight. The after-action report, however, described an American combat victory at My Lai, and a news story about the “battle” made its way into *Stars and Stripes*. Oran Henderson did not conduct an investigation, and My Lai quickly drifted back into obscurity.

The Investigation and Public Scandal

More than a year later, multiple copies of a single letter began arriving at the White House, Congress, and the Pentagon, describing a horrific incident in 1968 at the village of My Lai in Quang Ngai Province. Ronald Ridenhour, a Vietnam veteran who had heard rumors of the massacre, wrote the letters,

in which he told how a unit of American soldiers had slaughtered hundreds of Vietnamese. Ridenhour learned about the events at My Lai through casual conversation with GIs who claimed to have witnessed and participated in the killing of civilians. Some said that they had not personally engaged in the killings, but several stressed that those who had were merely following orders. Medina, they claimed, had instructed Charlie Company to “waste” My Lai.

Even before the story broke in the national media, the U.S. Army assigned its own lawyers to investigate whether a war crime had occurred, and they asked Lieutenant General William R. Peers to head a formal investigation of the incident and any associated cover-up. In his report, Peers confirmed both—a massacre and then a cover-up at every level of the army chain of command. Before the criminal and official investigations were complete, however, Seymour Hersh, a freelance journalist, got wind of the massacre and



This photo of the My Lai Massacre by Ron Haeberle shows bodies of some of the victims lying along a road.

Source: Getty Images.

the cover-up and, on November 13, 1969, broke the story. The international wire services immediately picked it up, and My Lai garnered headlines in major newspapers around the world. On December 5, 1969, *Life* magazine published a set of grisly photographs of the massacre taken by Ron Haeberle, an official U.S. Army photographer assigned to Charlie Company. Critics on the left quickly cited My Lai as proof of a racist, genocidal campaign on the part of the United States to exterminate the Vietnamese people, while critics on the right treated the episode either as an anti-American fabrication or as an unfortunate, but noncriminal, consequence of war.

The lying and the cover-up had also distressed General William C. Westmoreland, former commander of the U.S. ground forces in Vietnam. He later wrote in his memoirs:

The developing evidence in the criminal investigation and in indications of command dereliction led . . . me, to arrange for an additional formal inquiry into the adequacy of the criminal investigation and possible suppression of information. When I learned that some members of President Nixon's administration wanted to whitewash any possible negligence within the chain of command, I threatened . . . to go personally to the president and object. That squelched any further pressure for whitewash. (Westmoreland, 1976, p. 375)

Charges were leveled at 16 officers and enlisted men. Early in 1971, Calley and Medina went on trial for murder at Fort Benning, Georgia. The international media covered the proceedings in detail. Calley insisted that he had followed orders given by Medina, who just as emphatically denied the allegation. On March 29, the military tribunal acquitted Medina of involuntary manslaughter. They convicted Calley of 22 counts of murder and sentenced him to life in prison at hard labor. Of the 14 officers facing court-martial for cover-up, only Oran Henderson, head of the 11th Brigade, actually went on trial, and he was acquitted. Many officers, however, faced other, noncriminal consequences. Major General Samuel Koster, commander of the Americal Division, lost a star and retired as a brigadier general. Brigadier General George Young, Koster's assistant at the Americal Division, received a formal censure, which effectively ended his career. Charges

against other officers and enlisted personnel were dropped.

The decision against Calley, however, triggered a firestorm of debate. Many conservatives felt a measure of sympathy for Calley, seeing him as a military scapegoat for the most unpopular war in U.S. history. President Richard Nixon, with his finger on the national political pulse, made a series of incremental moves to ensure that Calley avoided both prison walls and hard labor. Soon after the conviction, he ordered Calley released from the stockade and put under house arrest in an apartment at Fort Benning. In August 1971, the president reduced Calley's life sentence to 20 years and soon down to 10 years. In November 1974, Calley was paroled.

Legacies

Since then, in an effort to prevent such incidents in the future, the U.S. Army and historians have sought to identify the factors contributing to the catastrophe at My Lai. What had gone so wrong? Why had the United States gotten entangled in Vietnam? What had been our mission and how had it led to the massacre in My Lai? Decent Americans had participated in the war, but something had happened in Vietnam that allowed some of them to kill innocent civilians.

In his official report on My Lai, Peers came to several conclusions about the incident. The soldiers of Charlie Company had not been adequately trained on rules of engagement and war crimes—on how to identify criminal orders from superior officers and on their own individual responsibility to disobey such orders. At the brigade and division levels, commanding officers had been more concerned about their careers than their duty and had failed to investigate the incident and bring its perpetrators to justice. Many of the soldiers themselves, after months of stress and frustration, had developed ethnocentric feelings of resentment and superiority toward all Vietnamese—both combatants and civilians—that dehumanized them and increased the likelihood of improper behavior. In many ways, My Lai became a symbol for the entire Vietnam War.

The Peers Commission focused on deficiencies in U.S. Army training. All soldiers, airmen, marines, and sailors fighting in Vietnam were to receive training in the international laws of land warfare, the handling of noncombatants, and the

requirement to refuse to obey illegal orders from commanding officers. But in Vietnam, such training had been haphazard and casual at best, with the vast majority of soldiers remembering the charge to “obey orders or else,” and not the need to distinguish between illegal and legal orders and to report officers and noncommissioned officers for their illegal commands.

The Peers Commission and subsequent scholars have also focused on ethnicity and racism. Too many troops harbored convictions that the Vietnamese people were inferior to Americans. The widespread use by military personnel of epithets such as “gook,” “slant,” and “slope” as synonyms for Vietnamese revealed a streak of ethnocentrism, and military psychologists have long recognized that soldiers are more likely to mistreat those considered subhuman, especially when they also represent a clear and present danger.

The nature of the war then aggravated the racism. The conflict was fought overwhelmingly inside South Vietnam, making it extremely difficult for American soldiers to differentiate between enemy troops and noncombatants. The Vietcong had been recruited from South Vietnamese peasants, and many American soldiers, for obvious reasons, developed suspicions toward all Vietnamese, not just communists, and treated them accordingly.

The nature of combat operations in South Vietnam exacerbated the challenge of distinguishing between civilians and Vietcong. U.S. soldiers spent long days, weeks, and months engaged in search and destroy operations to locate an elusive enemy, with significant numbers of casualties as a result of land mines rather than head-on-head firefights with the enemy. The soldiers in Charlie Company witnessed death and serious wounds among comrades but enjoyed few opportunities to vent their pain and frustration against the enemy. American soldiers also grew resentful of Vietnamese villagers unwilling to identify the location of deadly land mines and booby traps. The My Lai region, known to Americans as “Pinkville,” had long been a notorious center of Vietcong activity, and it was no secret that the Vietcong often masqueraded as civilians. The army officers who planned the My Lai operation on May 16, 1968, had assured the combat troops that My Lai was infested with Vietcong, that civilians would be away at the local market, and that

an opportunity loomed to achieve a major military victory and to avenge the death of comrades.

Finally, the Peers Commission cited a failure of leadership on the ground that morning. Calley had been a poor officer, unable to read maps, and the butt of jokes from those under his command as well as from Medina, his commanding officer, who regularly ridiculed him in front of the troops. Both Calley and Medina had created a company culture deficient in discipline and unable to contain the blood lust that enveloped My Lai on March 16, 1968.

That day, the troops in My Lai found themselves battling a determined enemy where distinctions between friend and foe, soldier and civilian, blurred. Fighting for freedom degenerated into a quagmire of racism and violence, symbolized by My Lai. For critics on the left, the Vietnam War had betrayed Lyndon B. Johnson’s Great Society. While the president pledged to eliminate poverty and guarantee equality in the United States, his foreign policy had become a homicidal assault on Vietnam, a poverty-stricken, developing country. How could a nation committed to protecting freedom and democracy engage in such a holocaust? For Martin Luther King Jr., the plight of the brown-skinned Vietnamese during the war reflected the plight of African Americans and other minorities at home. In his speech “A Time to Break Silence,” delivered at Riverside Church in New York City on April 4, 1967, King denounced

this business of burning human beings with napalm, of filling our nation’s homes with orphans and widows, of injecting poisonous drugs of hate into the veins of peoples normally humane, of sending men home from dark and bloody battlefields physically handicapped and psychologically deranged, [which] cannot be reconciled with wisdom, justice, and love.

The war in Vietnam seemed to capture all that was wrong with America, at home and abroad.

For conservatives, My Lai and its critics similarly symbolized an America no longer moored to its heritage and history, “a country of sunshine patriots,” to use Thomas Paine’s wording, who held their soldiers in low esteem and stood ready to sacrifice them on an altar of liberal guilt and contempt. Perhaps Peers best captured the meaning of My Lai. On learning that President Nixon had paroled Calley,

a crestfallen Peers sighed, "To think that out of all those men, only one, Lieutenant William Calley, was brought to justice. And now, he's practically a hero. It's a tragedy."

James S. Olson

See also Crimes, War; Geneva Conventions; Hague Conventions; Laws of War; Vietnam War

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NATIONAL DEFENSE UNIVERSITY

The National Defense University (NDU) is a multifaceted Department of Defense institution. NDU is increasingly recognized as a focus for “whole of government” education, and it carries out three missions: primarily education, along with research and outreach. Located at Fort Lesley J. McNair in southwest Washington, D.C., with a second campus in Norfolk, Virginia, and a program in conjunction with Fort Bragg, North Carolina, the university began in 1976. Its faculty and staff intertwine civilians hired under Title X of the U.S. Code, agency personnel on loan for a fixed period of time, and active-duty or reserve military officers, offering a unique blend of understanding to teach current personnel about national security strategy here and abroad. Its role as a focal point for interagency and international discussions is shifting the dynamic of the university to that of an instrument of statecraft for the U.S. government’s soft power, or nonmilitarized, approach to the world.

Today, NDU’s components include five colleges, eight research centers and programs, a strategic gaming center, the National Defense University Press, reserve and senior military training courses, and outreach activities. NDU received accreditation in 1996 by the Middle States Commission on Higher Education to grant master’s degrees. NDU represents a crossroads for U.S. military officers, civilian governmental officials, and a small number of private sector employees with ties to the defense industrial base. The final component of the NDU

student body is a cadre of international officers from countries around the world to which the chairman of the Joint Chiefs of Staff, in consultation with the combatant commands, offered an invitation to send students to learn about the United States and share knowledge of his or her country for a year-long program in the United States. This entry examines the colleges, programs, and research centers of NDU.

Education: The Colleges

The Industrial College of the Armed Forces, known from its founding in 1924 until the end of World War II as the Army Industrial College, is a senior service college with a mission to educate its students on the role of “national strategic resource management,” including logistics and acquisition in national security strategy. In the autumn of 2012, it became the Dwight D. Eisenhower School for National Security and Resource Strategy but will continue educating officials from the Department of Defense, civilian agencies of the national security community, and foreign officers invited by the chairman of the Joint Chiefs of Staff to the college in national security concerns relating to understanding and enhancing the resource base that allows the United States to provide materiel for national security requirements. The Eisenhower School has two additional emphases differentiating it from the other senior service colleges of the professional military education system: teaching issues relating to acquisition along with incorporating students from the civilian defense industrial base into courses with civilians and military personnel in the senior Professional Military Education system.

These students may be from defense contractors, automobile makers, and other businesses that need to understand the resource process and its relationship to national security strategy. The Eisenhower School, like the National War College, offers its 315 annual students a 10-month accredited master's degree program that considers national security strategy, the resource challenges a conflict presents, and an "industry study," which gives students the opportunity to delve into a single subfield of the global economic base with much greater time and detail. The Eisenhower School has roughly a third of the international fellows at NDU with the remainder at the War College and College of International Security Affairs (CISA). These senior service schools allow students to earn Joint Professional Military Education Level II credit, as required under the Professional Officers Military Education Program.

The creation of the National War College resulted from lessons learned in World Wars I and II to include the profound need for greater understanding across and within the armed services as well as of the civilian agencies engaged in foreign policy decision making. The mission of the college, which has remained remarkably constant since opening its doors in 1946, is to educate the future leaders of the national security community for "high level policy, command, and staff responsibilities," with an emphasis on interagency and joint perspectives of national security strategy. The college educates roughly 220 students per year in its 10-month master's program in national security strategy. This program explores all aspects of developing, implementing, and evaluating national security strategy and allows the student to pursue a special emphasis in a "regional study," which is a single country or two countries in a region. The composition of the student body includes 60% U.S. officers, equally distributed between the sea services (U.S. Navy, Coast Guard, and Marine Corps), army, and air force—at the lieutenant colonel/colonel and navy equivalent rank—along with roughly three dozen international officers. The remaining students are from the civilian portions of the national security community. The State Department from its founding has had a major role in the college because its officers were part of the original conception of the community that needed to be part of the increased conversation across the government and services. The author of the "containment" policy

(1947–1989) against the Soviet Union, Ambassador George F. Kennan, wrote his article on the subject while serving as the inaugural international affairs advisor at the college.

The Joint Forces Staff College (JFSC) began in 1946 as the Armed Forces Staff College, but the adoption of its current title in the early 21st century reflects the emphasis in the U.S. military on its jointness rather than simply combined operations. Located in Norfolk, Virginia, JFSC is a midlevel (educating officers at the 12-year point in their careers, on average) joint educational institution. According to the JFSC website, its mission is to educate "national security professionals to plan and execute operational-level joint, multinational, and interagency operations to instill a primary commitment" involved with today's warfighting issues. JFSC has several programs, such as the Joint Advanced Warfighting School, the Joint and Combined Warfighting School, and the Homeland Security Planners' Course. The JFSC student, in general, works toward Joint Professional Military Education Level I certification, although higher level programs are also at Norfolk.

In the 1980s, emerging concerns about information as both a potential threat and a tool of statecraft led to the 1988 creation of the Information Resources Management College (IRMC or "iCollege") to assess the utilization of information technology as an instrument of national power. The iCollege offers far more short courses than any of the other components at NDU, ranging from a couple of days to several weeks' duration. The courses focus on the wide array of national security concerns relating to information, and the college offers a number of certificate programs in information issues. The iCollege has become a focal point for U.S. government education on considering the information aspects of national power through process reengineering, management of acquisition processes, information technology, and transformation. Its programs fall under three departments: (1) Information Operations and Assurance, (2) Chief Information Officer, and (3) Systems Acquisition.

The fifth school, the CISA, began in 1997 as the Defense Leadership and Management Program during the Clinton administration to educate Department of Defense civilians about national security more effectively than the military traditionally has done. In the next decade, the program also

included national security executive education but gradually took on its current focus on “interagency, interservice and international” approaches to international security when it adopted its current name. Areas of emphasis include counterterrorism, counterinsurgency, and strategic planning. CISA graduates earn a master of arts in strategic security studies. A significant constituency is the Counterterrorism Fellows program for the Department of Defense, which brings students—civilian and uniformed, domestic and international—to study for 10 months. CISA’s offerings include the Counter-Terrorism Education Capacity-Building Program, the Homeland Defense Fellowship Program, the master’s degree in strategic security studies, and a number of nondegree programs for government and military officials in the United States.

NDU also has had a number of nondegree programs targeting both military education at the national security level and the interface of civil-military understanding in national security strategy. These include the Capstone course for newly minted general officers and ambassadors, Pinnacle for three-star officers confronting joint and combined campaign planning and operation, the Center for Joint Strategic Logistics to emphasize the overall lessons for the nation to consider for best practices in this area, the Keystone program for the senior enlisted personnel, and courses in Joint Reserve Affairs preparing both military and civilian leaders for immediate positions or offering refresher training on the changing context in the national security community, with NDU serving as an ideal focal point for these activities.

Research

One of the fastest growth areas for NDU over the past decade has been the proliferation of research centers and programs. All research falls under the vice president for research and active learning. The oldest research body at NDU is the Institute for National Strategic Studies (INSS), currently functioning as an umbrella organization for studies requested by the Joint Staff and other Pentagon offices. INSS researchers also generate their own agenda. INSS publishes short research pieces on timely issues and occasionally also publishes more extended works.

The INSS umbrella covers several smaller, targeted centers engaged in policy-relevant study of

issues directly applicable to national security in today’s world. The Center for Applied Strategic Learning is a gaming center that offers a venue for various portions of the U.S. government to test ideas, engage in new approaches to strategic challenges, and open doors for cooperation across the national security community. The Center for Technology and National Security Policy evaluates new technologies as assisting or threatening current approaches to international policy. The Center for Complex Operations distills lessons from U.S. security experiences abroad as a “lessons learned” repository while also asking what the challenges are in an evolving, complex security environment. The Conflict Records Research Center makes documents captured from recent enemies of the United States available for study by scholars of warfare and related fields. Current holdings come from al Qaeda, the Saddam Hussein government in Iraq, and operations in Afghanistan. The Center for the Study of Weapons of Mass Destruction has been considering this challenge for a decade. The Center for Strategic Research does direct work for the Department of Defense in seven areas crucial to national security: the Western Hemisphere, Asia Pacific, Europe and Eurasia, Energy and the Environment, Near East and South Asia, Future Strategic Concepts, and Africa. The Center for the Study of Chinese Military Affairs was a congressionally mandated facility for translation of Chinese military documents but has largely operated as a facility to do research on the People’s Liberation Army.

NDU also has the Strategic Conference Directorate, hosting conferences many times per year at NDU and in conjunction with institutions around the world.

Outreach

One of the three primary missions for the university, increasingly through 2012, was outreach to the broader U.S. national security community, civilian and governmental, as well as with similar institutions and military components around the globe. A reorganization by the Joint Staff, putting the university directly under the J-7 head, however, has resulted in a new mission statement that puts much more emphasis on teaching over both research and outreach. It would appear that many of the outreach enterprises resulting from bilateral relationships

that NDU has had with institutions and countries, with NDU being a party to memoranda of agreement with many similar national defense academic institutions outside of the United States, might be much less important in the future. This would also decrease stress on NDU serving as an instrument of national policy by opening venues for dialogue with academic, government, and military groups across the spectrum.

NDU had several institutions to carry out its outreach, ranging from the International Student Management Office to the Center for Joint and Strategic Logistics to the Institute for National Security Ethics and Leadership.

Cynthia A. Watson

Author's Note: The views here are personal and do not necessarily reflect those of the U.S. government, National Defense University, or any affiliated organization.

See also All-Volunteer Force; Army, U.S.; Command and General Staff College; Goldwater-Nichols Department of Defense Reorganization Act; Marine Corps, U.S.; Military Organization, Air Force; Military Organization, Army; Military Organization, Marine Corps; Military Organization, Navy; Naval War College

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NATIONAL GUARD, ARMY

The federal mission of the Army National Guard (ARNG), according to its website, is “to maintain well-trained, well-equipped units available for prompt mobilization during war and provide assistance during national emergencies.” As of May 2010, the ARNG did this with 363,003 members.

ARNG units are under the direct authority of their state governors, but they may be activated for federal service under Title 10 of the U.S. Code. Title 10 “allows the President to ‘federalize’ National Guard forces by ordering them to active duty in their reserve component status or by calling them into Federal service in their militia status.” This entry examines the mission, history, structure, and operations of the ARNG.

Force Structure

The 2006 Quadrennial Defense Review (QDR06) Report recommended reforms in order to more effectively conduct the war on terrorism and to conduct “irregular warfare activities, including long-duration unconventional warfare, counterterrorism, counterinsurgency, and military support for stabilization and reconstruction efforts.” The army responded with its modular force conversion, designed to provide “a more flexible, more capable, and more rapidly deployable force.”

Modular force conversion required the army to convert from “a division-based force to a more flexible brigade-centric force.” ARNG brigade combat teams (BCTs) “are structured and manned identically to those in the active Army” to facilitate integration. The ARNG structure projection for 2013 consisted of 8 divisions, 34 BCTs (10 Heavy BCTs, 23 Infantry BCTs, and 1 Stryker BCT), 7 fire brigades, 10 combat support brigades (Maneuver Enhancement), 9 sustainment brigades, 2 battlefield surveillance brigades, 8 divisional combat aviation brigades, 4 theater aviation brigades, 1 theater aviation group, and 31 functional brigades.

Current Overseas Deployment

As of April 2006, more than 39,000 Guardsmen were serving in Operation Iraqi Freedom (139,733 to date), 14,000 in Operation Enduring Freedom (37,700 to date), and 652 in Operation Noble Eagle.

Since the September 11, 2001, attacks, more than 248,000 soldiers have been mobilized under U.S. Code Title 10 authority and more than 337,000 under Title 10 or Title 32.

History

The National Guard originated in the colonial militias. Citizen soldiers organized into militia units to defend their local communities. They were determined to preserve their independence from central authority and, after national independence and the adoption of the Constitution, were seen as a counterbalance to the power of the federal government.

State militias served in every major U.S. war. Their early performance was problematic for several reasons. Historically, state militias and National Guard units have faced three sets of recurring problems: (1) command and control issues, (2) recruiting and retention issues, and (3) training and equipment issues. In every instance of their use, questions have arisen as to who actually commands the Guard. The practice of the men electing their company officers often turned command into a popularity contest. State governors and state adjutants general were in command of their respective Guards and technically remain so to this day, but when National Guard troops are federalized under U.S. Code Title 10, they are placed under the direct command of the Regular Army. The Army Reserve is different from the National Guard in this respect because it is exclusively under the command of the federal government.

Recruiting and retaining individual soldiers was also a problem. Irregular pay led to high attrition rates. In addition, state militias were not given top priority in the allocation of state funds. Consequently, many citizen soldiers drilled without pay, provided their own uniforms, and were inclined to view their organizations as social clubs rather than professional military organizations.

Training for the National Guard was often conducted at a local level. Units relied on experienced members to guide them through drill and ceremony, weapons training, and the like. It was not until the 20th century that the Regular Army began to standardize training and require Guardsmen, and later Guardswomen, to submit to Basic Training and Advanced Individual Training at Regular Army bases. It would not be until the late 20th century

that the Department of Defense provided state-of-the-art weaponry to the ARNG.

The performance reviews that followed the Spanish-American War convinced the federal government that it must ensure a minimum performance standard for the militias. U.S. policymakers passed the Militia Act of 1903, often referred to as the Dick Act after its sponsor—the former Guardsman and U.S. senator from Ohio, Charles Dick—to address this need.

The federal government would provide pay, transport, uniforms, weapons, necessary equipment, and the administrative costs associated with their disbursement, for National Guard units during field training if the Guard conformed to certain standards, including holding 24 drills per year and a minimum 5-day field training exercise. The National Defense Acts of 1916 and 1920 brought federal pay for drills as well as annual training.

Federal money came with strings attached. The federal government demanded greater input into decisions that the states traditionally had made regarding Guard issues. State autonomy was significantly reduced, and the tension that had always existed between the active army and the militia continued unabated. These reforms greatly improved Guard performance in the wars of the 20th century. National Guard units contributed significantly to the victories in World Wars I and II.

After World War II, a national effort was made to recruit Guard members that netted 81,648 enlistments. Part of the campaign was the promise that the Guard would maintain a 1-year lag behind standard equipment of the active military. In 1950, Congress passed the National Defense Facilities Act with funds earmarked to construct new armories and maintain buildings for the ARNG. Washington provided 75% of the cost while the state or local community picked up the other 25%.

Guard units were federalized for service in the Korean War. Selected units were also federalized during the Berlin Crisis of 1961. The call-up of the Reserves in 1961 was a fiasco for the army. Significant problems were identified in a summary prepared for the chief of staff of the army in December 1961. Secretary of Defense Robert McNamara began to develop the Total Force Concept (TFC) shortly thereafter.

As things in Germany wound down, U.S. policymakers strengthened their commitment to the Republic of Vietnam. Congress passed the 1964

Tonkin Gulf Resolution that allowed President Lyndon Johnson to introduce combat troops in March 1965. Johnson committed 560,000 U.S. soldiers to Vietnam between March 1965 and March 1968. Johnson's escalation was accomplished without calling up reserve forces in significant numbers. The war had been sold to the public as a limited war that would be over quickly, and one that "Asian boys" should fight. Activating the reserves would counter that message.

The draft and lottery policies from 1965 to 1973 led some young men to enlist in the ARNG to escape the war. Duty in the Guard meant virtually no chance of duty in Vietnam. As a consequence, authorized numbers for the National Guard were reduced so that the Selective Service could meet the needs of the army in Vietnam. Several Guard units were activated during the war but mostly for duty in the United States. Eight different units sent 2,729 men to Vietnam.

One of the most controversial events in ARNG history occurred in 1970 during a confrontation between an Ohio National Guard unit and antiwar protestors. The deaths of four Kent State University students caused a review of the Department of Defense regulations regarding the use of deadly force.

The withdrawal of U.S. forces from Vietnam following the 1973 Paris Peace Treaty led to declining enlistments in the ARNG. To counter this trend, the National Guard offered tuition assistance to personnel attending institutions of higher education in 1973. The National Guard Bureau also issued directives to encourage recruitment and retention of minorities and women.

The TFC gained momentum in the wake of Vietnam. As the result of pressures to downsize the military, and with the advent of the all-volunteer force, the Department of Defense relied more heavily on the Guard and the Reserve. Secretary of Defense Melvin Laird called for the implementation of the TFC in August 1970, but his successor, James Schlesinger, converted the TFC to a real program. Schlesinger issued a directive on August 22, 1973, that required the armed forces to integrate active and reserve forces. Formal ARNG readiness reports were required in October 1973, and in 1975, Guard commanders were involved in the army's first post-Vietnam mobilization exercise. A new army affiliation program was begun that assigned ARNG divisions to active divisions for training support.

Another important component of the TFC was to provide the Guard modern equipment. It made no sense to train Guard personnel on modern equipment at active-duty bases and then have them return home to antiquated equipment. This policy also helped with recruiting because it undermined the perception of an inferiorly equipped Guard.

General Creighton Abrams, who replaced General William Westmoreland as commander, Military Assistance Command-Vietnam in 1968, and became army chief of staff in 1972, believed that the failure to mobilize reserve forces during the Vietnam War was one of the principal reasons the American public never got behind that war. General Norman Schwarzkopf agreed. When tasked with meeting the threat Saddam Hussein's invasion of Kuwait posed to U.S. national interests in 1990, Schwarzkopf requested the federalization of the National Guard for service in Operation Desert Shield and later in Operation Desert Storm. On August 25, 1990, the Pentagon announced the activation of 174 FORSCOM Reserve Component units from 38 states and Puerto Rico.

Rather than call a partial mobilization of up to 1 million reservists for a period of 2 years, the president relied on Section 673b, Title 10, U.S. Code that allowed for the mobilization of 200,000 reserve personnel for 90 days and, subject to renewal, for a second 90 days. Although this seems transparent, there were behind-the-scenes politics taking place. At issue were the limitations Congress had placed on the executive branch's ability to commit troops without oversight. Although the War Powers Act of 1973 and Section 673b really did not reduce presidential power, they did not sit well with American presidents.

The ARNG played an instrumental role in the Persian Gulf War victory, but not without difficulties. Vehicles had to be painted for desert camouflage, equipment had to be packed for shipping, and there were always administrative details. Weapons qualification was a daily event, as was physical training, and training with Mission, Oriented, Protective, Posture Gear. There were shortages of desert uniforms, desert boots, and ammunition for M-16s and crew-served weapons until early November 1990.

More than 25% of all activated units departed the continental United States within 20 days of activation and two thirds deployed in 45 days or less. Fully 94% of the soldiers called to duty were fit for

overseas service. Most of the rejected soldiers had simply not completed Advanced Individual Training.

President George H. W. Bush issued Executive Order 12733 that authorized reserve units to be used in combat operations. Ninety-nine ARNG units were federalized in November 1990. Of the 101 activated Guard units in support roles outside the combat zone, 16 were sent to duty at North Atlantic Treaty Organization (NATO) bases. The other 85 remained in the United States. A total of 62,411 Guard personnel in 398 units served on active duty between August 8, 1990, and the end of the war.

The most important news for the ARNG in the post-Gulf War environment was its downsizing from 457,000 soldiers in 1991 to just 338,000 soldiers by 1995. George H. W. Bush called for reductions the same day Saddam Hussein ordered his armed forces to invade Kuwait. George H. W. Bush was under pressure to provide a “peace dividend” as Soviet power declined. He responded in August 1990 with the “Base Force” concept. Base Force was predicated on the assumption that the post-Cold War environment required a reduced military. General Colin Powell, chief of the Joint Chiefs of Staff, spearheaded Base Force to streamline the armed forces yet still meet America’s overseas responsibilities.

According to historian Michael Doubler, Powell perceived four primary military missions for the military: meeting NATO commitments, keeping peace in the Pacific, maintaining a U.S.-based rapid response force, and maintaining nuclear deterrence. National Guard leadership identified four primary Guard missions under Base Force: (1) to remain the nation’s primary reserve force, (2) to “maintain combat forces in the first line of defense,” (3) to remain the nation’s principal responder to domestic disasters, and (4) to participate in domestic operations that developed the “social and moral fabric of the nation.”

George H. W. Bush called for up to a 25% across-the-board cut for the military. Active-duty forces would be reduced to 1.6 million from 2.1 million. This translated into a drawdown from the post-Vietnam high of 18 regular and 10 guard divisions that had been organized into 5 corps to a Base Force of no more than 20 divisions organized into 4 corps. ARNG would be allocated 8, not 10, divisions. Before the end of 1990, with the United States gathering ARNG forces in Saudi Arabia, the secretary of the army informed the ARNG that it should prepare for cuts that might eliminate 137,000 personnel.

The transition from the Bush administration to President Bill Clinton’s made it clear that Clinton would embrace the Bush policy of military cutbacks. Clinton appointed Les Aspin, former chairman of the House Armed Services Committee, as his secretary of defense and retained General Colin Powell as chairman of the Joint Chiefs of Staff. Clinton ordered a reassessment of U.S. military posture in a post-Soviet environment in September 1993 known as the Bottom-Up Review, or BUR. The Bottom-Up Review envisioned an additional 160,000 personnel cut from the armed forces. On September 1, 1993, Aspin announced that the ARNG would field 15 brigades, but they would be equivalent to only five divisions.

Reducing the National Guard was difficult because its lobbying body, the National Guard Association, was a potent force on Capitol Hill. There was also the fact that nearly every congressional delegation found a reason why its Guard units should be spared at the expense of other states’ units. The drawdown took 4 years.

An additional consequence of Base Force and the Bottom-Up Review was that many of the deactivated army units transferred their equipment to the Guard. Such transfers enhanced the Guard’s mission to provide quick and effective support to the active army.

Despite the reductions, the ARNG was called on to participate in the War on Drugs. Congress appropriated \$300 million for waging the drug war in 1989. Of this amount, \$40 million was for the National Guard. The ARNG was also called on to fulfill U.S. NATO obligations and to conduct traditional state duties.

General John M. Shalikashvili succeeded Powell as chairman of the Joint Chiefs of Staff. Shalikashvili and two secretaries of defense, Les Aspin and William Cohen, believed that noncombat interactions with other countries would promote both stability and the image of the United States as a peacekeeper. Because the U.S. military already had similar programs, the new policy was a matter of emphasis. By 1996, 21 state National Guards had entered relationships with the militaries of several former communist bloc countries in addition to existing relations with Latin American militaries.

President Clinton inherited the commitment of peacekeeping forces in the Sinai Desert along the Egyptian-Israeli border. Clinton also ordered Operation Uphold Democracy in the summer of

1994, and U.S. forces occupied Haiti, disarmed the Haitian military, and returned President Jean Baptiste Aristide to office. ARNG soldiers participated in both operations.

Clinton also employed the ARNG when President Slobodan Milosovic launched attacks in 1991 against states seeking to secede from Yugoslavia. By 1993, an estimated 150,000 people had been killed in what was called "ethnic cleansing." The United States contributed 20,000 of a total NATO force of 60,000 personnel in 1996. As of July 23, 2003, there were 1,800 U.S. personnel serving under the NATO-led Stabilization Force, nearly half of them ARNG.

The training the ARNG received prepared it for many contingencies, but few members were trained to anticipate the kind of attack that struck the United States on September 11, 2001. In fact, few Americans from any walk of life could have imagined terrorists using civilian aircraft as missiles to attack civilian targets on the day that Vice President Dick Cheney declared "changed everything." It was difficult to identify an enemy that specialized in unconventional tactics and was not concerned with rules of conduct and engagement.

The definition of what it means to be a member of the Guard evolved after President George W. Bush indicated that the Global War on Terrorism might last for decades. In an era where the Pentagon increasingly relies on the Guard and reserve to accomplish its missions, part-time soldiers have become full-time soldiers more frequently, and for more extended periods, than ever before in American history. Barring passage of a draft, it is likely that the all-volunteer army will remain dependent on the Guard to fill out force needs for the foreseeable future.

Operation Enduring Freedom, the official name of the War in Afghanistan, had lasted nearly 11 years as of July 2012. Operation Iraqi Freedom, the official name of the war in Iraq, ended in 2011 after 8 years. ARNG units have been the backbone of these operations, especially in terms of combat service support and combat support roles. All of the historic issues the activation of the ARNG raises have occurred in these two wars, but a new problem emerged with multiple tours of duty. Many ARNG units have served two, and even three, tours of duty in Iraq and Afghanistan. Recruiting and retention have been difficult, so much so that the army implemented a little used policy that allows it to retain personnel who perform vital duties

beyond their original estimated time of separation. The service of female soldiers has also expanded dramatically as a result of the Persian Gulf War and the Iraq War.

For the men and women of the ARNG, of the many things that became clear in the days and months that followed 9/11, the meaning of the recruiting phrase "one weekend a month" had changed dramatically to reflect the more prominent role for members of the National Guard.

Steven J. Bucklin

See also Air National Guard; Civil Disorder; Iraq War (2003); Korean War (1950–1953); Natural Disasters, Military Response to; Persian Gulf War; Vietnam War

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NATIONAL MILITARY FAMILY ASSOCIATION

The National Military Family Association (NMFA) is a nonprofit (501[c][3]) special interest group representing military families. The group's mission is "to fight for benefits and programs that strengthen and protect uniformed services families and reflect the nation's respect for their service," according to the group's official mission statement. It operates programs for military children and spouses, provides information and support for military families,

especially around deployment issues, and lobbies the U.S. Congress on behalf of military family members for benefits and support services. The NMFA works on behalf of the families of all branches of the uniformed services, whether active duty, reserve, or National Guard. In addition, families of the U.S. Public Health Service and the National Oceanic and Atmospheric Administration are part of the NMFA. This entry examines the history, structure, and programs of the NMFA.

The group was founded in 1969 by several wives and widows of military service members to address the plight of military widows who were left without support when their husbands died. The Military Wives Association, as it was first known, lobbied for the Uniformed Services Survivor Benefit Plan, which was created in 1972. The Uniformed Services Survivor Benefit Plan is an insurance plan that provides an annuity for the survivors of a deceased military retiree. Enrollment in the program is automatic on retirement, and a retiree cannot opt out of the program without the written consent of the beneficiary. A retiree can name a spouse, children, former spouse, or other "insurable interest" such as another family member or business partner as a beneficiary.

The group continued to push for improved benefits for family members. Successes in the 1980s and 1990s ranged from increases in the authorized weight of household goods for moves; the authorization of travel funds for college-going children of military personnel stationed overseas; the defeat of a bill that would have prevented military spouses from working as teachers in the Department of Defense school system; to increased family housing allowances to comprehensive changes such as the Military Child Care Act and the TRICARE health care program for personnel, family members, and retirees.

Most of the programs and legislation advocated by the NMFA are supported by active-duty personnel and retirees, but at times the interests of military families and military personnel diverge. In 1980, for example, the association came out in favor of the Uniformed Services Former Spouses Protection Act, a measure that provided for equitable division of retirement benefits between military personnel and their former spouses in case of divorce. Interest groups representing active-duty personnel and retirees fought fiercely against the Uniformed

Services Former Spouses Protection Act, although it did pass in 1982. The Survivor Benefit Plan itself was not without controversy among service members and retirees, who pay for premiums under the plan. Although active-duty personnel are members of the NMFA's board of directors, the organization is focused on issues of interest to military families, whether or not these coincide with the interests of active-duty personnel or the military institution itself.

Since 2001, when the nation's armed forces were mobilized in Afghanistan and, later, Iraq, the NMFA has been extremely active in supporting active-duty and reserve families facing the deployment of their family members. The group has successfully advocated for an increase in Family Separation Allowance from \$100 per month to \$250 per month, fought for increased benefits to survivors of military personnel killed in the line of duty, worked with the Army Wounded Warrior Program to support families of injured personnel, and helped push for improvements in the Family Medical Leave Act. The NMFA is a founding member of the Military Coalition, an umbrella group of associations of active-duty personnel, retirees, spouses and families, and others who support legislation benefiting the armed forces. The association has also conducted a number of large-scale surveys of military family life, collecting a large amount of valuable information on the challenges and benefits of military life.

Currently, the NMFA runs three programs for military families, all of them initiated in 2004. The Joanne Holbrook Patton Military Spouse Scholarship program provides funding for spouses seeking education, from GED (General Educational Development) certification to postsecondary studies. The Military Family Awards honor military families who are active in service to their communities. The largest program, Operation Purple, sends children of deployed service members to summer camp and organizes retreats for personnel and families. The association also maintains an active presence on the Internet, providing information and guidance on the welter of benefits and programs designed for military spouses and children.

The group's headquarters are located in Alexandria, Virginia. It employs a chief executive and as of 2008 includes a paid staff of 47. The board of directors consists of 25 military spouses,

retirees, and active-duty personnel. More than 200 people volunteer with the organization. It receives about \$10 million in contributions each year through membership dues and donations. In 2008, about \$6.7 million was spent on youth programs, mostly the Operation Purple camp and retreat program, and most of the rest was spent on community outreach, education, and advocacy. Approximately 91% of the group's expenditures go toward its programming, while 3% goes to fund-raising and 6% to administration costs, making the NMFA one of the most highly efficient charitable organizations according to charity watchdog groups such as the Better Business Bureau and Charity Navigator.

Anni P. Baker

See also Family, Military; Family Readiness; Finance, Personal; Women

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NATIONAL SECURITY ACT

The National Security Act was a sweeping piece of legislation that restructured the U.S. military, created several new government agencies, and sought to promote greater coordination between civilian and military leaders in the formulation of U.S. foreign and national security policy. It established both the National Security Council (NSC) and the Central Intelligence Agency (CIA), elevated the air force to coequal status with the army and navy, and provided for the unification of the three military services within a single National Military Establishment (NME; later to become the Department of Defense). It was signed into law by President Harry Truman on July 26, 1947, and the former navy secretary James V. Forrestal was sworn in as the country's first secretary of defense on September 17. The following sections briefly

outline several of the major provisions and effects of the National Security Act.

The National Security Council

The NSC was established to serve as an advisory body to the president on matters relating to national security and foreign policy. The council's chief responsibility was to promote coordination and cooperation between key civilian and military policymakers. In its original form, the NSC included seven permanent members: The president; the secretaries of state, defense, army, navy, and air force; and the director of the National Security Resources Board (NSRB). Under the terms of the National Security Act, other cabinet- or subcabinet-level officials could be added to the NSC at the president's discretion.

The Central Intelligence Agency

The onset of the Cold War convinced many policymakers that it would be necessary for the United States to maintain a national intelligence-gathering organization in peacetime. The National Security Act established the CIA to fill this role and charged it with the collection, evaluation, and dissemination of information relating to matters of national security. The CIA was to be responsible for keeping both the president and the NSC apprised of developments anywhere in the world that might affect the security of the nation. The CIA was not assigned to an existing cabinet department but rather was organized as an independent agency reporting directly to the NSC. In September 1947, Rear Admiral Roscoe Hillenkoetter was sworn in as the agency's first director.

Military Unification

Agreement on the form that the NME would take was achieved only after several years of often-contentious negotiations between the War and Navy Departments. The Second World War had convinced both services of the necessity of establishing a formal mechanism for interservice coordination to replace the ad hoc Joint Chiefs of Staff system utilized during the war. They disagreed, however, on how this coordination should be achieved. The War Department advocated the establishment of a unified Department of National Defense, under the leadership of a strong civilian secretary. The War Department proposal called for the appointment of a uniformed chief of the general staff who

would advise the secretary of defense on technical matters, particularly budget allocations. The Navy Department's proposal was based on a report drafted for Forrestal by his close associate Ferdinand Eberstadt. The Eberstadt Report recommended the retention of separate War and Navy Departments, the establishment of a third cabinet department to oversee the air force, and the creation of an NSC to oversee coordination between the armed services and civilian policymakers.

Under pressure from Truman to resolve their differences after more than a year of stalemated negotiations, Secretary of War Robert Patterson and Navy Secretary Forrestal brokered a compromise in January 1947. The agreement, codified in the National Security Act, called for an NME in which the U.S. Army and Navy Departments, along with a newly created Department of the Air Force, reported to a civilian secretary of defense. Within the NME, however, the three services retained a considerable degree of autonomy. The authority of the secretary of defense over the individual services was initially quite limited, and in effect, the Departments of the Army, Navy, and Air Force retained "quasi-cabinet" status, with all three service secretaries being granted permanent seats on the NSC.

The National Security Resources Board

The NSRB was a short-lived agency established by the National Security Act to oversee economic mobilization in the event of war. The NSRB was tasked with such duties as long-range planning for industrial mobilization, identifying potential shortages of vital strategic materials, and reducing waste and delays in war production. The Greyhound Corporation's president Arthur Hill was appointed in 1947 as the first director of the NSRB. The NSRB was formally disbanded in 1953.

Amendments

The National Security Act has undergone a number of amendments. In 1949, at the recommendation of outgoing secretary James Forrestal, the authority of the secretary of defense over the individual armed services was greatly strengthened by the provision of additional staff support, most notably an undersecretary of defense. In the same year, the membership of the NSC was reshuffled, with the U.S. vice president being named a permanent member of the coun-

cil and the three service secretaries losing permanent member status. The 1949 reforms also redesignated the NME as a single cabinet-level Department of Defense and stripped the three service departments of their quasi-cabinet status. In 1986, the Goldwater-Nichols Department of Defense Reorganization Act designated the chairman of the Joint Chiefs of Staff as the "principal military advisor" to the president and the NSC, a role that had previously been shared by all the Joint Chiefs.

Steven Pedler

See also Central Intelligence Agency; Defense, Department of; Defense, Secretary of; Goldwater-Nichols Department of Defense Reorganization Act; National Security Council

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NATIONAL SECURITY AGENCY

The National Security Agency (NSA) was established on November 4, 1952, by means of a classified memorandum from President Harry Truman to the secretaries of defense and state. Created to address clear flaws in the ability of the U.S. government to collect and analyze communications intelligence, today the NSA is the cryptologic organization for the United States. Its responsibility is to protect U.S. national security information systems domestically; abroad, those responsibilities include collecting and disseminating foreign signals intelligence by means of cryptanalysis, cryptography, mathematics, computer science, and foreign language analysis.

Strategic Mission of the NSA

The NSA's strategic mission is twofold. The first of these is to use "signals"—communications, be they verbal, electronic, or written—from foreign organizations, persons, or states to collect intelligence on those organizations, persons, or states and to produce counterintelligence. Second, the mission is to provide varying means of protection, including services, products, solutions, and defensive information operations to ensure the security of U.S. information and intelligence. This protection is referred to as "information assurance."

Since its inception, the NSA has been under the purview of the Department of Defense; as such, it is staffed by both military and civilian employees. It is also a part of the U.S. intelligence community (IC). The NSA's headquarters is located at Fort George G. Meade in Maryland. The budget for the NSA and the number of its employees are classified. The NSA is headed by the director of the NSA, who is an officer in the U.S. armed services. This director answers to both the secretary of state and the director of national intelligence.

The end of the Cold War posed challenges to the NSA and the IC as a whole. The fall of the Soviet Union eliminated the greatest threat to the United States, and as a result, the future of the intelligence community seemed in doubt. However, the effectiveness of intelligence officers during the Persian Gulf War—particularly with regard to actionable intelligence that allowed American and allied troops to quickly and efficiently dispatch Saddam Hussein's Republican Guard—mitigated that doubt.

To this day, the NSA remains among the most secretive members of the IC, earning it the monikers "No Such Agency" and "Never Say Anything." Indeed, for many years, its existence was not formally acknowledged by the U.S. government.

NSA in a New Era

Since September 11, 2001, the secretive NSA has found itself in the press with increasing frequency, most notoriously for a year-long mission to tap into phone calls, web activity, and text messages of those believed to be external threats to the United States. These activities extended to cases where the target was communicating with someone inside the United States; often the NSA carried this surveillance out without acquiring search warrants. Under the Foreign

Intelligence Surveillance Act of 1987, the NSA is required to obtain a warrant from a three-judge panel in order to spy on American citizens. In the case of the warrantless wiretapping, however, the NSA was directed to act by President George W. Bush, who used the recently passed USA PATRIOT Act to bypass the Foreign Intelligence Surveillance Act Court.

While the NSA's official mission is clearly stated, its actions go far beyond protecting American secrets. The NSA conducts top-secret work in numerous areas, most notably nuclear, naval, ground, and air satellite operations; counterdrug, counter-improvised explosive device, and psychological operations; weapons technology; training, security, personnel, management and administration, information technology, and facilities; and technical intelligence, intelligence analysis, cyber operations, and counterintelligence. Because of the highly sensitive nature of these programs, more detail on the exact scope of these activities is currently unavailable; even the existence of these programs under NSA purview remained classified information until recently.

Though the post-9/11 creation of the Office of the Director of National Intelligence was meant to streamline information sharing among the members of the IC, clear divisions still remain between the NSA and other intelligence organizations, such as the Central Intelligence Agency. Though both agencies are dedicated to protecting the United States, their spycraft is markedly different and, as such, leads to competition for resources and the ear of the President.

Kendall Metz

See also Central Intelligence Agency; Intelligence Organizations, Military; USA PATRIOT Act

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NATIONAL SECURITY COUNCIL

Under the terms of the National Security Act of 1947, the National Security Council (NSC) was intended to

advise the President with respect to the integration of domestic, foreign, and military policies relating to the national security so as to enable the military services and the other departments and agencies of the Government to cooperate more effectively in matters involving the national security.

Under the original statute, the members of the NSC included the president, secretary of state, secretary of defense, and the service secretaries of army, navy, and the newly established air force, and the president could designate other officials to attend meetings of this body. The 1949 National Security Act Amendments cut the mandated size of the board with only the president, vice president, secretary of state, and secretary of defense required by the legislation to serve on the council. The 1949 Act removed the service secretaries from the council and designated the chairman of the Joint Chiefs of Staff and director of the Central Intelligence Agency (CIA) as advisors to the board. Each president has expanded the size of the NSC to include a range of officials and even close aides, such as the White House chief of staff.

Beginning with President Harry S. Truman, the role of the board in formulating policy in areas of war and peace has shifted. Although an afterthought in the legislation that established the NSC, the role of the National Security Advisor has achieved heightened importance, particularly in recent administrations, and has come to overshadow the role of the NSC as a collective group. Under the National Security Act of 1949, the NSC was explicitly designated as part of the Executive Office of the President. The staff of the NSC has increased significantly, currently numbering 240 personnel in the administration of President Barack Obama.

Congress had hoped that a formal NSC structure would help enable a relatively inexperienced Truman to make complex decisions. One powerful advocate of the NSC, Navy Secretary James Forrestal, viewed it, with its statutory Cabinet-level members, as a mechanism to help box in the newly created Defense

Department—specifically, the secretary of defense—thereby retaining some of the U.S. Navy’s traditional autonomy.

Truman did not care for the NSC, resenting the implication that he needed help. After the first NSC meeting, he did not attend another until the Korean War broke out in June 1950, leaving the chairmanship of the NSC to his secretary of state. From the Korean War on, Truman called frequent NSC meetings and personally chaired 62 of the 71 subsequent meetings between June 1950 and January 1953. The Truman-era NSC had but a handful of staffers with no substantive functions in policy. By and large, the Department of State assumed the lead in policy making during the Truman years.

President Dwight D. Eisenhower’s NSC staff expanded in size. Eisenhower also created the position of Special Assistant for National Security Affairs. The NSC advisor became the principal administrative agent of NSC. The role was pioneered by Robert Cutler, a banker with service in the War Department during World War II. Cutler set agendas and assisted in policy, planning, and policy coordination. Cutler’s NSC staff grew to more than 70 professionals.

Full NSC meetings, comprising all the statutory cabinet level members, were held weekly, with Eisenhower presiding over them. Eisenhower’s management style reflected his military background and his concern with the costs of funding the policy of “containment.” Therefore, the secretary of the treasury and the budget director frequently attended NSC meetings, along with the chairman of the Joint Chiefs of Staff and the director of the CIA. CIA operations became increasingly important as they seemed to Eisenhower a more economic means of dealing with Soviet power. Eisenhower only missed 6 of 179 NSC meetings. Over the course of the Eisenhower years, the full NSC was forced to come to grips with an increasing number of issues.

Secretary of State John Foster Dulles and CIA director Allen Dulles were Eisenhower’s chief foreign policy advisors, responsible for foreign policy implementation. But in the last year of the Eisenhower administration, NSC meetings appeared somewhat formulaic. Perhaps the lack of policy innovation was due to the president’s occasional serious health problems, and the illness of Secretary of State Dulles, who was diagnosed with cancer in 1956 but stayed in office until shortly before his death in 1959.

President John F. Kennedy reduced the NSC staff to 48, down from 71 in the last years of Eisenhower's presidency. But while the NSC staff was downsized, the president gradually augmented the role of his national security adviser, McGeorge Bundy. At first, Bundy deferred to Secretary of State Dean Rusk, whom Kennedy designated as the lead officer in all overseas matters. But early in his presidency, Kennedy sensed that the Department of State had become unresponsive and rigid. In contrast, Bundy's small NSC staff could produce sharply focused decision papers in short order. Bundy's punchy national security action memoranda underscored the president's penchant for timely "action."

The president's informal decision making allowed for creative solutions, distinct from the regular bureaucracy. At the time of the Cuban missile crisis, Kennedy assembled an ad hoc group of advisors, the so-called ExComm, a group drawn from within and without government and known as "The Wise Men." The ExComm helped produce options and perhaps slowed the pace of the confrontation with the Soviet Union. The crisis was resolved when the president decided to come to a private understanding with Chairman Khrushchev, using his brother Robert Kennedy as an intermediary. The decision was at odds with the advice of nearly all the members of the ExComm, with the exception of the secretary of state.

On the death of President Kennedy, President Lyndon B. Johnson had no choice but to rely on Kennedy's NSC personnel and process. In time, however, Johnson relied more heavily on Secretary Rusk and the Secretary of Defense Robert McNamara. McNamara and Rusk became Johnson's chief foreign policy advisors. As the Vietnam War escalated, Bundy and the NSC were marginalized, a process abetted by a 1966 directive that strengthened the authority of the State Department. The NSC seldom met formally under Johnson, who preferred more informal meeting with advisors.

When Walt W. Rostow replaced Bundy at the NSC in 1966, Rostow found he had the ability to affect policy. During the Johnson years, the interdepartmental coordinating role of the State Department produced little beyond consensual verities and the routinization of Cold War policies.

The NSC of President Richard M. Nixon was larger and designed to provide clear options.

Nixon was highly suspicious of the established intergovernmental consensus and the bureaucrats that managed foreign affairs. Nixon's assistant for national security affairs, Henry Kissinger, chaired NSC interdepartmental groups, thereby limiting the influence of the Department of State. Kissinger also chaired contingency planning groups, policy intelligence groups, crisis groups, and even a defense review group.

Only in matters that involved the Department of Defense was Kissinger's influence equaled and, for the most part, checked by Defense Secretary Melvin Laird. But Kissinger's dominance of the NSC process was far ranging, and included becoming the principal negotiator in high-level matters of every kind, frequently without the knowledge of the secretary of state. In the Nixon-Kissinger era, Kissinger's dominance derived from his unique position and authority. When Kissinger became both the head of the NSC and the secretary of state in September 1973, there was little gainsaying his virtual monopolization of foreign policy initiative and design.

In November 1975, President Gerald R. Ford named Air Force Lieutenant General Brent Scowcroft as national security adviser, replacing Kissinger. Because Scowcroft had been Kissinger's NSC deputy, his appointment did little to diminish Kissinger's preeminence. However, Scowcroft was adept at including more meaningful input from the permanent foreign affairs bureaucracy.

President Jimmy E. Carter had decried the power of the NSC staff under Kissinger during his campaign and initially attempted to end NSC dominance, pledging to make the State Department and the NSC advisor "coequal" and "collegial" in foreign affairs. The Carter-era NSC was led by Dr. Zbigniew Brzezinski. Soon an animus developed between the NSC advisor and his staff, on the one hand, and the Department of State and Secretary of State Cyrus Vance, on the other. The State Department found itself marginalized in such critical issues as Soviet-American relations, China, and Iran.

In 1979, Secretary Vance was not informed about the (ill-fated) plan to rescue U.S. diplomats held hostage by the Iranian government. Vance did not learn of the rescue mission until the NSC-designed raid was under way. The secretary of state felt he had little choice but to resign. However, bureaucratic warfare between the NSC staff continued unabated

under the new secretary of state, the former senator Edmund Muskie.

Early in the presidency of Ronald W. Reagan, a presidential directive affirmed the role of the State Department as the lead agency in foreign policy. The NSC advisor would no longer chair interdepartmental groups. The role was given back to the State Department. The new secretary of state, Al Haig, termed himself the new foreign policy “vicar,” apparently hoping to dominate the foreign policy process by decree. But Haig failed to command the bureaucracy as he had hoped and came to despair that the policy process had become a “black hole” into which his policies seemed to disappear.

Secretary of State George Shultz succeeded Haig in July 1982. As in the Carter years, policy seesawed between the Defense Department and the State Department. From the start, the new secretary of state vied with Secretary of Defense Casper Weinberger for control and direction of foreign policy.

The first NSC advisor, Richard Allen, reported through the presidential counselor for domestic affairs. Judge William Clark soon replaced Allen. After 9 months, Clark took the job of interior secretary, and Robert McFarlane became national security adviser. McFarlane was soon depleted by the job, and his deputy, Vice Admiral John Poindexter, became NSC advisor in January 1986.

The NSC’s role was, for the most part, marginal until the mid-1980s. But both Admiral Poindexter and Robert McFarlane were deeply involved in an illegal and secret effort to arm revolutionaries in Nicaragua and sustain them through proceeds of arms sales to Iran. These undertakings were contrary to American law and stated official positions. The scandal broke at the end of 1986.

Poindexter resigned, and Ambassador Frank Carlucci replaced him in December 1986. Soon, Carlucci became Secretary of Defense, to be replaced by Army General Colin Powell in November 1987. With six advisors in 7 years, the Reagan-era “NSC system” staggered to a fitful close.

However, in the home stretch of the Reagan presidency, Secretary of State George Schultz achieved unchallenged foreign policy coherence. The long rivalry with the defense secretary ended with Weinberger’s resignation in 1987 and the president’s quest to find a *modus vivendi* with the Soviets proceeded to the point where most of the issues of the Cold War appeared to be on the cusp of resolution.

In contrast to President Reagan, President George H. W. Bush came to office with significant foreign policy experience. Bush had been director of the CIA, U.S. ambassador to the United Nations, and U.S. representative in China. Highly confident of his expertise, Bush exercised great personal control aided by James Baker, the secretary of state and a longtime advisor, and Scowcroft, the national security adviser. Bush was also close to Richard Cheney, the secretary of defense, and Robert Gates, director of the CIA. Baker and Scowcroft were exceptionally close to the president and oversaw an organized and focused policy-making system.

President Bill Clinton’s NSC, in contrast, was innovative. Clinton added new players to the NSC process: the secretary of treasury, Lloyd Bentsen, and the U.S. ambassador to the United Nations. Additionally, a new National Economic Council, headed by the assistant to the president for economic policy, Robert Rubin, paralleled the NSC in seeking to coordinate the decision-making process in domestic affairs. Some National Economic Council staffers also served as NSC officials. Also, an important role for the vice president was signaled by the detailing of one of his close aides to the NSC.

Clinton’s first-term NSC advisor, Anthony Lake, tried to limit the impact of domestic politics on White House foreign policy making. Lake said he desired to play “honest broker,” modeling himself on Scowcroft. But Lake’s efforts fell apart because Secretary of State Warren Christopher, a lawyer for most of his career, found his “client” (the president) to be hesitant and indecisive. Christopher long waited for initiative and guidance from the White House. Though Lake had not wanted to be “operational,” the vacuum left by the secretary of state led Lake to take a more activist role than he expected. When Serbian forces began a series of murderous attacks on the breakaway regions and peoples of the former Yugoslavia, the need for White House policy direction became acute.

While Europeans, the United Nations, and the U.S. State Department dithered, tens of thousands died in Bosnia and Croatia. In mid-1995, the NSC advisor finally took the reins of policy, and Lake was detailed to inform North Atlantic Treaty Organization partners of a new presidential resolve to end the Bosnian conflict. In mid-1995, a U.S. air campaign to bring the Serbs to the bargaining table began in earnest.

The secretary of state was nowhere to be seen in this process. An indefatigable undersecretary of state, Richard Holbrooke, headed the vigorous diplomatic effort to settle the Balkan wars. The negotiation over the shape of a Balkan peace was conducted by Holbrooke, largely on his own, far from Washington in a Dayton, Ohio, airplane hangar in September 1995.

In Clinton's second term, Sandy Berger ran a more disciplined and larger NSC apparatus, exerting extensive control over foreign affairs agencies and executive departments. A new secretary of state, Madeleine Albright, was publicly and privately more assertive, but she forged a good working relationship with Berger. After the Clinton administration, Berger and Albright joined in creating a private consulting firm. Significantly, there was not a single formal meeting of the NSC during Clinton's second term.

Clinton had successes in securing landmark trade accords with the ratification of North American Free Trade Agreement and with China's becoming a member of the WTO (a trade agreement with China accompanied by Clinton's successful push to allow China to join the World Trade Organization). Still, Clinton turned to foreign policy issues only sporadically. In two instances, the former president Jimmy Carter took an unbidden lead, as crises seemed to come to a head without an effective executive response. President Carter managed to secure an unopposed American military presence in Haiti and to defuse a potential showdown over North Korea's atomic ambitions. Some critical White House initiatives—with North Korea and Iran, and a settlement of the Palestinian issue—came too late to germinate and flower.

In February 2001, President George W. Bush issued a National Security Presidential Directive indicating that the NSC was to "coordinate executive departments and agencies in the effective development and implementation" of foreign policy. The Bush team assembled a huge NSC staff of some 241 professionals. Although Bush and National Security Advisor Condoleezza Rice were personally close, the State Department was all but excluded from policy, and Rice was consistently outflanked by Vice President Cheney and Defense Secretary Donald Rumsfeld.

In the second Bush term, Rice was named secretary of state. Bush's troop "surge" stabilized an

impending foreign policy fiasco in Iraq. Bush and Rice also secured more than \$60 billion from Congress for State Department-led health and development initiatives in Africa. Significant resources were brought to bear against the AIDS epidemic and had a positive impact on the lives of tens of millions. The long depletion of resources for the Department of State and the United States Agency for International Development was reversed, and the State Department became more effective during the last years of Bush's tenure.

President Barack H. Obama designated marine general James L. Jones (Ret.) as national security advisor. Jones asserted that the NSC would be "dramatically different" from that of prior administrations. But White House political advisors disliked and ignored Jones. In turn, Jones derisively termed some senior White House political aids "water bugs." Soon, Secretary of State Hilary Clinton and the Secretary of Defense Robert Gates routinely bypassed Jones, taking their positions directly to the president.

In October 2012, Jones's senior deputy, Thomas Donilon, a close associate of Vice President Joe Biden, became the new NSC advisor. Donilon was close to Obama, and grew closer. Unlike Jones, Donilon worked famously long hours, chairing some 270 deputies meetings in less than 3 years. He claimed, with evidence, that there were now no "back doors to the president." Obama was said to be disciplined, on top of his brief, and demanding. The NSC process again reverted to the model of the Scowcroft years.

Conclusion

Whether the national security adviser should be confirmed by the Senate and be subject to more congressional oversight is a recurrent and still open question. The advice and consent of the Senate would ensure more transparency and accountability in policy but would risk making the NSC just another bureaucracy and force the president to go outside a "mandated system." Making the NSC advisor's nomination subject to Senate confirmation would probably result in a president conjuring his own ad hoc NSC staff and shaping his own foreign policy process.

The NSC process works best when the president is fully engaged. As Scowcroft recalled, "the National

Security Adviser can't do it [without the president]. He's junior to all the other people. He needs that moral authority." In the end, the NSC system, the NSC advisor, and the NSC staff are resources that can be used, abused, ignored, or exploited, as the president chooses. The challenge of taming a huge bureaucracy and ensuring its interests are congruent with presidential policy, and national interest is a work in progress.

James A. Nathan

See also Defense, Department of; Powell, Colin; President as Commander in Chief; U.S. State Department

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NATION-BUILDING

While *nation-building* is a concept widely used by academics, journalists, and decision makers, it lacks a precise definition. In a 2008 report produced by the Organisation for Economic Co-operation and Development, nation-building is defined as “the process of building a sense of a common national identity, whether defined in an ethnic, cultural or political sense.” An oft-cited study maintains that nation-building “involves the use of armed force as part of a broader effort to promote political and economic reforms with the objective of transforming a society emerging from conflict into one at peace with itself and its neighbors” (Dobbins, Jones, Crane, & DeGrasse, 2007, p. xvii). These two definitions see nation-building as a social process, but the first considers it as driven by domestic actors and the second by foreign ones.

Adding to the concept's unclear meaning, the growth of humanitarian interventions since the end of the Cold War has led many people in policy and academic circles to equate *nation-building* to *state-building* or *peace-building*—a term developed by the United Nations during the 1990s that encompasses the multiple efforts external actors execute to establish a self-sustaining peace in war-torn societies. Indeed, as a term, nation-building is mostly used by American policymakers. To define nation-building, it is important to differentiate between internally driven nation-building efforts and those imposed by external actors. Once these differences are established, it is necessary to describe some of the goals that inform contemporary nation-building missions and provide two reasons why many of these have failed to fulfill these goals. This entry describes the

process of nation-building and modern nation-building missions.

An Internally Driven Process

While the nation-state's ideological roots can be traced back to the Treaty of Westphalia of 1648, the principle was universalized in 1945 with the signing of the UN Charter. Since then, the number of nation-states has more than tripled, increasing from 51 to 192. As the main unit of political organization, the nation-state has four elements: "(a) permanent population; (b) defined territory; (c) government; and (d) a capacity to enter into other relations with other states" (Montevideo Convention, 1933). This conceptualization assumes congruence between the state as a juridical-political entity and the nation as sociocultural entity. Given that the world has more nations than states and that not all nations are included within a single country's territorial borders, the state has been forced to construct a sense of nationhood among its citizens over time.

The Organisation for Economic Co-operation and Development's definition of nation-building, cited above, sees it as a domestic process driven by the state's institutions. This is closely associated with the development of nationalism in Europe in the aftermath of the French Revolution. The goal of this social process is not only to legitimate the state's authority but also to create a social consensus that endorses the state's political and socioeconomic interests. Over the years, states have built national identities by establishing public schools, standardizing school curricula, encouraging a single language, creating national symbols (flags, anthems, etc.), celebrating national holidays, and supporting the work of certain cultural groups. States have also used their coercive capacities to enforce and to protect their conception of social order.

Nation-building exercises can foster intergroup conflicts. This is especially the case when a state constructs the nation's identity along essentialist lines (race, language, ethnicity, religion, etc.). Fearing that the state's conceptualization of the nation will inhibit their members' participation in their society's political or economic life and threaten their cultural heritage, marginalized groups struggle against the state in hopes of establishing a more inclusive national identity. Many historical examples demonstrate that resistance to these nation-building exercises tends to

be nonviolent at first, but if a government ignores these opposition movements' demands or if it tries to suppress these protests, these groups will develop more violent strategies and force them to secede and establish their own nation-states.

States have also legitimated their rule through democratic mechanisms. Thus, nation-building exercises do not have to be based on narrow, essentialist criteria. Civic conceptions of nationalism have taken shape in many democracies, where the national identity is based on a citizens' affinity to a set of political values. Thus, states that pursue nation-building strategies along essentialist lines are more prone to experience severe legitimacy crises that cripple the state's ability to administer society or enforce the rule of law. Since the end of the Cold War, these states have been described as "failed" or "weak" states.

A Process Enforced by Outside Actors

With the end of the Cold War, the UN secretary general Boutros Boutros Ghali reoriented the work of his organization's organs and specialized agencies to promote democracy, advance human rights, and encourage market economics. The UN efforts have been in line with the U.S. neoliberal values and its commitment to globalization. In the past two decades, the international community has been involved in the reform of nation-states' political and economic structures in hopes that these changes will increase the number of democracies, deepen global economic interdependence, and encourage interstate cooperation. To accomplish these goals, the United Nations and other donor organizations alongside Western states have stressed the importance of building up the state's institutional capacity.

Not all countries have been able to transform their societies according to these principles. These failed or weak states have become a source of anxiety for the international community. These states are more likely to descend into civil wars, leading to widespread human rights abuses, humanitarian crises, and acute refugee flows. As experienced in Central Africa, instabilities in these failed or weak states can easily spread to neighboring states, sparking further regional instability. Especially worrying since the terrorist attacks of September 11, 2001, many of these states are seen as magnets for terrorists, drug dealers, and other criminal organizations.

The second definition of nation-building, cited above, more closely approximates this global interest in developing state capacity. In this manner, the emphasis is for outside actors to intervene militarily in a civil war, settle the fighting, and establish a new social order along neoliberal lines. In other words, the goal of this intervention is to reconstruct the state's coercive and administrative capacities. While outside interveners work with local actors in this project, outsiders play a leading role in the short term. Their troops provide security, while their civilian administrators initiate state-building strategies.

It is important to note that building the state's capacities has been seen as more critical than constructing new national identities based on civic values. The growing influence of neoliberal values plays down the salience of identity-based issues. According to this perspective, individuals' relation to an established social order is motivated by utilitarian interests rather than a need to be part of an identity-based, collective grouping. This view does not ignore identity-based concerns altogether. The belief is that if the state can meet its citizens' basic needs, provide security, enforce the rule of law, and promote human rights, former combatants will be free to associate in the public sphere to construct new political cultures based on common interests. Rather than engineering new national identities, supporters of this definition of nation-building contend that these interactions will produce new civic-based identities that will legitimate the social order, closely resembling civic conceptions of nationalism discussed above.

Making Sense of Post-Cold War Nation-Building Missions

As a concept, nation-building has been widely used in American policy circles. Other countries and intergovernmental organizations tend to use other terms, such as *state-building* or *peace-building*. During the Cold War, the United States conducted several nation-building missions (e.g., Japan, Germany, South Korea, South Vietnam, and Panama). Since the end of the Cold War, the United Nations, with the support of its most powerful member states, including the United States, has either authorized many of these missions or its peacekeepers and civilian administrators have led them.

Contemporary nation-building missions are complex and involve many actors. While the intervention force's military plays a dominant role at first, transnational civilian administrators are those responsible for the transformation of the war-torn society's political, economic, and social structures. These missions attempt to fulfill four key goals.

The first goal is the stabilization of postwar environments and the institutionalization of a new security regime. This is probably the most critical goal, as the lack of security makes it difficult for transnational administrators to accomplish the other three objectives. In the short term, foreign troops need to protect local inhabitants, disarm combatants, and thwart disgruntled leaders from organizing militias or insurgencies. Over the long term, foreign forces, with the support of civilian administrators, need to rebuild the country's security apparatus. Training and equipping these new military, police, and intelligence units are costly and protracted efforts.

The second goal is the institution of a transnational civilian administration that can deliver humanitarian aid, manage the economy, and deliver basic public services. If a peace agreement has been signed by former combatants, this body oversees its implementation. In many cases, these administrators work closely with local leaders to rebuild the state's bureaucracy, design new constitutional structures, carry out democratic reforms, and establish a new representative government that can take over the country's affairs and continue these reforms once outside interveners end their mission.

The third goal is economic reconstruction along capitalist principles. Most war-torn societies face severe economic challenges: Their infrastructure is in shambles; their states lack the capacity to collect taxes, regulate economic activity, or manage monetary supply; their high unemployment rates are a source of anger; and their financial and banking systems are too weak to promote investment. Transnational civilian administrations not only have to address these challenges, but they must also convince international donors to finance reconstruction efforts, while attracting foreign direct investments. More critically, these administrators need to work closely with international financial institutions to renegotiate the country's sovereign debt and provide new loans to sustain reconstruction efforts.

The final goal is the creation of a new collective identity based on civic values. Because most contemporary nation-building missions have been executed in societies divided by ethnic, racial, or sectarian conflicts, administrators have realized that their political and economic reforms can only survive if individuals of these diverse groupings are willing to work together to establish new cultures based on tolerance and trust. Consequently, these nation-building exercises, originally conceived of as state-building enterprises, are expanded to address the roots of these identity-based conflicts. In some cases, administrators, with the assistance of non-governmental organizations and intergovernmental bodies, set up truth and reconciliation commissions or conflict resolution programs to increase dialogue among everyday citizens or leaders of these social groups.

Given their complexity, it is not surprising that many contemporary nation-building missions have not successfully met these goals. In some cases, these missions have failed to address the root causes of the conflict, seeing these societies descend once again into civil war. In other cases, external actors have not invested the necessary resources or earned enough local support to secure the transformation of these countries' political, economic, and social structures. It is not surprising that many academics and policymakers have questioned the effectiveness and the desirability of these missions.

While each nation-building mission is unique, there are at least two main reasons why many of these contemporary missions have failed. The first is the fact that outside interveners do not have the will to carry through these efforts over the long term. Nation-building cannot be accomplished on the cheap; it requires a heavy investment in financial resources and military and civilian personnel. Resolving the conflict and transforming the social order according to neoliberal values require a long-term commitment, which many outside actors are unwilling to make. The second reason is similar to the first. For nation-building to succeed, outside actors need to establish a strong partnership with local actors. In other words, rather than enforcing a set of security, political, and economic reforms, civilian administrators need to find ways of empowering local leaders so they can devise the necessary strategies to stabilize their country, rebuild their

state's capacity, and build new inclusive, civic-based identities that promote tolerance and trust.

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See also Occupations; Peacekeeping; United Nations

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NATIVE AMERICANS

The story of Native American military service is lengthy and complex. Scholars have been divided about the merits of studying this topic, since the relationship of Native peoples to the U.S. federal government in general, and the American armed forces in particular, is not always a proud one. Yet Native peoples have fought for, as well as against, the United States since the days of the colonial Indian wars. Public fascination with this service has grown in recent years, with the celebration of the World War II-era Navajo code talkers. This entry examines that process of interaction and conflict and offers some thoughts on the motives and contributions that Native societies have made to America's fighting forces.

Statistics

Native Americans often have been represented in the ranks of the American military in numbers greater than their share of the general population. As of September 2008, there were 24,173 Native Americans in uniform, constituting 1.7% of the total 1,409,210 active-duty forces. Native American women constitute 2.1% (4,300) of the total 202,842 female active-duty personnel. According to the 2010 U.S. Census, 5.2 million people have been identified as American Indian and Alaska Native, either alone or in combination with other races. In addition to active-duty forces, there are approximately 190,000 Indian veterans throughout the nation.

The Warrior Tradition

The history of American colonization, with its Indian wars and massacres, often made American soldiers the enemy of Native people. Yet Native alliances with American forces also occurred. During the War of 1812, Chief Junaluska and other Cherokee men fought along with General Andrew Jackson at the Battle of Horseshoe Bend. Once the Civil War started, Native American tribes fought for both sides. Indian soldiers, such as Colonel Ely Parker (Seneca), served with General Ulysses S. Grant, while Stand Watie became a Confederate brigadier general. Warriors from the Crow Nation of Montana allied with Lieutenant Colonel George Armstrong Custer, and Crow scouts died with his command at the Battle of the Little Big Horn. Theodore Roosevelt recruited Native Americans, who saw action in Cuba during the Spanish-American War of 1898.

There are various reasons for Native service in the military. Some are unique to Native history, and some are universal to all cultures. Economic need, access to educational and job training, patriotism, and a sense of duty are some of the reasons that Indians and non-Indians alike enlist in the military. Unemployment rates for Native Americans on poverty-stricken reservations can reach as high as 80%, and economic stability can be an extremely difficult task. Moreover, rural reservations rarely offer the same education or training to be found in urban communities. As with many non-Indians, tribal members left home to seek access to college and professional training.

While Native Americans entered the military for these shared reasons, there are some reasons unique

to their situations. First, protection of their ancestral land and culture, family, and community has been the most important purpose of serving in the armed forces for many Native Americans. Their sincere love for the land, no matter who controlled it, be it the United States or indigenous nations, encouraged Indian people to fight for the country. Protection of their homeland, moreover, helped preserve their way of living, values, and culture. They did not necessarily wish to protect the nation called the United States but their ancestral land and their people that became part of the United States.

Second, some Native Americans consider military service important for their maturity, as it instills a sense of purpose, accomplishment, and pride. Before and after their enlistments, Native Americans participate in ceremonies in their communities where they are honored for their decision. The Native tradition of honoring warriors for their valor and patriotism continues even today, and Indian tribes demonstrate their appreciation for Indian soldiers' service in various ways. For example, powwows offer opportunities to recognize Native American soldiers and veterans for their sacrifice to the country and its people.

World War I and the First "Code Talkers"

The best known example of the Native contribution to the U.S. military is that of the code talkers. Most attention is paid to the Navajos who served in the Marine unit in the Pacific theater of World War II, where their language (essentially unwritten), which the Japanese military could not decode, became the source of communications among American forces.

As early as World War I, American leaders encouraged Indians to enlist in the military as a part of integrated units, instead of segregated ones, to further the cause of Americanization. Some Native Americans, however, served in all-Indian units, including Company E of the 142nd Infantry of the Texas-Oklahoma National Guard. Among the 600 Native soldiers in this unit were the Choctaw code talkers. During the war, 19 Choctaw soldiers used their tribal language as a code. The first reported use of these code talkers was on October 17, 1918. The Army Signal Corps also utilized Indians from the Hopi, Ojibwa, Oneida, and Sac and Fox tribes. These code talkers helped the United States defeat

Germany by transmitting crucial communications through the use of their own tribal language.

In spite of their significant service in the war, the U.S. government did not recognize the code talkers' contributions. The first government to honor the Choctaw code talkers was not the United States, which had sent them to fight Germany. Instead, it was the government of France, which in 1919 recognized their contribution in the war by awarding four members of the 142nd Infantry with the *Croix de Guerre*, recognizing their acts of bravery.

The Native American soldiers' contribution during the Great War proved their preparedness for American citizenship. In part for that reason, the U.S. government in 1919 granted full citizenship to Indian veterans (41 Stat. 350). Five years later, Congress passed the Indian Citizenship Act of 1924 (43 Stat. 253). This provided that all Native Americans received a certificate of citizenship if they did not possess one. Because of service to the United States, all Native Americans became U.S. citizens.

World War II

During the Second World War, 24,521 reservation Indians and approximately 20,000 off-reservation Indians served in the European and Pacific theaters of war. The number represented more than 10% of the total Native American population of 350,000. Among them were about 400 code talkers. In the U.S. Army, approximately 50 Native Americans worked in the special Native language communication in Europe. The Marine Corps, on the other hand, assigned more than 300 Navajos for communication duty in the Pacific region. The idea to use the Navajo language as a code was introduced by Lieutenant Philip Johnston, a non-Native missionary's son who had lived on the Navajo reservation.

In spite of their devoted service during World War II, the contribution of the code talkers, or even their existence, was little known for over 20 years after the end of war. The Navajo code talkers had been sworn to silence, and their role had been kept secret until 1968 when the Department of Defense declassified the code. Thus, the Navajo code talkers were recognized by the U.S. government in 2001, when they were presented with congressional medals. Code talkers from other tribes had to wait seven more years until the passage of the Code Talkers Recognition Act (122 Stat. 4774). The purpose of the act was to recognize all Native code talkers for

their dedication and valor, and they were awarded the Congressional Gold Medal.

One of the well-known Native American soldiers serving during World War II was Major General Clarence L. Tinker (Osage). He was the first Native American to become a major general in the U.S. Army. He also became the first U.S. general officer to die in combat in the war, on June 7, 1942, during the Japanese attack on Midway Island. In his honor, Tinker Air Force Base outside Oklahoma City was named after him.

Cold War Era: Korea and Vietnam

Little information exists in terms of the Native Americans in Korean War, but it is estimated that between 10,000 and 12,000 Native American soldiers served in the war. Charles George (Eastern Band of Cherokee), Raymond Harvey (Chickasaw), and Mitchell Red Cloud Jr. (Ho-Chunk) received the Medal of Honor for their service in this warfare.

More than 42,000 Native Americans (about 90% of them volunteers) served in the conflict in Vietnam. The image of Native Americans as warriors who are used to guerrilla fighting—the type of warfare that their ancestors utilized against the European and American intruders—also influenced command decisions to send Native soldiers to the front.

Posttraumatic Stress Disorder and Recovery

As did many of their fellow service members, Native American veterans of all wars faced difficult times readjusting to life back home. One such Indian veteran was Ira Hamilton Hayes, a Pima from Arizona, who served as a paratrooper in the Marine Corps. On February 23, 1945, Hayes and five other soldiers raised the Stars and Stripes at the top of Mount Suribachi on the Pacific Island of Iwo Jima. Through a famous photograph, Hayes and his comrades became heroes of the war effort. On Veterans Day in 1954, the U.S. military held a ceremony to dedicate the Marine Corps War Memorial, a 78-foot statue of the flag-raising that includes bronze figures 32 feet high, in Arlington National Cemetery. Three months after the dedication of the statue, Hayes was found dead in a roadside ditch near his reservation home. He had succumbed to alcoholism and exposure.

The life of Ira Hayes exemplifies the challenge of readjustment among Native American veterans, many of whom suffered from what came to be

known after Vietnam as posttraumatic stress disorder. According to one study, Vietnam-era Native American veterans were twice as likely to suffer from posttraumatic stress disorder as their White counterparts. Scholars have shown that the high percentage of Native American soldiers in the Vietnam War contributed to the overall high rate of serious mental disorders in soldiers after the war.

While such studies have shown that minority soldiers had more chance to see combat and suffered from posttraumatic stress disorder, Native American soldiers confronted another problem: They fought an enemy who resembled themselves. The American soldiers also referred to enemy-controlled territory as "Indian Country," a reference to the Western movies of the 1940s and 1950s where this phrase was used often. For many Native soldiers, the enemy was indigenous people fighting for their self-determination, much like themselves. They observed parallels in the U.S. government's attitude and treatment of people in Vietnam, Iraq, and some other nations.

Contemporary Warriors: From the Persian Gulf War to the Iraq War

In the 1980s and 1990s, Native American soldiers saw duty in Grenada, Panama, Somalia, and the Persian Gulf. During the Persian Gulf War, more than 3,000 Native men and women served in the Persian Gulf. Manuel Michael Davila, a 24-year-old Lakota man, became the last soldier to be killed in combat in the war. At the time when Operation Enduring Freedom started, 18,000 Native Americans served in the military, while an undetermined number were deployed to Afghanistan.

In the conflict of the early 2000s in Iraq, the death of a Native American woman soldier drew national attention. Private First Class Lori Ann Piestewa, a Hopi from Arizona and single mother of two young children, was deployed in February 2003 as a member of the 507th Army Maintenance Company. When her support-service unit was ambushed in Nasiriyula in southern Iraq on March 23, 2003, Piestewa became the first servicewoman to die in the Iraq War and the first Native American woman to die in combat while serving the U.S. military. As was the case of many Native American veterans, she came from a family with a military tradition: Her father had served in Vietnam, and her grandfather in World War II. Squaw Peak in Phoenix was renamed Piestewa Peak after her.

Conclusion

In spite of the historically complex relationship with the United States, Native Americans have served in the nation's armed forces in impressive numbers. Their economic needs, as well as limited educational and job opportunities, encouraged Indian youth to join the military. Their wish to protect their homeland provides strong motivation for Native American soldiers. The Native Americans' enduring tradition of joining the U.S. military continues today, a reminder as to why Native people chose to serve a country that did not always respect their sacrifice.

Azusa Ono

See also Diversity; Indian Wars; Posttraumatic Stress Disorder

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NATO

See North Atlantic Treaty Organization

NATURAL DISASTER, MILITARY RESPONSE TO

Beginning in the 1950s with the advent of civil defense, the U.S. military establishment has been tasked to support civilian authorities during disasters. Originally codified in the Federal Civil Defense Act of 1950, the Department of Defense has, over all the intervening years, worked to set aside capabilities and

forces to support civilian authorities. Today, these capabilities are available to support the response to and recovery from natural disasters, special security events such as political conventions or the Super Bowl, and accidental or human-made disasters, particularly in support of presidential emergency declarations. This entry discusses the capabilities and the role of the U.S. military in responding to natural disasters.

At the center of these defense capabilities is the National Guard. The Guard is uniquely positioned to respond to disasters because of its triad of tasking authorities. The governor of a state can activate and financially support Guard activities in the state. Under Title 32, the governor can activate the Guard and request the federal government to pay for its operations. Under Title 10, the Guard responds to and is funded by and directed by the president and the legal national military authority. This flexibility makes the Guard the centerpiece of military support for civilian authorities.

With the passage of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, Title 32 was amended to allow Guard forces to be used for "homeland security activities." Most recently, Department of Defense Directive 3025.18, of December 2010, incorporated other directives and outlined clear criteria for using military forces in support of civilian authorities. All requests from civil authorities and qualifying entities for assistance should be evaluated for the following:

1. *Legality*: Would the use of military forces comply with the law?
2. *Lethality*: Would lethal force be part of the mission of the military forces?
3. *Risk*: Would the forces be unnecessarily put in harm's way?
4. *Cost*: Who pays?
5. *Appropriateness*: Is the use of military forces in the interest of the Department of Defense and its missions?
6. *Readiness*: Will this commitment affect readiness in other mission areas?

In recent history, the use of military forces in support of civil authority during disasters has been greeted with mixed reviews. Perhaps the most significant and visible deployment of military forces was during Hurricanes Katrina and Rita in 2005. Some authors were of the view that the deployment of

guard units to Afghanistan and Iraq seriously undermined the readiness of those forces that remained home in Mississippi, Louisiana, and Texas. However, these conjectures do not fit the facts as events unfolded in these Gulf states. Almost immediately after the storm began to abate, literally hundreds of guard and reserve helicopter units self-deployed to the region and began rescue operations. Other uniformed units were on the scene to assist in the recovery of bodies, rescues of those stranded, and in securing property. The flexibility and adaptability of the units along with their inherent command and control allowed military support to be most effective. Eventually, the Coast Guard, National Guard, and active-duty military forces facilitated the restoration of order to the region.

More recently, the flooding along the Missouri River was supported by guard units operating under state control. These units, operating on their home turf, provided immediate stability to the impending crisis and allowed civil authorities to deal with the human aspects of this tragic displacement of people and destruction of private property. As of the fall of 2012, National Guard units were still supporting Hurricane Katrina operations.

Not all interactions between the military and civil authorities work as well as was seen in the Midwest during the summer of 2011. Often, as was the case in certain circumstances in Katrina and Rita, integrating military capabilities into civil structures can be problematic. Civilian authorities are unwilling to cede sovereignty and local control to any entity outside the jurisdiction. The adage that all disasters are local is usually in full force. Even if the local authorities are overwhelmed and are in desperate need of help, officials are reluctant to give authority to outside agents.

Challenges still confront both military and civil authorities on many fronts. The U.S. Northern Command (NORTHCOM), the unified command organized specifically to support the homeland defense of the nation, has had difficulty reaching out to state and local authorities. Civil authorities are not much help, either, as they have difficulties articulating what their needs might be, and the planners at NORTHCOM cannot read minds. Along with the long-standing issues related to interoperability of communications capabilities, command and control systems, and other homeland security protocols, NORTHCOM is often left with few forces or resources to offer to jurisdictions that need support.

As was recently documented in a Government Accountability Office report, NORTHCOM planning activities have been deficient, but the command is improving its planning capabilities. Furthermore, the command has had difficulties establishing readiness standards for its units. Because many of the forces that might be available to NORTHCOM in times of emergency are already tasked in foreign areas of operations, correcting these deficiencies might be well beyond the control of the command.

Another element of concern is the slow economic recovery ongoing in the nation. Resources at the state and local levels have diminished dramatically, leading to force and capability downsizing. Furthermore, preparedness activities have fallen in priority as jurisdictions struggle to keep schools open and police and fire departments fully staffed. Homeland security considerations become less compelling under the current circumstances. Similarly, Department of Defense budget priorities might force difficult decisions concerning NORTHCOM and military support to civil authorities.

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See also Civil Defense; Homeland Security, Department of; National Guard, Army; Posse Comitatus Act; U.S. Northern Command

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NAVAL POSTGRADUATE SCHOOL

The Naval Postgraduate School (NPS), established and operated by the U.S. Navy, got a modest start at the United States Naval Academy at Annapolis, Maryland, in 1909 and since 1951 has been located in Monterey, California. Beginning with 10 officer

students and 2 navy instructors, the NPS has grown to a student body of more than 1,500 U.S. officers and government civilians and more than 250 military personnel from more than 60 other countries instructed by a faculty of 500 (90% civilian) professors, most of whom hold a PhD. According to its official website, the mission of NPS is to provide high-quality, relevant, and unique advanced education and research programs that increase the combat effectiveness of the naval services, other armed forces of the United States, and our partners, to enhance our national security. This entry discusses the history of the NPS and describes its centers and graduate schools, institutes, and curriculum.

Many of the most senior U.S. naval officers, as well as those of other American armed forces, are NPS graduates, including Admiral Michael G. Mullen, Chairman of the Joint Chiefs, General Michael W. Hagee, former Marine Corps commandant, and Admiral James D. Watkins, former chief of naval operations. NPS has educated more than 45,000 foreign officers and defense officials since its founding, and members among its alumni are King Abdullah of Jordan, the minister of defense of Thailand, the commander of the Turkish navy, the chief of staff of the Israeli air force, and the chief research scientist of Singapore's Ministry of Defense.

The school (which is in fact a fully accredited research university) is divided into four degree-granting graduate schools: (1) Business and Public Policy, (2) Engineering and Applied Sciences, (3) Operations and Information Services, and (4) the School of International Graduate Studies. NPS awards both master's and doctoral degrees. The graduate schools are in turn divided into 19 departments. The graduate schools and departments are augmented by four "institutes" for (1) Innovation and Information Security; (2) Modeling, Virtual Environments, and Simulation; (3) Systems Engineering; and (4) National Security. Finally, NPS features 33 "centers" that offer research and education programs in highly focused areas of study. Often led by interdisciplinary teams of faculty members, the centers explore a variety of areas ranging from civil-military relations to spaceship research and design.

In addition to its resident programs, NPS also offers graduate degrees to military officers through distance learning via "web-enabled, video tele-education" seminars and lectures. Teams of scholars also travel and teach overseas as part of NPS's

short-course programs that reach close to 50,000 students annually.

Only the U.S. Air Force sponsors an institution similar to the NPS. The Air Force Institute of Technology (AFIT) is also a doctorate-granting school. The U.S. Army does not have a comparable institution. Each service does have its own war college, which grants master's degrees to O-5 and O-6 military personnel, to U.S. government civilians of comparable rank, and to international officers.

The International Graduate Programs Office of the NPS is responsible for the cultural, social, and academic integration of the international military students and their families into the NPS. The office is charged with interacting with outside military and civilian agencies of the U.S. government to accomplish the goals of the Security Assistance Training Program and the Informational Program (IP). Additionally, it is responsible for the International Sponsor Program and acts as the Command Sponsor to the International Committee. The International Program at NPS has proven to be of great value in establishing long-term military-to-military relationships between the United States and other countries. More than 20% of currently enrolled international students are registered in Expanded International Military Education and Training (EIMET) certified programs, including Resource Management, Area Studies, and Security Studies. Approximately 5,000 international student officers have received NPS degrees since 1954.

History and Evolution of the NPS

According to its official website, the idea for establishing a graduate education program for naval officers first emerged in the late 1800s, but the concept initially had few advocates. However, with Guglielmo Marconi's invention of the "wireless" (telegraph) in 1901, the Wright brothers' flights of 1903, and the global cruise of the steam-powered Great White Fleet from 1907 to 1909, the belief gained support that advanced technical education for U.S. naval officers could be intrinsically valuable to the navy.

In 1909, Secretary of the Navy George von L. Meyer signed General Order 27 establishing a school of marine engineering at Annapolis, placing the fledgling school under the direction of the Naval Academy superintendent. The marine engineering school's 10 officers and 2 faculty set up shop in two attic rooms set aside by the academy for classes

and laboratory space. Within 3 years, Meyer had agreed to transform the school into the Postgraduate Department of the Naval Academy. His General Order 233 established courses of study in ordnance and gunnery, electrical engineering, radio telegraphy, naval construction, and civil engineering, as well as continuing the original program in marine engineering. With the additional curriculum content, enrollment increased to 25.

During World War II, Fleet Admiral Ernest King, chief of naval operations and commander in chief of both the Atlantic and Pacific fleets, established a commission to study the role of graduate education in the navy. By the end of the war, it had become apparent that the facilities of the NPS at the Naval Academy at Annapolis would be insufficient for the navy's future needs. In 1945, Congress passed legislation making the NPS a fully accredited, degree-granting graduate institution. Two years later, Congress authorized the purchase of the Hotel Del Monte and 627 surrounding acres in Monterey, California, for the establishment of an independent campus for the NPS. In December 1951, the NPS moved its 500 students, 100 faculty and staff, and tons of books and research equipment from the east coast to the west coast. Rear Admiral Ernest Herrmann supervised the transition.

The principal administrative offices remain in the former Hotel Del Monte, now named Herrmann Hall. The NPS academic quadrangle has been built incrementally since 1951. The most recent additions include renovation of the library, more than doubling its usable space, the academic building (Glasgow Hall), and the new mechanical engineering building. In 2006, renovation of the two wings of Herrmann Hall was completed, providing 140 new Bachelor Officers' Quarters (BOQ) rooms for the school's international officers and their families for temporary residency, while they become established in permanent living facilities. In the year of the NPS's centennial anniversary, 2009, Herrmann Hall began a series of renovations and refurbishments to restore the building's early-20th-century charm and elegance in tribute to its historic past.

Recent Developments

While technology and engineering were its original focus and remain a principal focus today, NPS has placed new emphasis on other curriculum areas in

recent years. Its School of International Graduate Studies has been in existence for less than a decade. Integral to the School of International Graduate Studies are the Department of National Security Affairs (NSA), the Center for Homeland Defense and Security, the Defense Resources Management Institute, the Center for Civil-Military Relations, the Center for Contemporary Conflict, the Center for Stabilization and Reconstruction Studies, and a program in International Defense Acquisition Resource Management.

The Department of NSA within the School of International Graduate Studies offers a master of arts degree and a doctoral degree in security studies. The MA degrees always entail concentration in a particular region or in a topical specialty. NSA regional security curricula meet the high standards set by the U.S. armed forces for foreign area officer education. Among the four regional curricula is Curriculum 681—"Middle East, South Asia, and Sub-Saharan Africa." Among the topical specialties offered by NSA is Curriculum 693—"Combating Terrorism: Policy and Strategy." Both Curriculums 681 and 693 are particularly relevant to ongoing military missions in Iraq, Afghanistan, and Libya.

The Global Center for Security Cooperation is another recent addition to NPS (established in 2006). Its mission is to provide additional capacity for extant Regional Centers: Marshall Center, Asia-Pacific Center for Security Studies, Near East South Asia Center, Africa Center, and the Center for Hemispheric Defense Studies.

The NPS Today

The U.S. NPS from its modest origins more than a century ago has developed into a world-class graduate teaching and research institution rivaling prestigious universities across the nation in theoretical and applied research and in fiscal impact. The Space Systems Academic Group of NPS has graduated 33 astronauts, more than any other graduate school in the country. NPS is home to the Center for Information Security and Research and the Center for Homeland Defense and Security—both of critical importance in the age of cyberwarfare and the Global War on Terrorism, respectively. Indeed, the Center for Homeland Defense and Security offered the first homeland security master's degree in the United States.

According to the 2010 NPS Annual Report, the total operating budget for the NPS for the fiscal year 2010 was \$379.1 million (approximately the cost of one F-22 aircraft in 2006 dollars, according to the Government Accountability Office). Funding comes from two primary sources. Direct funds are provided by the Department of the Navy for the school's core teaching mission. Reimbursable funds are provided from a variety of sponsors for the implementation of research and other unique educational programs. In 2010, a total of 1,188 degrees were conferred, including 18 PhDs in 11 fields.

William L. Dowdy

See also National Defense University; Naval War College; Strategy, Naval; U.S. Naval Academy

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Website

Naval Postgraduate School: <http://www.nps.edu/>

NAVAL WAR COLLEGE

The Naval War College, located at Newport, Rhode Island, has provided the highest level of professional military education for the U.S. Navy since its founding in 1884. It provides both intermediate and senior levels of education. Its younger counterparts are the Army War College, the Army Command and Staff College, National Defense University, Air University, and Marine Corps University. Since 1990, the Naval War College has been accredited by the New England Association of Schools and Colleges to

award a master of arts degree in national security and strategic studies for its year-long course. About half of the midcareer resident students are officers from the U.S. Army, Air Force, Coast Guard, and Marines, while the other half are naval officers and civilian students from defense-related agencies. More than 100 officers from other navies attend the Naval War College annually. In addition, the college provides distance education faculty-led evening seminars in many locations throughout the United States as well as at bases overseas, a web-enabled program, and a correspondence program. At the end of the Naval War College's 125th anniversary year in June 2010, the resident graduating class included 303 navy, Marine Corps, air force, army, and Coast Guard officers, and civilian government employees, as well as 120 students from 68 different countries. With an additional 1,042 distance education students, the Naval War College graduated a total of 1,465 students in 2010. This entry discusses the history of the Naval War College and some of its illustrious leaders and influence.

Origins and Establishment

The first of the professional military colleges of its type to be established in the United States, the Naval War College owes its existence to U.S. Navy Rear Admiral Stephen B. Luce (1827–1917). In 1884, Luce had served for 40 years in the navy and had recently held the U.S. Navy's most senior command afloat as commander of the North Atlantic Squadron. Earlier in his career in 1862, he took an important role in naval education by producing the U.S. Navy's first textbook on seamanship, which served as the service's standard text issued nine times in five different editions over 40 years. Additionally, Luce played a key role in various types of maritime education and training. He was involved in the Marine Schools Act of 1874, the establishment of what is today the State University of New York Maritime College at Fort Schuyler, New York, and the naval recruit training program that was based afloat at Newport, Rhode Island, from 1877 and ashore from 1883.

After accomplishing his plans for recruit training, Luce turned to promoting the establishment of a school for the highest level of officer education. He thought that it was clear what kind of training an officer needed to rise to the command of a ship, but he saw there was no education readily available

for those who were destined to become admirals or advisors to senior officials. In thinking about this, Luce was profoundly influenced by his reading of the English historian Thomas Buckle (1821–1862) and his thoughts on inductive and deductive reasoning, the thoughts of the German philologist Friedrich Max Müller (1823–1900) on comparative study, and the pioneer article by Professor Sir John Knox Laughton (1830–1915) on the “Scientific Study of Naval History” (1874) that first encouraged broad analysis of naval events. In addition, Luce was also influenced by key contemporaries, among them Commodore Foxhall Parker (1821–1879) with whom he had helped establish the United States Naval Institute in 1873. Not long afterward, while in command of the USS *Hartford* in 1875–1877, Luce became an acquaintance of Colonel Emory Upton (1839–1881). These two men shared much in their outlook on service reform. With this orientation, Luce formed his ideas about the future Naval War College.

On November 6, 1882, Luce wrote to the secretary of the navy recommending a college to study the science of war, naval tactics, military and naval history, international law, and modern languages. The secretary of the navy took no action on Luce's recommendation until early 1884, when Luce drafted a General Order for the secretary's signature to establish the Naval War College. In response, Luce was ordered to convene a board to consider the ways in which to implement his recommendation. As members of the board, the secretary appointed Luce with Captain William T. Sampson and Lieutenant Commander Caspar F. Goodrich. Among the materials that the board members considered were examples of the army's schools, Luce's writings on war schools as well as the official report of the Naval Academy's professor James R. Soley (1850–1911), *Report on Foreign Systems of Naval Education* (1880), which included information on two interesting examples: the Royal Naval College, Greenwich, where John Knox Laughton had taught, and the Imperial German Navy's 3-year long, voluntary course at the *Marine Akademie* in the higher aspects of warfare.

The First Quarter Century, 1884–1909

On October 6, 1884, Secretary of the Navy William E. Chandler issued General Order Number 325 to establish the Naval War College as an advanced course of professional study for naval officers.

Even before it was signed, Luce began arranging for a faculty and was making arrangements for the new college to occupy the former home of the Newport County Poor Asylum, originally built 65 years earlier in 1819, on Coasters Harbor Island in Narragansett Bay.

Nearly a year later, on September 4, 1885, the Naval War College convened its first class. Its first full-time faculty members included Luce; Soley, a lawyer and historian who would serve as assistant secretary of the navy in 1890–1893, as lecturer on international law; and Army First Lieutenant Tasker Bliss (1853–1930), a future chief of staff of the army in 1917–1918, as lecturer on military science.

Luce also arranged for Captain Alfred Thayer Mahan (1840–1914) to be ordered from the command of a ship on the South American Station to become the first lecturer in naval strategy and tactics. Luce wanted Mahan to do for the navy what Antoine-Henri Jomini had done for the army and to create a theoretical understanding of the navy's strategic and operational roles. To start this, Luce ordered Mahan to spend a year studying the relationships between naval operations and foreign relations in European history. The result of this was a series of Naval War College lectures that eventually appeared as a book, *The Influence of Sea Power Upon History, 1660–1783* (1890), the first of his four-volume series. By the time Mahan finished his work and arrived in Newport to take up his teaching responsibilities, Luce had been assigned back to sea duty, and the navy ordered Mahan as his successor as college president.

The first quarter century of the college's existence was a fight for the fledgling institution's survival from its critics, who favored technical training over the broad educational mission that Luce had laid out for it. The college survived many attacks. In 1893, Secretary of the Navy Hilary Herbert had been deeply influenced by the critics and traveled to Newport with the intention of abolishing the College. En route, he read Mahan's most recent book, *The Influence of Sea Power Upon the French Revolution and Empire* (1892), which completely reversed his opinion of the college's work and led him to develop plans to sustain it and to develop it further.

From 1894, the college began to play a major role in naval contingency planning for the possibility of future wars and to employ as part of this the innovative concepts of naval war gaming that lieutenant, later captain, William McCarty Little (1845–1915)

was developing at the Naval War College from the German *Kriegspiel* along with some early ideas of Fred T. Jane (1870–1916) in England. As part of this, the Naval War College was closely involved with the navy's first contingency plans for the Spanish-American War.

Among the early visiting lecturers to the college was Theodore Roosevelt, who first came in 1888 to speak on his study of the War of 1812 and then in 1897 as undersecretary of the navy to give an address on preparedness as a means to prevent war. In 1908, as president of the United States, Roosevelt returned to the Naval War College, while the Great White Fleet was completing its circumnavigation of the globe under the former Naval War College president Rear Admiral Charles S. Sperry (1847–1911). This time, Roosevelt chaired a session of the Battleship Conference that he had convened to examine the design for a new American battle fleet.

Educating Leaders for the World Wars, 1910–1942

Over three decades, the Naval War College gradually developed an approach to naval planning and thinking that reached its apogee in 1934–1942 with the publication of the textbook *Sound Military Decision*, designed to prepare its students for high military command or staff assignments to senior commanders. Reflecting the curriculum of the time, this work focused on the mental logic for command and served as a manual for planning and a treatise on the profession of arms based on the concepts of “estimate of the situation” and the “order form.” All of the college's leaders in these decades contributed to this development; most famous among them were Admirals William S. Sims (1858–1936) and William Veazie Pratt (1869–1957). In 1934, the college built the navy's first purpose-built naval war gaming facility, Pringle Hall, which was used most famously to examine the options in War Plan Orange for the naval war against Japan. When the United States entered World War II, nearly every serving flag officer in the navy had graduated from the Naval War College.

Searching for a Role, 1942–1972

At the outset of World War II, 1923 Naval War College graduate Admiral Chester Nimitz (1885–1966) ensured that the college not be closed during the war years and carried out short courses. Immediately

after the war, Admiral Raymond Spruance (1886–1969), graduate and former faculty member, returned to the college as its president to begin the postwar transition. Spruance took the initial steps toward using civilian faculty, establishing a professional journal in what has since become the *Naval War College Review*, and preparing professional thinking for the Cold War era. With the establishment of the Defense Department, the need for joint thinking, and the application of business, management, and systems analysis approaches to professional military education, the Naval War College, like its sister war and staff colleges, was left in a quandary about the range and content of its curriculum and its institutional role. In this period, the college began its Naval Command course for senior international officers in 1956, while staff members Henry E. Eccles (1898–1986) and J. C. Wylie (1911–1993) made key original contributions to naval strategic thought in the 1960s.

A New Focus From 1972

In 1972, Vice Admiral Stansfield Turner (1923–) initiated a new educational approach that was inspired by his own graduate experience as a Rhodes Scholar at Oxford University. Emphasizing tutorials and seminar discussion with extensive reading and writing assignments, Turner implemented a permanent civilian faculty that taught three core courses successively in trimesters, a series of electives, and institutionalized research. Turner's basic concept has remained in place with incremental changes. In 1977, Medal of Honor recipient Vice Admiral James Stockdale (1923–2005) and Professor Joseph Brennan (1910–2004) introduced an innovative elective on military ethics, based on Stockdale's Vietnam experience. From 1981, innovative applied research was focused in a Center for Naval Warfare Studies with several series of Global War Games. As a result of the 1986 Goldwater-Nichols Act, the college was accredited to provide phase one joint education.

John B. Hattendorf

See also Goldwater-Nichols Department of Defense Reorganization Act; Mahan, Alfred Thayer; Training, Naval Officers

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NAVIGATION, AERIAL

Air navigation is the process of piloting and navigating an aircraft from its present position to a destination. The basic principles of air navigation can best be understood by comparing it with the better understood process of land navigation, which is a valid comparison, up to a point. The fundamental function of both air and land navigation is to proceed from point A to point B. In land navigation, factors such as terrain, map reading, and compass accuracy are important considerations for planning. In air navigation, terrain, map reading, and compass accuracy are important, but each of these factors should be considered in a broader “air” context. This context includes a discussion of navigation aids available to pilots, high-level navigation versus low-level navigation, the unique dynamic of drift, and the different principles that govern piloting and air navigation.

Navigation Aids

Air navigation aids can be divided into two primary groups: (1) ground-based navigation aids and (2) stand-alone air navigation aids. Ground-based air navigation aids consist of, but are not limited to, Air Traffic Control (ATC) radar vectors, VHF Omnidirectional Range (VOR) instrumentation, and the Tactical Air Navigation (TACAN) system. With regard to platform navigation aids, nearly all

aircraft possess three stand-alone systems: (1) magnetic compasses, (2) Inertial Navigation System (INS), and (3) Global Positioning System. These systems are considered stand alone because they provide navigation data separate and apart from external (or ground-based) systems. In other words, these systems are capable of providing independent navigation solutions.

Ground-based air navigation aids represent those navigation systems that reside on the ground and assist in aerial navigation. ATC radar vectors consist of ground-based radar systems, which can “see” and track aircraft and thus vector the aircraft either at altitude or while the aircraft is in descent and approaching the airfield. Generally speaking, for military aircraft ATC radar vectors are not considered precision navigation and, as a consequence, are used to vector aircraft into unoccupied airspace or assist aircraft flying an approach. Aircrews continually verify the radar vectors they receive from ATC. VOR and TACAN navigation aids perform in similar ways. Both systems behave within a beacon-like framework. The ground-based VOR or TACAN systems send out beacons to receivers on compatible aircraft. The receivers then interpret the beacon and determine the azimuth and range to the ground-based station. This information allows the aircrew to navigate by either plotting their position based on the VOR or TACAN or to fly directly to the VOR or TACAN station. These are several significant differences between the VOR and TACAN systems. First, by itself the VOR only provides azimuth information. Second, the TACAN has a much greater range than the VOR system. Most aircraft use a combination of ground-based navigation systems to increase accuracy.

Of the three most common stand-alone air navigation systems, magnetic compasses are the simplest and provide the least amount of navigation data. Magnetic compasses provide magnetic headings. To properly navigate using magnetic compasses, wind speed and direction must be known and factored. Additionally, magnetic headings need to be logged and plotted on air navigation charts to track the progress of the aircraft (with consideration to wind effect) over time. In contrast, the INS provides an independent navigation solution. Using accelerometers to measure aircraft velocity (first axis) and gyroscopes to measure aircraft heading (second axis), the INS converts inputs into usable navigation data. Like

the INS, the Global Positioning System is a stand-alone navigation system. The Global Positioning System relies on satellite data (a minimum of three satellites for accurate solutions). Three or more satellites within the range of the aircraft receiver provide constant signals to and from the aircraft. These signals “triangulate” the aircraft position and provide highly accurate navigation solutions. While it is true any of the three stand-alone systems can be operated individually, most aircraft use a combination of air navigation systems to increase the accuracy of the solutions.

Unique Challenges of Air Navigation

High-level air navigation essentially entails all navigation and pilotage occurring in a high-level environment. (*Pilotage* is the act or skill of piloting.) Certain rules and requirements regulate this arena, such as radio communication with air traffic controlling agencies, filed instrument flight plans, specific navigation instrumentation requirements, and certain physiological equipment (e.g., oxygen supply) requirements. High-level navigation is almost always synonymous with instrument flight rules (IFR). In fact, aviators will often use the terms (especially IFR) interchangeably to represent the specific guidance, procedures, and protocols that govern high-level navigation. Low-level navigation, on the other hand, is more closely associated with visual flight rules (VFR). Since low-level navigation takes place at lower levels, the navigation techniques applied to it are much more visual. This means that aviators actually use visual references on the ground to help them navigate. For example, during a low-level sortie, it is not uncommon to navigate around the route using only visual ground references to determine flight path. Roads, bridges, towns, mountain ridges, and lakes all make wonderful low-level, visual navigation aids. Since low-level navigation is most closely associated with VFR, weather is a significant limitation to flying in low-level and/or under-VFR conditions. It is, then, effectively impossible to fly and navigate using visual reference points when the pilots cannot see the ground. Additionally, since navigation is occurring outside the high-level IFR structure, the rules governing flying at lower levels are much less restrictive with regard to equipment requirements. However, these rules place a much greater responsibility on the crew, as the pilots

(and any additional crew members) are ultimately responsible for safe navigation. This differs significantly from high-level navigation.

The dynamic of drift, probably more than any other factor, distinguishes air navigation from land navigation. Drift affects both high- and low-level navigation. Simply stated, drift is the effect of winds at altitude on the aircraft. For example, an aircraft that is traveling due east would continue to head in an easterly direction if wind was not a factor. If, however, the altitude wind is originating from the north, the aircraft is being “pushed” toward the south. The effect of this “push” is known as drift. Pilots, navigators, or flight planners must always take drift into account. If drift is not factored into air planning and air navigation, then wind can literally force the aircraft onto a path away from the intended destination. Another way to state the importance of drift is to consider that if drift did not exist, aircraft could travel in a relatively straight line from point A to point B and the need to plan for aerial navigation would be nearly entirely eliminated. In other words, it is drift caused by wind that makes air navigation even more necessary. Without drift, aircrew could simply set their courses/headings and fly to their destination, secure in the fact they would not get blown off-course.

The rules governing pilotage and navigation can be summarized by the two categories of IFR and VFR. As mentioned, IFR is usually reserved for high-level navigation. In basic terms, IFR is a designation in which the air traffic controllers share the responsibility of air navigation. Instrumentation, as the name implies, is integral to IFR procedures. Aircraft are under the control of both their instruments and the air traffic controllers, and as a consequence, aircrews can be considered less liable for their operations. Yet aircrews must always remain vigilant even when flying IFR to guarantee the safe navigation of their aircraft. Additionally, IFR flight involves many complex rules beyond the scope of this discussion. In contrast, VFR flight is less restrictive and provides the pilots and aircrews more control over their navigation.

VFR can be summed up as “see and avoid.” Pilots are responsible, while under VFR procedures, to see all obstacles (terrain as well as other aircraft) and to avoid all of those obstacles. Obviously, visibility is an important aspect of VFR, so weather plays a fundamental role. Aircrews planning to fly

VFR must always monitor the predicted weather for their projected flight path with diligence. Not to do so would be negligent.

Hillary Jean Sebeny

See also Global Positioning System; Navigation, Sea

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NAVIGATION, SEA

Sea navigation is the processes maritime vessels use to determine their location in order to move to a certain destination. To determine their location, mariners use a variety of techniques, including dead reckoning, pilotage, celestial, radio, radar, and satellite, also known as Global Positioning System. These techniques employ basic navigation skills and tools such as latitude, longitude, bearing, distance to objects, and fixes. Sea navigation has an ancient history but has been brought into the 21st century with modern techniques, while still preserving the methods of the past, as discussed in this entry.

History

Modern sea navigation traces its origins to the ancient sailors of the Mediterranean Sea. Early navigators would stay within sight of the coast, using the land as a reference to their location. They would also use knowledge of wind and currents to determine the routes they would take. However, the rocky coast, along with the sudden storms of the Mediterranean, proved to be a challenge to sailors in keeping their ships afloat.

Early navigators began traveling farther out to sea, far from the dangerous coast. The Minoans of Greece began using records of celestial bodies to help guide them over open water, away from the landmarks of the coast. The most used constellation was Ursa Major, and more were used as they were discovered.

The medieval age saw the development of many tools that greatly advanced the art of navigation, such as the introduction of the magnetic compass, one of the most important tools of navigation. With the magnetic compass, navigators were able to find their way across open water without the aid of celestial bodies, by being able to determine the direction of north. Navigation went forward again with the sextant and marine chronometer. A marine chronometer is nothing more than a simple timepiece but is made special in its ability to remain precise in any weather, temperature, or level of humidity. In conjunction with the precise timing of a marine chronometer, a sextant was developed and used to find longitude from celestial bodies.

Latitude

Latitude is the term used to describe the imaginary lines that run east to west on the surface of the earth, parallel to the equator. With the equator set in the geographic middle of the earth, lines of latitude are both north and south of the equator.

All lines of latitude are represented by degrees (°). These degrees are determined by giving the degree of the angle the line of latitude has when compared with the equator. The equator is determined to be at 0° based on the angle it has when compared with itself. In contrast, a latitude of 90° forms a right angle when compared with the equator. This line of latitude would be at either the North Pole or the South Pole depending on whether it is north or south of the equator. Positions of latitude are given in degrees followed by an N or S, which states whether the line is north (N) or south (S) of the equator.

Longitude

Longitude functions in the same way as latitude. Degrees are given in W (denoting west) or E (denoting east). Much like latitude is based off the equator, longitude is determined by the angle from the prime meridian. The prime meridian is at 0° and runs from the North Pole to the South Pole. Lines of longitude extend east and west until they reach 180° at the International Date Line. This line marks the change in days. When crossing the International Date Line going east to west, the day advances ahead and vice versa. Unlike lines of latitude, lines of longitude are not parallel. Each one intersects with the others at the North and South Poles. Longitude does not stop

at 90°. Angles of longitude extend to 180°, meaning that all longitude lines must be given in three-digit format.

Vessels use both latitude and longitude to present their location on the earth's surface. When both are used, a location can be determined at the position in which the two lines cross. For example, the approximate latitude and longitude of New York City is 40°N, 074°W, meaning that New York City lies on the line that is 40° north in relation to the equator and 074° west of the prime meridian.

It is also important to note that a position of a ship can be determined by a given latitude and longitude and given in latitude and longitude if the position was found by other means.

Bearing

Bearings are measurements taken from a navigating vessel to determine the direction of an object, such as other ships. Bearings are based on compass directions and given in three-digit format. To determine a bearing to an object, a mariner determines which direction is north (000°). From that, an angle is found that compares the direction of the object to north. For example, a ship coming directly from the east is said to have a bearing of 090° because the angle of north and the ship is 90°. These angles can be as large as 359°, as a compass is a circle.

It is important to note that heading is entirely different than bearing. Heading is the measurement of which direction, or course, a vessel or object is moving on a compass. If a ship is moving directly west, it is said to have a heading of 270°.

Distance to Objects

Distance to objects is an important step in determining location of a vessel. By using whatever means available, a mariner can use distance in relation to known and charted objects to determine location. By finding an object and the distance a ship is away from it, a mariner can find the same object on a chart, which is a type of map specifically used for nautical navigation, and draw the distance from that object using a scale bar, a tool on a chart used to represent distances in a smaller frame. With the distance and the object, a mariner can draw a circle around the object at the scaled distance. The mariner then knows that the vessel is somewhere along that circle. The mariner will most commonly find

another object and repeat the process. The two circles will intersect at two spots, giving the mariner two possible locations. The process may be repeated a third time to receive the most accurate positioning.

Positional Fix

A positional fix, or simply fix, is the term used when determining a location on a chart. Through the use of latitude, longitude, bearing, and distance to objects, a position can be determined quickly and easily. Most commonly, fixes are taken by either using longitude and latitude or bearing and distance to objects, separately. The process of finding a location is known as “taking a fix.”

Dead Reckoning

Dead reckoning is a special process to determine location but does not utilize latitude and longitude or bearing and distance to objects in its process of taking a fix. Instead, a vessel uses its known heading, speed, and time elapsed. The current speed is multiplied by the elapsed time to give the distance a vessel will travel in that time. The heading determines in which direction the ship is moving. Combining the direction and distance the ship will travel, a mariner plots, or draws the position of the ship on a chart. This gives the approximate position of the ship and can give the approximate latitude and longitude.

A more advanced version of dead reckoning is inertial navigation. Through several sensors on board a vessel, a computer system can automatically determine a position through dead reckoning. These sensors measure ship movement forward and backward and side to side to determine movement. These sensors along with a compass use the same methods to determine a position as with dead reckoning.

Pilotage

Pilotage is another way of determining an approximate position without using latitude and longitude or bearing and direction. Pilotage works by comparing a chart of the area a vessel is thought to be in to what can be visually seen. This is one of the most common methods of navigation for small boats. The use of buoys plays an important role in pilotage. Each buoy can have a distinct color, number, and style, all of which can be compared with buoys

on a chart. This is important when vessels navigate through hazardous waters and channels. Also, by identifying geological features, such as mountains and coastlines, and human-made features, such as buildings and bridges, a mariner can compare them with a chart and determine an approximate location. If a certain building is shown on a chart, a mariner can compare the location of it in relation to the vessel and determine an approximate position.

Celestial

Celestial navigation is the process of determining a location through the observation of celestial bodies, such as the sun, moon, and stars. Through using a sextant, a skilled mariner determines which stars are overhead. With a nautical almanac, which lists the positions of stars during certain months, a mariner sees where the star is positioned over the earth on that particular day. By cross-referencing celestial bodies to a nautical almanac, a mariner can determine a vessel's position.

Radio

Radio navigation is a process for finding location through radio signals. In the same way a mariner finds bearing through visual identification, a receiver listens for signals coming from a dedicated transmitter. The transmitter's location will be known, and by using the receiver, a bearing of where the signal is coming from is found. Using this process, combined with other radio signals and bearing-finding processes, a fix can be taken.

Radar

Radar, which is an acronym for radio detection and ranging, works in the same fashion as radio navigation. The difference is, the vessel sends out its own signal, which reflects off objects and comes back to the source's receiver. Bearing is found to an object, and speed and time elapsed determine the distance to an object. The bearing and distance are plotted on a chart to determine location.

Satellite

Satellite navigation uses satellites in the earth's atmosphere to determine a latitude and longitude in order to produce a fix. A receiver on a vessel receives the signals transmitted by the satellites, which have a

known position above the earth's surface. By receiving several different satellites' signals, a receiver can display location, speed, and direction.

Passage Planning

Passage planning is the planning of a vessel's movement from origin to destination. Passage planning is important to determine the route a vessel will take and how long it will take the vessel to get to the destination, as well as to prepare for any potential changes that may occur. A plan is usually laid on a chart well before the voyage starts. Utilizing many, if not all, of the ways to determine position, a ship constantly checks to make sure that the plan is adhered to in order to make specific deadlines.

Modern Ship Bridge Systems

Today's sailors use various means to determine their location and safe passages. Most modern ship pilot-houses utilize a computer system that is able to determine a ship's location via Global Positioning System and latitude and longitude, display the chart for the given area, and precisely record its past, current, and possible future movements, all on one screen. This has greatly simplified the process that sailors use to safely navigate from one area to another. Even with this highly advanced system, most navigators still practice and use the older, manual methods of navigation as a backup in the event of a system failure. During some of the most dangerous shipping events, such as pulling in and out of port, navigators still rely heavily on a lookout taking bearings to landmarks on the coast, while verifying with a computer-assisted system.

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See also Military Organization, Navy; Navy, Department of; Navy, U.S.; Radar; Space

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NAVY, DEPARTMENT OF

Directed by a civilian secretary of the navy, the Department of the Navy oversees the administration of the U.S. Navy, including the construction, maintenance, and repair of ships; the recruiting, training, and mobilization of navy and Marine Corps personnel; equipment and supply; and related matters. Currently, the secretary of the navy is assisted by the undersecretary of the navy and four assistant secretaries and advised by the chief of naval operations and commandant of the Marine Corps, respectively, the senior navy and marine officers. This entry discusses the history of the U.S. Department of the Navy and its structure and examines the impact of influential secretaries of the navy.

During the Revolutionary War, the Continental Navy passed through several administrative arrangements. Congress established a 3-man Marine Committee in October 1775, which it increased to 7 and then 13. Cumbersome and inefficient, Congress replaced it with a Board of Admiralty in 1779. Its three members relied on the advice of Robert Morris, the superintendent of finance, and in September 1781, Congress dissolved the board, and Morris assumed its responsibilities. Following the war, Congress abolished the navy in 1785.

Following worsening relations with France, Congress authorized six frigates in 1794, though construction delays did not necessitate the establishment of a Department of the Navy until April 30, 1798. Directed by a secretary of the navy, a member of the president's cabinet, it would oversee the navy, as well as the Marine Corps, which Congress reestablished on July 11, 1798.

President John Adams appointed Benjamin Stoddert, a Maryland merchant and shipbuilder, the first secretary of the navy. Assisted by a few clerks, Stoddert directed the fleet, secured its provisions, enlisted its personnel, and supervised the construction and maintenance of its ships, which acquitted themselves well against France (1798–1800) and later against the Barbary pirates (1801–1805). Following the War of 1812 (1812–1815), Congress established the Board of Navy Commissioners. Composed of three senior captains, it oversaw procurement, construction, and related matters.

Secretary of the Navy Abel P. Upshur recognized the need for greater technical expertise, and in 1842,

he replaced the board's three captains with five chiefs, each in charge of a different bureau: (1) Yards and Docks; (2) Construction, Equipment, and Repair; (3) Provisions and Clothing; (4) Ordnance and Hydrography; and (5) Medicine and Surgery. Over the next generation, the fleet's growing size and new technologies, as well as fighting the Civil War, forced further expansion of the naval bureaucracy. In 1862, Congress added the Bureaus of Steam Engineering and Navigation. The latter oversaw ship deployments and officer assignments. Secretary of the Navy Gideon Welles appointed the former naval officer Gustavus V. Fox as assistant secretary of the navy, though this post did not long survive the Civil War.

Beginning in the 1880s, Congress funded a tremendous naval expansion. Congress reestablished the assistant secretary position, but the navy addressed its other administrative needs through a series of ad hoc arrangements. Secretary of the Navy Benjamin Franklin Tracy formed the Construction Board in 1890 to coordinate the five bureaus involved in ship construction. During the Spanish-American War (1898), Secretary of the Navy John D. Long formed a temporary board of officers to advise him on strategy. In 1900, he created the General Board, an advisory body whose officers studied matters from personnel policy to new technologies.

To achieve greater coordination among the bureaus, whose chiefs operated with great independence, Secretary of the Navy George von Lengerke Meyer in 1909 appointed four naval officers as aides to assist him, one each for operations, personnel, material, and inspections. These grew into a naval staff system under his successor, Josephus Daniels, who appointed Admiral William S. Benson the first chief of naval operations (CNO) in 1915. The CNO became the secretary of the navy's principal adviser and directed the Office of Operations, which absorbed a host of administrative and planning duties. The bureaus, though, remained, and in 1921, Congress added the Bureau of Aeronautics.

The Navy Department functioned well through World War II, but the war's end found air force leaders campaigning not only for the separation of the air force from the army but also for control of all aviation including naval aviation. Army leaders, in turn, hoped to absorb the Marine Corps. The 1947 National Security Act established the air force as an independent service and subordinated the secretaries of the navy, army, and air force to the secretary of

defense, who led the Department of Defense. Yet tensions between the services remained and exploded in 1949 when Secretary of Defense Louis Johnson cancelled construction of an aircraft carrier, signaling the navy's diminishing role in national defense and a commensurate reduction of its budget. Secretary of the Navy John L. Louis resigned in protest, and CNO Louis E. Denfield unsuccessfully led what the press labeled the "revolt of the admirals."

The Korean War helped restore the navy's fortunes, but the Navy Department's purview continued to narrow. It disbanded the General Board in 1951, and growing centralization under the Department of Defense led to the elimination of the navy's bureaus. Instead, four assistant secretaries directed manpower and reserve affairs, installations and logistics, financial management, and research and development, while six deputy chiefs for surface warfare, submarine warfare, air warfare, logistics, plans and policy, and manpower served under the CNO.

Navy secretaries found little role in policy making until President Ronald Reagan's arms buildup in the 1980s gave voice to Secretary of the Navy John Lehman, who announced a "new maritime strategy." Rather than the defensive sea control and convoy protection advocated by his immediate predecessors, Lehman emphasized offensive action against the Soviet Union in the event of war. The Soviet Union's collapse made the mission irrelevant not long after Lehman articulated it. His successors have since struggled to articulate a clear mission for the navy in the post-Cold War world. Beginning with H. Lawrence Garrett III (1989–1992), they have emphasized waging war "from the sea," that is, using naval power to intervene in regional conflicts, a mission further articulated and clarified under Secretaries of the Navy John H. Dalton (1993–1998), Gordon England (2003–2005), and Ray Mabus (2009 to the present).

Stephen K. Stein

See also Defense, Department of; Military Organization, Navy; National Security Act; Navy, U.S.; U.S. Naval Institute

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NAVY, U.S.

The U.S. Navy boasts the world's largest fleet with 288 warships and submarines (as of March 2011) and more than 3,700 aircraft. Slightly more than 320,000 personnel serve on active duty in the navy and roughly another 100,000 are in the Reserves. It is the only navy with global reach, able to project power to any part of the world. The U.S. Marine Corps, which is also administered by the Navy Department, includes slightly more than 200,000 active-duty personnel and about 40,000 reservists. This entry discusses the history of the U.S. Navy, including its wartime and peacetime missions and the role of the navy today.

Compared with the U.S. Army, and later the U.S. Air Force, peacetime operations have significantly shaped the navy. Its ships policed the seas, protecting American commerce and helping it expand into new markets, and conducted diplomatic and exploratory missions. In war, the navy protected the American coast and attacked enemy commerce. As the navy expanded in the 19th century, it improved its amphibious warfare capabilities and ability to project power within the American hemisphere, a mission encouraged by Alfred Thayer Mahan, who called on Americans to “look outward.” In the 20th century, the U.S. Navy became the largest navy in the world, able to project power to the furthest corners of the planet. Its peacetime missions remained important and ranged from economic blockades and commerce protection to humanitarian missions. In the past 20 years, American warships have rendered vital aid in more than 100 crises, including tsunamis in Indonesia (2004) and Japan (2011) and the 2010 Haitian earthquake.

The Sailing Era

During the American Revolution (1775–1783), Americans capitalized on their rich maritime heritage

to construct a regular navy and outfit almost 3,000 privateers. The latter captured about 2,200 British merchant ships during the war. Apart from a successful raid on Britain's Caribbean possessions, the few dozen Continental Navy warships raided British commerce and conducted diplomatic missions. Their few successes, particularly that of John Paul Jones, who captured the British frigate *Serapis*, provided a heroic model for future naval officers. Members of Congress, though, saw little need for a navy and sold its remaining warships in 1785.

Increasing tensions with Britain and France and the depredations of pirates convinced Congress to recreate the navy in 1794 and authorize the construction of six frigates. The fleet grew slowly afterward and operated successfully against French warships and privateers in the Quasi War (1798–1800) and pirates in the Mediterranean (1801–1805). Despite some successes, the U.S. Navy fared poorly against Britain's large fleet in the War of 1812. Americans again relied on privateers to harass enemy commerce, while they rushed new warships to completion. Victories on Lake Erie (1813) and Lake Champlain (1814) resulted from bold American leadership and superior shipbuilding capability on the Great Lakes. Similar boldness, along with the heavy armament of American frigates, produced victories in several single-ship engagements in the Atlantic. Yet the nation's outnumbered warships could not prevent the Royal Navy from sailing where it pleased and landing troops that burned Washington, D. C., in 1814.

After the war, the navy laid up its largest warships, while frigates and smaller vessels resumed their distant patrols. American warships patrolled the African coast to halt the slave trade and protected American commerce, sometimes violently, as in 1832 when the American frigate *Potomac* retaliated for the murder of several dozen American merchant seamen in Sumatra by bombarding the village where the murders occurred. Naval officers secured trade treaties with the Ottoman Empire and Thailand, and Lieutenant Charles Wilkes led an expedition to Antarctica. The 1853 expedition of Commodore Matthew Calbraith Perry to Japan proved the culmination of American naval diplomacy in the antebellum years.

The navy improved its administration by creating five specialized bureaus to oversee technical matters in 1842. The Naval Academy opened in Annapolis, Maryland, in 1845, ending the days in which officers

learned their entire craft at sea. Improved education for sailors lagged that of officers, though the navy abolished flogging in 1850. An increasing number of its warships boasted steam engines, and during the Mexican-American War (1846–1848), these blockaded Mexico's coast and supported the conquest of California and the march of General Winfield Scott's army from Veracruz to Mexico City.

The majority of the navy's personnel remained loyal during the Civil War (1861–1865), providing a foundation for the dramatic expansion of the fleet from 90 to 671 ships. The 1862 engagement between the *Monitor* and the *Virginia* confirmed the importance of steam power and armor for warships, and the placement of the *Monitor*'s main armament in a revolving turret became standard. Union warships led amphibious expeditions that seized New Orleans (1862) and other ports along the southern coast, and their blockade slowly strangled

Confederate trade. In the western theater, Union gunboats gained control of the nation's interior waterways, split the Confederacy, and opened the heartland to invasion.

A Fleet of Iron and Steam

After the Civil War, Congress authorized few new ships, and the fleet declined in size and quality. The growing technological gap between the U.S. Navy and European fleets inspired a host of reform and modernization proposals from officers who found a voice for themselves in the *Proceedings*, the journal of the U.S. Naval Institute. Among the most influential were Stephen B. Luce and his protégé Alfred Thayer Mahan, who guided a cohort of young officers. Together, they lobbied for the modernization of the fleet and the reorientation of American naval strategy from commerce raiding and coast defense



USS *Michigan* and other American ships in Veracruz harbor during the U.S. occupation of Veracruz, Mexico, which took place during the Mexican Revolution. Photo taken in 1914.

Source: Bain News Service. Courtesy of the Library of Congress.

to sea control. Rather than small, fast cruisers, the navy should build large battleships and concentrate these to gain control of the seas through decisive fleet engagements.

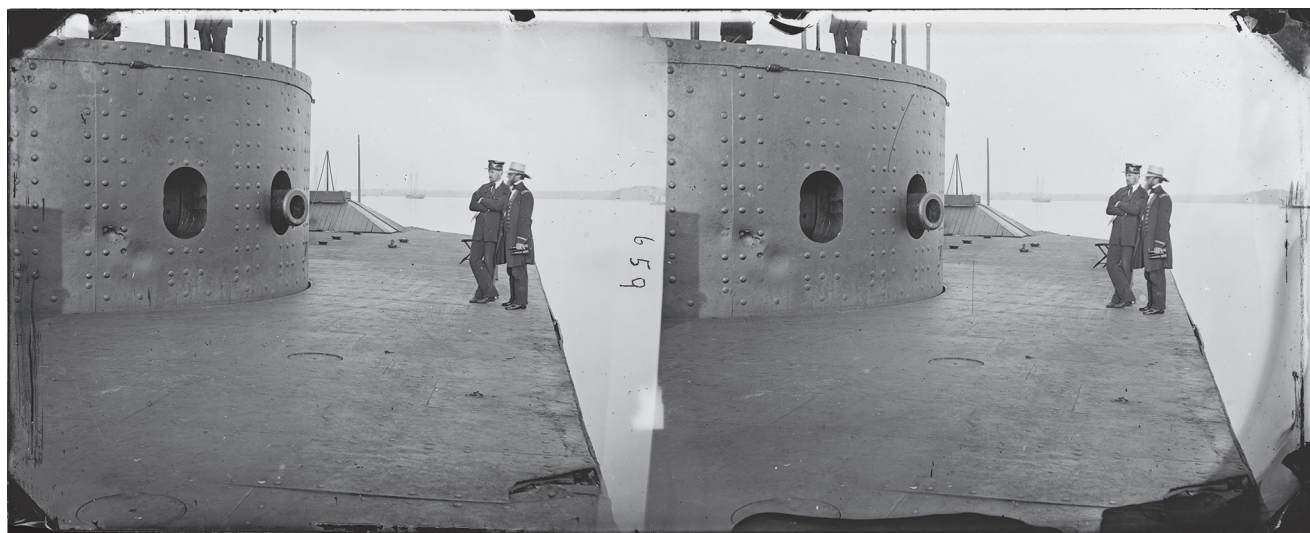
Members of Congress increasingly agreed, funding the construction of a growing number of large warships after 1890. It was a fleet for an imperial era and supported an aggressive American foreign policy in the Caribbean and Central America. American squadrons overwhelmed their opponents in the Spanish-American War (1898) and supported military operations in Cuba and the Philippines. Over the next generation, this new navy deterred European intervention in the Americas, secured Panama as an American protectorate (1903), and demonstrated its global reach in the round-the-world voyage of the Great White Fleet (1907–1909). The navy added bases in Hawaii, the Philippines, and Cuba. The completion of the Panama Canal in 1914 allowed it to shift ships quickly between the East and the West coasts. Construction of ever-larger battleships continued, and the United States entered World War I in 1917 with a fleet second in size only to Great Britain. Two years earlier, Congress created the post of chief of naval operations (CNO) to direct the navy.

During World War I, American warships helped enforce the Allied blockade of Germany, laid 70,000 mines across the North Sea from Norway and

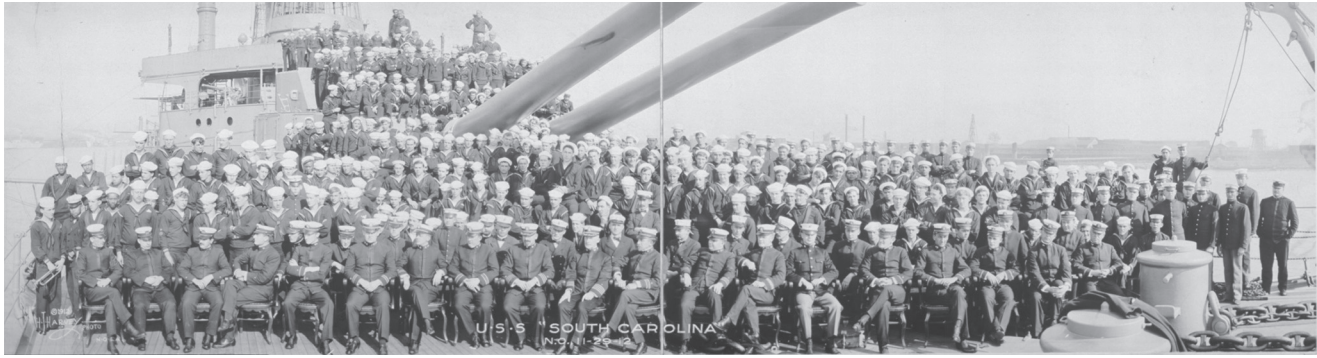
Scotland to contain German submarines, escorted convoys, hunted German submarines, and ferried hundreds of thousands of American troops to Europe. Reorganized in 1915, the Coast Guard played an important role in this campaign, as it would in future wars when it operated under navy orders.

After the war, the United States led the effort to prevent another naval arms race and secured agreement by the remaining naval powers to the Washington Naval Treaty (1922). This established a strict ratio of fleet size among the United States, Britain, Japan, France, and Italy and limited the number and size of battleships and aircraft carriers in their fleets. The 1930 London Treaty extended these limitations to cruisers, but other interwar arms limitation efforts failed. Nonetheless, the economy-minded Republican presidents of the 1920s restricted naval funding and kept the fleet well below treaty limits. President Franklin Roosevelt reversed these policies in the 1930s and enlarged the fleet as war became likely. By 1940, the United States had 488 new warships under construction, and the 1940 Naval Act authorized another 200.

Between the two World Wars, the U.S. Marine Corps developed doctrine for amphibious warfare and made this its primary mission and the foundation of its relationship with the navy. The navy, which acquired its first airplanes in 1911, continued



This stereoscopic image shows the light damage caused to the turret of the ironclad USS *Monitor* during its fight with the Confederate ironclad CSS *Virginia*, March 9, 1862, at the Battle of Hampton Roads—the first battle of two ironclad warships.
Source: Photo by James F. Gibson. Courtesy of the Library of Congress.



Officers and crew, USS *Mount Vernon*, October 30, 1918.

Source: H. J. Harvey. Courtesy of the Library of Congress.

to expand its aviation program as a succession of air-minded officers overcame the reservations of senior officers and congressional emphasis on battleship construction. Well before the Japanese attack on Pearl Harbor on December 7, 1941, the American fleet reflected the importance of air power, which it embodied in six new aircraft carriers.

For the U.S. Navy, World War II began before Japan attacked Pearl Harbor. Marines occupied Greenland and Iceland, and by mid-1941, American warships patrolled the Atlantic and escorted convoys partway to Britain. American warships occasionally clashed with German submarines, and these launched devastating attacks on American shipping following Germany's declaration of war on the United States on December 11, 1941. The Allies had gained the upper hand in the Atlantic by May 1943, thanks to new tactics and technologies and tremendous American construction of cargo ships and warships. A growing volume of American troops and supplies reached Britain safely, and Allied armies launched successful amphibious invasions of North Africa, Sicily, Italy, and France.

In the Pacific, American fleets halted the Japanese advance at the Battles of the Coral Sea (May 7–8) and of Midway (June 3–6). These victories allowed American forces to take the offensive, invading Guadalcanal and then advancing up the Solomon Islands and along the New Guinea Coast. On November 20, 1943, U.S. Marines invaded Tarawa, beginning a drive across the Central Pacific. The United States seized key islands in the Gilberts, Marshalls, and Marianas. The latter provided bases for B-29 bombers that devastated Japanese cities. The navy continued its advance, landing army

and marine forces in the Philippines, Iwo Jima, and Okinawa. Concurrently, American submarines attacked Japanese shipping. By the war's end, little remained of either the Japanese navy or merchant marine. In contrast, the U.S. Navy outnumbered all the world's navies combined, with 1,194 warships of destroyer size and larger, 1,256 amphibious transports, and 41,000 aircraft.

The Cold War Navy

The navy demobilized rapidly after the war, falling to 300 warships. Critics questioned the need for a navy and argued that air power and nuclear weapons would win future wars. Air force leaders hoped to absorb naval aviation, while army leaders suggested eliminating the Marine Corps. Fierce lobbying produced a compromise in the National Security Act of 1947, which gave the air force its independence and created the Department of Defense with separate secretaries for each of the three services who reported to the new secretary of defense.

Yet interservice disputes exploded in 1949 when the newly appointed secretary of defense, Louis A. Johnson, cancelled construction of a new aircraft carrier. Secretary of the Navy John L. Sullivan resigned in protest, and the press dubbed the acrimonious protests of the navy's senior leaders the "revolt of the admirals." Air force and navy leaders traded barbs over the respective capabilities of carrier aviation and the air force's B-36 bomber, while Johnson threatened to reduce the navy to only four aircraft carriers. Only growing tensions with the Soviet Union and the Korean War forced the restoration of the navy's funding.

The navy proved critical to UN operations in Korea (1950–1953). An amphibious landing at Inchon sent the North Korean army reeling northward, and naval forces evacuated UN troops from Hungnam after the Chinese intervened. Navy ships secured the sea, transported supplies, and supported troops with naval gunfire and air strikes. More often during the Cold War, the navy conducted operations short of war, protecting Taiwan during repeated crises, delivering marines to Lebanon (1958), and blockading Cuba during the Cuban Missile Crisis (1962).

The United States launched an ambitious program to build nuclear-powered ships. Beginning with the 1955 launch of the USS *Nautilus*, nuclear-powered submarines replaced older diesel-electric boats. A handful of surface warships received nuclear power plants, as did a growing number of aircraft carriers, including the USS *Enterprise* (1961), USS *Nimitz* (1975), and nine additional *Nimitz*-class carriers commissioned between 1977 and 2009. In 1962, the navy launched its first submarine armed with ballistic nuclear missiles. These became an important part of the nation's nuclear force, the Triad, composed of air force bombers and land- and submarine-based missiles designed to deter and, if necessary, fight a nuclear war. The navy's officer corps remained divided among aviators, submariners, and those who sailed surface warships, with aviators generally in ascendance and crafting strategies that emphasized offensive carrier operations.

During the Vietnam War, navy aircraft carriers launched regular air strikes, while smaller warships patrolled South Vietnam's coast and rivers to prevent enemy troop and supply infiltration. The war's cost and postwar inflation curtailed naval building, and the fleet fell to 336 ships and submarines by 1978. Yet it remained active in the 1980s, including the failed effort to rescue American hostages in Iran launched from the USS *Nimitz* (1980), the support of interventions in Lebanon and Grenada (1983), two clashes with Libyan aircraft and warships (1981 and 1986), and protection of shipping in the Persian Gulf during the Iran-Iraq War (1980–1988).

President Ronald Reagan and Secretary of the Navy John Lehman vowed to reinvigorate the navy and increase its size to 600 warships and submarines, but growing budget deficits made this difficult. The fleet peaked at 594 in 1987 and then

declined. Lehman resigned in protest over reduced budgets, as did his successor, James Webb, in 1988. As the navy retired older ships, the fleet fell to 471 ships in 1992.

Advancement Opportunities for Women and African Americans

In the 20th century, the navy generally lagged behind the other services in offering opportunities to women and African Americans, particularly the Coast Guard, which ended the combat exclusion for women in 1973. Only in the 1970s did the first African Americans and women achieve the rank of admiral, an important landmark in their struggle for inclusion and equal treatment.

African Americans accounted for about one sixth of the navy's personnel in the War of 1812 and the Civil War, though none served as officers. After the Spanish-American War, the navy increasingly limited opportunities until African Americans served only as mess stewards. Recruitment of African Americans expanded during World War II, and for the first time, some were commissioned as officers. Mimicking the army's Black regiments, the navy crewed the destroyer escort USS *Mason* and a few other small warships almost entirely with African Americans. The navy slowly desegregated after the war, but racial tensions persisted, highlighted by race riots that broke out on several ships in 1972. These forced the navy to update its policies, a job eagerly embraced and effectively executed by new CNO Admiral Elmo Zumwalt.

Opportunities also expanded for women in the 20th century. The navy established the Nurse Corps in 1908, and women briefly served in shore positions during the First World War. Created in 1942, the WAVES (Women Accepted for Volunteer Emergency Service) served in a growing number of positions during World War II, eventually totaling 78,000. The navy began training female pilots in 1973, the Naval Academy accepted its first female midshipmen in 1976, and Congress authorized women to serve aboard noncombatant ships in 1978 and warships in 1994. Opportunities steadily expanded afterward, culminating in a 2010 Navy Department decision to allow women to serve on submarines. Complaints of sexism, though, persisted and were highlighted by charges of hazing at the Naval Academy and a series of incidents at the Tailhook Convention of



Captain Maureen Farren took command of the USS *Mount Vernon* (LSD-39) in June 1998. She was the first U.S. Navy woman to command a combatant ship. This photo shows the then navy lieutenant Farren, officer in charge of the surface effect ship SES 200, posing in front of the ship in dress uniform wearing the Navy Achievement Medal.

Source: Department of Defense photo (photographer unknown).

naval aviators during which two dozen women were harassed in 1991.

After the Cold War

The end of the Cold War did not lessen the navy's missions, which CNO Admiral Carlisle Trost (1986–1990) listed as strategic deterrence, forward defense, sea control and maritime protection, power projection to crisis areas, and supporting American allies around the world. Following Iraq's August 1990 invasion of Kuwait, American warships including two aircraft carrier battle groups deployed to the

Persian Gulf to establish a blockade and deter the Iraqi leader Saddam Hussein from invading Saudi Arabia. Sealift carried 90% of the cargo for the allied buildup. Naval air and cruise missile attacks helped open Operation Desert Storm, the American-led liberation of Kuwait, while the threat of amphibious invasion distracted Iraqi commanders. After the war, U.S. Navy aircraft helped patrol the no-fly zones over Iraq and supported military operations in Somalia (1992–1993), Haiti (1994–1995), Bosnia (1995), and Kosovo/Serbia (1999–2000).

American warships rapidly redeployed to threatened areas following the September 11, 2001,

terrorist attacks on the World Trade Center and Pentagon. Naval air and missile strikes supported operations against the Taliban in Afghanistan the following month, and special operations forces and marines deployed into Afghanistan from navy aircraft carriers and amphibious ships. Following the Taliban's defeat, navy personnel occupied important positions in support and reconstruction efforts in Afghanistan. Navy Special Forces operated against insurgents and led the raid into Pakistan that killed the al Qaeda leader Osama bin Laden in 2011.

Navy forces played a similar role in the March 2003 invasion of Iraq. Navy cruise missile strikes again opened the campaign, along with strikes by air force stealth aircraft, and navy aircraft participated in the air campaign that shattered the Iraqi command system and supported the advance of U.S. forces, which included the 1st U.S. Marine Division. After the collapse of Saddam Hussein's regime, navy personnel joined the reconstruction effort in growing numbers. By 2010, 14,500 sailors served on land in Iraq and Afghanistan, outnumbering those at sea in the region.

Following the Soviet Union's demise, navy leaders abandoned their century-long emphasis on fighting fleet actions at sea and instead emphasized projecting power ashore from the sea and closer cooperation with the Marine Corps, which described its role as "operational maneuver from the sea." Continuing revisions of strategic statements emphasized this partnership between the navy and Marine Corps, placing the two on almost equal footing. The inclusion of the Coast Guard in *A Cooperative Strategy for 21st Century Seapower* (2007) marked a similar increase in that service's status. The strategy emphasized forward presence, deterrence, sea control, power projection, and humanitarian assistance—something never before considered a core mission.

Wars in Afghanistan and Iraq and rising construction costs forced the continuing reduction in fleet size, which navy leaders hoped to slow by designing ships to last 40 years and aircraft carriers to serve 50 years. Vice Admiral Arthur Cebrowski, president of the Naval War College (1998–2001), hoped "network centric warfare"—leveraging advanced computer and information technologies—would enhance the navy's effectiveness. CNO Admiral Michael Mullen (2005–2007), appointed chairman of the Joint Chiefs of Staff in 2007, accepted the fleet's continued decline but envisioned a 1,000-ship

navy to which "all freedom-loving" maritime nations would contribute to police the seas.

The 2011 establishment of a no-fly zone to support Libyan rebels opened with naval air and missile strikes that demonstrated the U.S. Navy's ability to rapidly respond to crises. While critics continue to decry its diminished size, it remains the world's largest, outnumbering its rivals and particularly dwarfing them in tonnage thanks to its 11 large aircraft carriers that remain unmatched by any potential rival.

Stephen K. Stein

See also Aircraft Carriers; Battleships; History, Naval; Approaches to; Military Organization, Navy; Navy, Department of; Strategy, Naval

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NAVY LEAGUE

The Navy League is a nonprofit advocacy organization that works to educate Americans about the importance of sea power to the nation and promote the needs of the U.S. Navy, U.S. Marine Corps, merchant marine, and Coast Guard through education, lobbying, grassroots promotions, and other public relations activities. Over its century-long history, it has lobbied for naval expansion, provided comfort packages and other supplies to sailors and marines during war, raised funds for maritime museums, and engaged in a host of grassroots educational activities. Unlike many similar organizations, the Navy League bars serving officers of the armed forces from membership, and this has allowed it greater independence to challenge government policy. This entry describes the history and functions of the Navy League.

Origin

Inspired by the patriotic naval leagues founded in Britain (1894), Germany (1898), and other countries, members of the New York State Naval Militia, Naval Academy Alumni Association, and other naval advocates formed the Navy League of the United States in December 1902. They opened league membership to any American regardless of race, gender, or political affiliation, elected the former secretary of the navy Benjamin Franklin Tracy as president, and issued a succession of pamphlets urging continued naval modernization and expansion.

The league grew slowly to 4,769 members in 1907, which disappointed founders who expected rapid growth to match the German league's 500,000 members. The voyage of the Great White Fleet (December 16, 1907, to February 22, 1909) presented the league an opportunity. On its return, the league published *Patriotic Reasons for the Navy League of the United States* and sent the fleet's commander, the recently retired admiral Robley Evans, on a nationwide tour to recruit members. The league also awarded honorary memberships to the former president Theodore Roosevelt, six former secretaries of the navy, and other prominent navalists who helped build its membership to 7,000 by 1911.

World War I

World War I proved a boon for the league, and membership soared, particularly after a German submarine sank the *Lusitania*. Mimicking the initiatives of the growing number of preparedness organizations, the league organized an unofficial naval reserve of private yachts and encouraged the training of voluntary naval reservists. It launched *Sea Power* magazine to promote its agenda and successfully championed the 1916 Naval Act, which included most of its platform including 156 new ships, a naval reserve, and merit-based promotion.

After the United States declared war, the league assisted the navy's recruiting efforts by distributing more than a million enlistment pamphlets, stickers, and handbills and provided aid and comfort to sailors, marines, and their families. It provided knitting instructions to more than 300,000 women who produced more than two million wool garments for distribution to sailors and marines in addition to books, playing cards, tobacco, toothbrushes, and other items.

Interwar Years

The league continued this work throughout the war despite an acrimonious dispute with Secretary of the Navy Josephus Daniels that resulted in Daniels banning all league volunteers from navy installations. It ended the war in debt, and its rapidly declining membership forced it to cease publishing *Sea Power*. To raise public awareness, the league organized the first Navy Day celebration on October 27, 1922, Theodore Roosevelt's birthday. Navy ships hosted thousands of visitors in ports around the nation, and it became an annual event. A million people toured naval vessels the following year, and these annual celebrations often resulted in editorials favorable to the navy.

While the league argued against arms limitation, it accepted the restrictions of the Washington Naval Treaty (1922) and London Naval Treaty (1930) and urged Congress to fully fund the navy treaty and maintain parity with Britain's navy. Yet the U.S. Navy remained well below treaty limits, and the league denounced President Herbert Hoover for "abysmal ignorance" and neglecting the navy. Pacifists, in turn, linked the league to a conspiracy of "merchants of death."

The New Deal and World War II

During the New Deal, league leaders successfully argued that shipbuilding would produce jobs, and they helped secure passage of the Vinson-Trammell Act (1934), which funded sufficient construction to bring the navy to treaty limits. Corporate donations funded the renewed publication of *Sea Power*. The league warned against Japanese imperialism, attacked isolationists, encouraged closer relations with Britain, and helped secure passage of large naval appropriations in 1938 and 1940. After the attack on Pearl Harbor, league members, whose number reached 18,781 in 1945, made clothing for sailors and provided them with books, athletic equipment, cigarettes, and similar items. They organized blood drives, arranged entertainment for sailors and marines, and spent time with those convalescing in hospitals.

Cold War

After the war, the league unsuccessfully opposed the National Security Act of 1947, which unified the armed services under the Department of Defense.

When senior navy leaders denounced Secretary of Defense Louis Johnson's cancellation of the aircraft carrier USS *United States*, the league mobilized to support them. Like Daniels, Johnson retaliated by restricting league members from navy ships and installations.

The league reoriented to work more with industry and the youth during the Cold War. It created the Navy Buddy Program and later the Sea Cadets to educate teenagers about maritime affairs. The league supported museums, helping raise funds for the Naval Aviation Museum in Pensacola, Florida, and the installation of a captured German submarine at the Chicago Museum of Science and Industry. It also created an annual Sea-Air-Space Exposition to showcase new technology. Membership rose steadily and remained more than 70,000 after 1990.

Conclusion

Rarely able to influence legislation on its own, the league regularly provided important publicity and support to pro-navy presidents and congressmen. It generally left policy making to navy leaders and proved unable to challenge the navy's civilian leaders. Often, it has served as an unofficial public relations agency for the navy, achieving its greatest success when aligned with sympathetic presidents and powerful congressional allies.

Stephen K. Stein

See also Association of the United States Army; Marine Corps League

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Website

Navy League: <http://www.navyleague.org/>

NAVY NURSE CORPS

In 1908, the U.S. Congress passed a bill creating the Nurse Corps (female) of the U.S. Navy. In the 19th century, male enlisted men, called loblolly boys, had

assisted navy medical officers, but in 1861, the title and rating became "nurse." This entry discusses the history of the Navy Nurse Corps, with a focus on its growth, milestones, and leaders.

Early History

During the U.S. Civil War, five African American women served as nurses along with male nurses and nuns of the Holy Cross School of Nursing on the *Red Rover*, a paddle-wheel steamer designated as the navy's first hospital ship. Before being taken out of service in 1865, the *Red Rover* cared for 2,947 sick and wounded men along the Mississippi River.

Although not enlisted in the navy, trained female nurses served patients at the Naval Hospital, Norfolk, during the Spanish-American War of 1898, and other female contract nurses employed by the navy worked at the Naval Hospital Brooklyn, and at Key West, Florida. The navy also purchased the hospital ship *Solace*, which made several trips to Cuba with medical personnel including eight trained nurses from Mills School of Nursing in New York. When the Spanish-American War ended, the Navy Medical Department established the U.S. Navy Hospital Corps and began employing trained nurses in all of its hospitals.

To provide a corps of skilled navy nurses, in 1908, Congress created the Nurse Corps (female) to consist of one superintendent, to be appointed by the secretary of the navy, and of as many chief nurses, nurses, and reserve nurses as needed. Esther Voorhees Hasson, a former army contract nurse, became the Navy Nurse Corps' first superintendent and set high standards for the first 20 women selected for the new nurse corps. Known as "The Sacred Twenty," these women met and overcame the numerous challenges of being accepted in the male world of navy medicine.

In 1911, Lenah Sutcliffe Higbee became the second superintendent and guided a nurse corps then totaling 86 women on duty in hospitals in Washington, D.C.; Philadelphia, Pennsylvania; Norfolk, Virginia; Annapolis, Maryland; Brooklyn, New York; Mare Island, California; Canacao, Philippine Islands; and Guam. Navy nurses served briefly in 1913 on the presidential yacht *Mayflower* and cruiser *Dolphin*.

Expanding Role: World Wars I and II

By the time the United States entered World War I, the Navy Nurse Corps had increased to 160 nurses.

To support the war effort, the navy appointed reserve nurses who worked alongside regular navy nurses in hospitals and clinics and trained enlisted medical personnel.

In September 1917, the first navy nurses to serve overseas sailed from the Brooklyn Hospital Unit to Brest, France, on the USS *Henderson*. The navy also deployed nurses to base hospital units in Scotland and Ireland, and navy operating teams, including nurses, cared for casualties near the combat front lines. At home, navy nurses tended patients and trained hospital corpsmen at 25 naval hospitals. A total of 1,551 navy nurses served in navy hospitals and on hospital ships during the war. Eleven regular navy nurses and eight reserve nurses died on active duty during the war, over half from influenza. Four, including Superintendent Higbee, received the Navy Cross for their wartime service.

During the interwar period, the Navy Nurse Corps decreased in size to 335 nurses, but they remained an important part of navy medicine. Navy nurses were stationed not only in hospitals in the United States but also in the Virgin Islands, Guam, Samoa, and on the hospital ship *Relief*.

Although some graduate African American nurses inquired about being appointed navy nurses, none were accepted until early 1945 when both the Army and the Navy Nurse Corps opened their ranks to Black nurses.

On the eve of the Second World War, Chief Nurse Sue S. Dauser became the fifth superintendent of the Navy Nurse Corps, then numbering 787 nurses. When World War II began, 95 navy nurses were serving at overseas bases and on hospital ships, the majority in the Pacific. The navy had 31 nurses on staff at the Pearl Harbor Naval Hospital, on the USS *Solace*, and deployed to the Philippine Islands. Eleven navy nurses led by Lieutenant Commander Laura M. Cobb were taken prisoner when Manila surrendered to the Japanese. Five other nurses serving on Guam also fell prisoner to the Japanese.

The nurse corps expanded rapidly to meet the needs of a global war assisted by the new Cadet Nursing Program. In early 1945, navy nurses trained in air evacuation began duties as flight nurses, and at the end of June 1945, the corps had 11,086 nurses on active duty serving at 40 hospitals, 6 hospital corps schools, and 176 dispensaries in the United States and on board 12 hospital ships. During World War II, the navy assigned nurses to units in

Africa, Alaska, the Aleutian Islands, the Admiralty Islands, Italy, the Marianas, New Caledonia, Newfoundland, Australia, New Zealand, Bermuda, the Canal Zone, Cuba, England, Hawaii, the New Hebrides, Puerto Rico, the Russell and Solomon Islands, and Trinidad. Although no navy nurses were killed in combat, 37 navy nurses lost their lives during the war.

Increasing Status: After World War II to the Vietnam War

In 1946, many navy nurses were demobilized, but others continued on duty overseas. That summer nine navy nurses joined other medical personnel on the island of Kwajalein to support servicemen and scientists deployed to Bikini Atoll as part of Operation Crossroads, the first postwar atom bomb tests.

A year later, Congress passed a law making the Navy Nurse Corps a staff corps of the navy with permanent rank. Now considered navy officers, the nurses received a new insignia, and in May, Secretary of the Navy James Forrestal appointed Nellie Jane DeWitt the first director of the new Navy Nurse Corps with the rank of captain.

Postwar reduction in personnel left the Navy Nurse Corps with only 1,950 women on active duty when the Korean conflict began. The need for more nurses resulted in the recall of experienced reserve nurses to active duty.

Three hospital ships, *Repose*, *Haven*, and *Constellation*, were deployed to Korean waters, but many battlefield casualties went to the former Yokosuka, Japan, Naval Dispensary, now a Naval Hospital with a full medical staff including 200 navy nurses. Navy nurses also served on board ships of the Military Sea Transportation Service carrying troops to Korea and casualties back to the United States. By July 1951, 3,328 navy nurses were serving on board three hospital ships, 29 navy hospitals, 78 station hospitals and dispensaries, and four Hospital Corps schools. Two years later, a truce ended the conflict in Korea during which navy nurses had served with distinction. Three received the Navy Bronze Star and six a Commendation medal.

Navy hospital ships continued to ply the Pacific following the Korean conflict. In September 1954, following the French defeat at Dien Bien Phu, the USS *Haven* embarked more than 700 French

patients in Saigon, French Indochina. At home, in 1961, the first navy nurse graduated from the Naval Postgraduate School at Monterey, California, with a master of science degree, and others soon followed.

When the United States committed additional military advisers to Vietnam in 1963, the navy assigned two nurses to assist medical personnel at a former army dispensary clinic in Saigon. Before the U.S. Naval Station Hospital, Saigon, returned to the army in March 1966, a total of 20 navy nurses had served there caring for casualties from the Vietnam conflict. Nurses then transferred elsewhere, including a new Naval Hospital at Da Nang, Vietnam, and the hospital ships *Sanctuary* and *Repose*. Navy nurses also provided medical care for casualties, as well as the dependent wives and children of naval personnel, on Military Sea Transport Service ships and in navy hospitals in Yokosuka, Japan, on Guam, and back in the United States.

In a milestone for navy nursing, in 1964 the secretary of the navy approved a change in the requirements for a commission in the Navy Nurse Corps allowing male nurses to join the all-female corps. George M. Silver was the first male nurse, commissioned as an ensign in August 1965. Although not at its authorized strength, by the end of 1967, the Navy Nurse Corps had grown to 2,453 officers.

When Vietcong forces launched the Tet Offensive in 1968, the Navy Hospital at Da Nang, Vietnam, Chief Nurse Mary Cameron recalled, received a tremendous number of casualties. They cared for a total of 24,000 patients in 1968, including a large number of malaria cases and prisoners of war.

The unpopularity of the war and a nursing shortage challenged the Navy Nurse Corps's leadership, but by early 1973, the last navy combat forces left Vietnam.

In April 1972, Navy Nurse Corps Director Captain Alene Durek became the first woman flag officer in the navy and in June received the star insignia of rear admiral. Nurses under her command served all over the world, including a new medical facility in Athens, Greece, in Sardinia, Asmara, Ethiopia, and on the USS *Sanctuary*. Women in the navy continued to make history. In 1975, Commander Julia O. Barnes became the first black navy nurse to receive assignment as a director of nursing services at the hospital in Guam. Three years later, the navy selected Commander Joan Bynum as the first African American woman to hold the

rank of captain, and in 1983, Captain Mary F. Hall became the first nurse to command a naval hospital, the Naval Hospital, Guantanamo Bay.

Middle East Wars and Humanitarian Missions

After almost two decades of peace, in 1990, the Navy Nurse Corps was again called on to support American forces overseas when a coalition of over 30 nations resolved to defend Kuwait and Saudi Arabia against Iraqi aggression. Over the next 5 months, in Operation Desert Shield, 200 ships brought troops and equipment to Saudi Arabia. In mid-January 1991, to support Operation Desert Storm, the navy deployed navy nurses and medical personnel to the Gulf of Arabia on two hospital ships, USNS *Mercy* and USNS *Comfort*, the latter admitting more than 700 patients.

Navy nurses participated in humanitarian missions as well. At the Naval Hospital, Guantanamo Bay, Cuba, in 1991, they participated in Operation Safe Harbor, caring for Haitian immigrants on board U.S. Coast Guard cutters and navy ships and at a camp ashore. After the September 11, 2001, terrorist attacks, the navy activated and sent the USNS *Comfort* to New York City where the ship provided sleeping quarters, meals, laundry service, and medical treatment to relief workers. *Comfort* also assisted relief efforts after Hurricane Katrina in 2005. These relief efforts have enabled the corps to determine the critical skills needed by navy nurses in wartime. According to Rear Admiral Nancy Lescavage, RN, NNC director, this led to the development of a plan to increase the numbers of nurses in anesthesia, OR (operating room), critical care, ER (emergency room), trauma, basic medical/surgical, and mental health care.

Once again called to the Middle East, in 2003, the Navy Nurse Corps deployed 600 active-duty nurses and activated approximately 400 reserve nurses in support of Operation Iraqi Freedom. They served at fleet hospitals, with U.S. Marines in Fallujah, and on the USNS *Comfort*, which received large numbers of casualties in 2003, most of them Iraqi civilians and enemy prisoners.

Following the December 2006 tsunamis and magnitude 9 earthquake in the Indian Ocean, the navy sent medical teams with the USS *Bonhomme Richard*, USS *Abraham Lincoln*, Carrier Wing Two, and USNS *Mercy* to assist in disaster relief efforts.

By March 2009, the navy had deployed a total of 2,606 medical personnel and nurses to Afghanistan in support of Operation Enduring Freedom. One of these navy nurses, 35-year-old Lieutenant Florence Choe, who volunteered to work as a mentor in the Afghan National Army, was gunned down and killed during an insurgent attack. Over the past decade, navy physicians, nurses, dentists, and corpsmen have seen duty in Cambodia, Sri Lanka, Djibouti, Baghdad, and Zambia to conduct HIV/AIDS research, Ghana for humanitarian support missions, and to Vietnam, Laos, and Cambodia with the Joint POW/MIA Accounting Command.

Navy Nurse Corps Today

On May 13, 2008, the Navy Nurse Corps celebrated 100 years of dedicated service. Today, nurses continue to serve in navy hospitals in the United States and abroad in Guam; Yokosuka, Japan; Okinawa; Italy; and Spain. Navy nurses can focus on more than a dozen practice areas including critical care, emergency trauma, maternal/infant care, anesthesia, pediatric, psychiatric, and medical/surgical. And, although most navy nurses today are not deployed on ships at sea, every U.S. Navy aircraft carrier and some larger ships have one nurse on staff. From that small group of 20 women in 1908, the Navy Nurse Corps has grown to 2,274 active-duty and 1,249 reserve nurses and become an invaluable part of the U.S. Navy.

Barbara Brooks Tomblin

See also Army Nurse Corps

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NEOCONSERVATIVES

New Conservatives (also *neoconservatives* or *neo-cons*) is a term that entered the American political discourse in the early 1970s to describe Americans who had moved from the left toward the right on the political spectrum. Often referred to as “a liberal who got mugged,” the term was coined by Michael Harrington and the editors of *Dissent* magazine to describe this shift in American political thought. Harrington was a social democrat. He chose this term to draw a contrast between his views and the views of his former comrades. His choice of words targeted those former socialists and communists who had defected; however, there were also traditional liberals who moved to the right. This entry discusses the principles and criticisms of neoconservatism, prominent neoconservatives, and the role of neoconservatism in U.S. foreign policy and in the post-9/11 world.

The inspiration for the neoconservative movement comes from Leo Strauss and Alan Bloom. Some of the early figures to be labeled as neoconservatives were Irving Kristol, Daniel Patrick Moynihan, Daniel Bell, Michael Novak, and Peter Berger. Kristol was the first to accept the label of neoconservative. He is known as the godfather of neoconservatism. The neoconservatives were disenchanted with the direction in which the United States was heading. The turbulence of the 1960s demonstrated to these men that the liberal and socialists agenda set forth for the “Great Society” was flawed.

Neoconservatives disapproved of the unequal treatment of racial minorities, women, and the poor. However, they were not content with the approach espoused by liberals and democratic socialists to address these challenges. The neoconservatives recognized the need for a limited welfare state but believed that the “nanny state” that emerged out of the Great Depression was detrimental to the collective good of society.

Neoconservatism emerged following the turbulence of the 1960s, gained significant power among the ruling elite during the 1970s, and dominated the

Reagan era in the 1980s. During the 1990s, neo-conservatives rejected the realist foreign policy of President George H. W. Bush as well as the humanitarian interventionism espoused by President Bill Clinton. Neoconservatives reemerged at the forefront of foreign policy decision making following the terrorist attacks of September 11, 2001.

General Principles of Neoconservatism

Neoconservatives do not have a manifesto or published tenets that clearly define their political platform. Neoconservatism is a political movement that continues to evolve. However, there are some general principles associated with neoconservatism that have remained more or less constant.

1. Neoconservatives believe that the “Great Society” is a “nanny state” that is detrimental to the collective good of society.
2. Neoconservatives generally support laissez-faire economics and free markets. Free markets are the best mechanism for the distribution of resources. However, they do not believe that the market will solve every problem.
3. Neoconservatives have a respect for religion and family. The 1960s counter culture was viewed as an affront to the establishment of an orderly and moral society.
4. Neoconservatives do not shy away from intervention when it comes to foreign policy. They believe that threats to democracy exist in the world, and they must be confronted. The survival of democracy depends on this approach.

Neoconservatives and American Foreign Policy

The end of the Cold War brought about a shift in the structure of the international system. A debate ensued regarding American foreign policy. The administration of George H. W. Bush was dominated by conservatives who believed that the United States should pursue a realist foreign policy—that is, the United States should avoid intervention in conflicts except in cases where American national interests are at stake.

The Clinton administration was composed of liberal humanitarians. Liberal humanitarians believe in the ideals set forth by President Woodrow

Wilson regarding democracy promotion and human rights. Liberal humanitarians believe that American power should be used to intervene in war-torn areas throughout the world to promote human rights.

Neoconservatives in the 1990s rejected both of these approaches. Consistent with the tradition of supporting intervention, most neoconservatives believed that the United States should use its power abroad to promote democracy. However, the rationale behind American intervention was not based on humanitarian grounds or a desire to spread democracy just to spread democracy. Rather the neoconservatives argued that democracy promotion was the best way to maintain American’s position as the world superpower.

Additionally, neoconservatives are ambivalent toward international organizations. In their view, the effectiveness of international organizations is limited. Unilateralism is the best approach to safeguard American interests. Some of the figures who supported this approach to foreign policy are William Kristol, Robert Kagan, Charles Krauthammer, Lawrence Kaplan, and Richard Perle.

Neoconservatives in the Post-9/11 World

During the 2000 presidential campaign, George W. Bush advocated a realist approach to foreign policy. In his view, the peacekeeping operations and humanitarian interventions conducted under the watch of Clinton degraded the capabilities of the U.S. military to prepare for higher intensity conventional conflicts. National Security Advisor Condoleezza Rice once stated, “Carrying out civil administration and police functions is simply going to degrade the American capability to do the things America has to do. We don’t need to have the 82nd Airborne escorting kids to kindergarten” (quoted in Gordon, 2000, p. 1A).

In the aftermath of the terrorist attacks of September 11, 2001, George W. Bush reevaluated this approach. The United States was attacked on its own soil and was caught off guard. The attacks were unprecedented. George W. Bush found the position of the neoconservatives to be a rational approach in this new era of strategic uncertainty. American security and democracy faced a new threat from terrorist groups such as al Qaeda. The neoconservative position of using force to protect the United States came to dominate the debate regarding American foreign policy.

The United States acted immediately following the attacks of 9/11 and defeated the Taliban regime in Afghanistan. The Taliban had harbored al Qaeda, and the sanctuary in Afghanistan had been used to plan the attacks of 9/11. The United States now recognized that failed states and rogue regimes provided a direct threat to national security. The neoconservative approach to foreign policy provided a rational prescription to deal with this threat. After 9/11, George W. Bush was determined to take the initiative and go on the offensive against America's enemies in order to thwart future attacks.

Once the Taliban were defeated, George W. Bush and the neoconservatives assessed the threats from rouge states such as Iraq, Iran, and North Korea. The fear was that weapons of mass destruction (WMD) developed or possessed by these states would be sold or given to terrorist groups such as al Qaeda. The category of WMD includes nuclear, biological, and chemical weapons. George W. Bush and his team of policymakers determined that Iraq posed the greatest threat of these three states. The neoconservatives proposed the use of military force to eliminate the threat from Saddam Hussein's alleged nuclear arsenal. The most vocal of these individuals was Perle. Perle had connections to Ahmed Chalabi, who at the time was a leader in the umbrella Iraqi opposition group the Iraqi National Congress.

The debate leading up to the Iraq War in 2003 was contentious as many liberals and a good portion of the international community opposed the use of force by the United States. However, the neoconservatives who advised George W. Bush favored intervention to secure America. American security was more important than placating the international community. Some argued that the neoconservatives hijacked the debate and pushed George W. Bush to opt for war. Either way, George W. Bush's neoconservative approach to foreign policy came to be known as the Bush Doctrine.

Neoconservative architects of the Bush Doctrine included Dick Cheney, Donald Rumsfeld, and Paul Wolfowitz. These men were unabashed supporters of the use of American force to further American interests. Key aspects of the Bush Doctrine are preemption, unilateralism and regime change, and strengthening of military capabilities. The Iraq War in 2003 was the first case in which the Bush

Doctrine was applied. The United States attacked Iraq to preempt future catastrophic attacks that might originate from Saddam Hussein's WMD program. The plan was for the United States to use minimal military force to decapitate the Hussein regime. Support from the international community was not required to justify this undertaking.

The insurgency in Iraq that followed America's swift defeat of the Hussein regime called into question the neoconservative approach and the Bush Doctrine. Saddam Hussein did not possess any WMDs. Accordingly, opponents of the Bush Doctrine questioned the legality of preemption. The force the United States used in Iraq was not enough to secure and stabilize the country following the initial invasion. The initial failure in Iraq raised doubts about the ability of the military to impose America's will abroad. Last, some have argued that the United States squandered the support from the international community that followed 9/11. Critics argue that the United States alienated the international community by disregarding their opposition to the war.

Critics of the Neoconservative Movement

The fallout from the Iraq War gave greater voice to critics of the neoconservative movement such as Shadia Drury and Anne Norton. Drury and Norton analyze the evolution of the neoconservative movement from its origins in the ideas of Strauss. They argue that Strauss was opposed to liberalism and democracy, and the neoconservatives have twisted his ideas to conceal this fact. They assert that the neoconservative movement is part of a conspiracy by a few to use the American political system to secure power and wealth.

The neoconservative movement has also had some prominent members break ranks and criticize the movement. Michael Lind began criticizing the neoconservative movement in 1996 when he argued that the Republican Party had been hijacked by southern Republicans who sought to use culture wars to shift the tax burden from the wealthy to the middle class. Francis Fukuyama initially supported the Iraq War but broke ranks with the movement because he felt that the neoconservative approach to Middle East democratization and foreign policy was a violation of neoconservative tenets.

Jonathan R. Martin

See also al Qaeda; Bush Doctrine; Global War on Terrorism; Huntington, Samuel; Iraq War (2003); Iraq War, Planning for; 9/11 (2001); Rumsfeld, Donald

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NICARAGUA INTERVENTION (1920s)

The United States has a long history of intervening in the affairs of Nicaragua. During the 19th century, an American filibuster, William Walker, seized control of the nation for several years before being overthrown. The U.S. government's interest in Nicaragua emerged in the early 20th century to protect the Panama Canal. The U.S. Marines intervened from 1909 to 1910 and from 1912 to 1925 to install and maintain a regime favorable to the United States. Under the 1916 Bryan-Chamorro Treaty, the United States gained exclusive rights to build a canal through this Central American nation in return for

\$3 million in foreign aid. The final intervention had several legacies, most notably, installing a regime that survived into the 1970s and fostered a major symbol of leftist nationalism in the Nicaraguan nation, Augusto Sandino. This entry discusses the history of the U.S. intervention in Nicaragua from 1926 to 1933.

Background

The United States landed marines and naval personnel in Nicaragua in May 1926, in a deployment that lasted until January 1933. The intervention expanded from its original mission of protecting persons and property of Americans and other foreign citizens to thwarting what appeared to be a significant threat of Mexico establishing a bloc of revolutionary states in Central America antithetical to U.S. interests. The threat arose from a civil war caused by an ultra-conservative coup led by Emiliano Chamorro Vargas against the Conservative-Liberal coalition government of the Conservative president Carlos Solózano and the Liberal vice president Dr. Juan Sacasa. The State Department's position was not to recognize the coup. Henry L. Stimson negotiated a settlement in 1927 agreed to by all except the Liberal general Sandino. He fought a guerrilla war against U.S. forces until they withdrew.

A Turning Point in Asymmetric Warfare

Partisans under General Emiliano Chamorro, who had been president of Nicaragua from 1917 to 1921, seized Loma Fortress in 1925, giving them military control of Managua and forcing the resignation of Solózano. He fled the country along with Sacasa. Chamorro removed the Liberal members of Congress, with the remaining representatives naming him president in January 1926. The United States made clear that it would not recognize his government. A Liberal group began an uprising along the east coast, which was defeated by the government forces. The fighting threatened American property, hence the landing of U.S. Marines at Bluefields, Nicaragua, in May 1926. They withdrew in June after the danger subsided but redeployed on August 27, 1926, when General José Moncada's troops rebelled in the east in support of the exiled Sacasa. This uprising spread across the nation, including General Anastasio Somoza's force in the southwest part of the nation.

The intervention expanded from protection of property interests to a broader political one after Mexico announced support for Sacasa's claim to the presidency. The United States did not want a Sacasa government friendly to Mexico to take power. The shipment of Mexican arms to Moncada lent substance to such concerns. The new imperative for the intervention was to assert U.S. supremacy in Central America. The goal was for a negotiated end to the civil war and the establishment of a provisional government led by neither Chamorro nor Sacasa. American-sponsored negotiations in October 1926 succeeded only in convincing Chamorro to resign when it became clear that he could not secure American support. Several Liberal members of Congress returned, and the reconstituted body elected Adolfo Díaz as the president, who was recognized by the United States.

Sacasa continued his claim. He named Moncada Minister of War, who then won several battles in the east. It became clear that Díaz would fall if the United States did not take further action. Faced with letting Díaz fall or initiating combat against Liberal forces, President Calvin Coolidge elected instead to send New York lawyer and the former secretary of war Henry Stimson in April 1927 to negotiate.

Stimson won Conservative support for a plan wherein Díaz would continue as president with posts given to Liberals. An amnesty would exist for combatants who surrendered arms to American forces. A nonpartisan National Guard under American command would replace the politicized Nicaraguan constabulary. The marines in Nicaragua would be part of a brigade-strength deployment to enforce the settlement. Liberal forces agreed to the terms because of the American force. The lone significant Liberal holdout was Sandino, who declared his opposition on May 12, 1927.

Only 30 of Sandino's men stayed with him. Eventually, guerrilla successes, along with frictions caused by American forces, caused Sandino's numbers to swell to hundreds of full-time effectives, hundreds of part-time partisans, and thousands of supporters. Civilian deaths from bombing and general occupation friction contributed to anti-American sentiment.

General Logan Feland received the posting of military commander of the marine deployment on March 7, 1927, where he served until he was relieved in March 1929 by General Dion Williams. Marine

deployment varied from a low of 1,500 in late 1931 to a high of 2,800 in June 1927. Guerrilla tactics and marine force limitations restricted almost all the fighting to small unit action involving U.S. forces less than a 100 against guerrilla forces that varied from equal to somewhat larger than the U.S. forces.

The first battle between Sandino's men and the marines occurred at Ocotal on July 16, 1927. Sandino carried out a frontal attack using 60 well-armed guerrillas and hundreds of peasants with machetes, on the 39-man marine and 48-man National Guard garrisons in the town beginning about 1:00 a.m. Both sides were equipped with rifles, automatic weapons, explosives, and machine guns. The marines were supported by a two-plane morning communications flight, including strafing and a five-plane afternoon bombing run. Sandino's forces lost the chance for surprise when a sentry detected movement at 1:15 a.m. The garrisons, with U.S. air support, inflicted heavy casualties on the guerrillas. Despite attacking with courage, the undisciplined guerrillas were only able to inflict marine casualties of one dead and one wounded. Sandino took the lessons of the battle to heart, deciding to never again try to fight the marines toe to toe or in any fashion that exposed his forces to decisive air action.

Subsequent battles usually involved ambushes, or attempted ambushes prematurely detected by U.S. forces, that involved brief or desperate firefights depending on whether American forces were pinned down or not. Only rarely did Sandino's subordinates attempt attacks on defended positions. Marine attempts to send large patrols into the countryside to deal with Sandino usually failed due to uneven intelligence on the American side as against excellent intelligence of American movements and the limitation that American patrols broke pursuit to return to base once they suffered any casualties. The stalemate favored the insurgents as the United States eventually committed to a withdrawal once elections had been carried out in 1932, having promised to turn the conflict over to the Nicaraguan government and its American-trained National Guard.

Intervention for Protection of Persons, Property, and National Security

The United States often intervened in the Western Hemisphere on announced missions of protecting American lives and property. It also intervened,

sometimes explicitly, on missions of national security or even commercial interest. The original deployment occurred in Nicaragua under the guise of protecting lives and property. It evolved into one of national security with a backdrop of commercial interest. Sandino presented a challenge on all these fronts. While he was circumspect about killing American civilians, he targeted American business interests, property, and military personnel. His capture of the La Luz and Los Angeles Mining Company mines proved that the marines were incapable of protecting American property at the troop levels employed. The fact that most foreign property damage and lives lost occurred after the intervention illustrates this point. National security concern about a leftist Mexico leading a Pan-American revolutionary movement eclipsed a merely protective mission when indications were that a Sacasa government could overthrow Díaz. Thus, Washington decided to militarily support him, turning the intervention into one supporting American hegemony.

While the political aspects of the Nicaraguan intervention fit the pattern of U.S. involvements, the conflict involved several novel features that had effect on subsequent insurgencies. The factors that gave rise to the changing nature of the tactics employed were the advent of air power in counterinsurgency and the reaction of the insurgents to it. Fast-moving insurgents, often cavalry, had long been able to mass at a point of numerical advantage, achieve surprise, and carry out missions and then withdraw into terrain that inhibited successful pursuit. The use of planes changed those tactics in Nicaragua, exposing massed insurgents to aerial bombardment and successful aerial reconnaissance. The replacement of the antiquated DeHavillands in 1928 increased aerial damage—inflicting potential as the new Vaught Corsair bombers increased bomb loads from 4 to 10 per plane, and five-gun, four-forward-firing, Curtiss Falcon dive bombers increased gun capacity by three. The dive bomb attack by Marine aviators on July 16, 1927, at Ocotal predated German dive bombing at the outbreak of World War II by over a decade. Aerial resupply and extraction of wounded also presaged its heavy use in future conflicts. Sandino adjusted by constantly moving, eschewing massing, restricting operations to shorter range from his camp, ordering cessation of mounted travel, and encouraging night travel.

The innovations listed above, in combination with his decision to never again try to fight a standup battle after Ocotal, or under any conditions that did not favor his men, allowed Sandino to survive successfully. Nevertheless, the failure to keep the National Guard apolitical gave its commander, Somoza, the means to achieve a dictatorship that killed Sandino after he had ceased hostilities following the American withdrawal and that closely aligned itself with the United States.

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See also Asymmetric Warfare; Counterinsurgency; Guerrilla Warfare; Haiti, U.S. Intervention in; Philippines Insurrection

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9/11 (2001)

Al Qaeda conceived of its September 11, 2001, attacks as blows against the American economy and the U.S. government. The sequenced strikes were aimed to kill victims on four commercial airliners, at New York City's World Trade Center (WTC), and in the U.S. Department of Defense's Pentagon headquarters in Arlington County, Virginia. To succeed, they exploited aviation security weaknesses—speed and surprise—capitalizing on lethality and media coverage. The hijacking of four jets, piloted as suicidal cruise missiles, allowed the planners and their subordinates to create the maximum physical and psychological impact. The result was the most deadly set of terrorist attacks in history. The 19 hijackers destroyed the pair of office buildings at the globe's financial heart, damaged the U.S. military headquarters, and killed 2,977—all civilians save for 60 police officers, 55 uniformed military personnel, 10 paramedics, and 341 firefighters—in less than 2 hours. This entry describes the techniques used

by the hijackers to take control of four passenger jets and carry out the attacks.

To capture the civilian airliners, the terrorists needed to bring enough force on board each jet to gain and keep control of it. Based on fragmentary reports, 15 attackers exclusively launched the hijackings, using either martial arts skills or weapons (mace, sharp knives, and tools) to injure and threaten passengers or cabin crew and compel pilots to turn over control of the airplanes. Before 9/11, such improvised weapons could be brought within the airport security network. In the hands of the hijackers, this level of force intimidated flight crews, who believed that their safest course was compliance when confronting a demand to surrender control of the airplane. This new method allowed the remaining 4 hijackers to begin flying the airliners, each loaded with a large amount of fuel.

Also important to the attacks' success was their speed and synchronization. The time between the first jet taking off (American Airlines Flight 11) and its impact into the North Tower of the WTC amounted to just 47 minutes. In that period, the plane flew west from Boston, was hijacked over New York State, rerouted southward, and crashed, all without explicit warning to civil aviation or military authorities. Seventeen minutes after Flight 11's destruction, United Airlines Flight 175 hit the WTC South Tower, while American Airlines Flight 77 and United Airlines Flight 93, respectively, crashed in northern Virginia and Somerset County, Pennsylvania, 35 and 60 minutes thereafter, respectively. The compressed sequence of events, using fast-moving jets flying without transponders and no announced demands to alert authorities, allowed three of four attacks to hit high-profile targets. Only on United Flight 93 did passengers receive enough warning to act in time, by cellular telephone calls. Their resulting self-sacrifice prevented the destruction of another, unspecified ground objective by forcing the airliner to crash in an empty field.

The 9/11 attacks were singular for their extensive destruction, rooted in a pair of causes: (1) airliners' speed and (2) fuel capacity. Two of the three jets in New York and Arlington struck buildings at speeds in excess of 500 miles per hour (800 kilometers per hour); all held more than 15 tons of fuel on impact. The high kinetic energy from their speed meant the airplanes created tremendous impact damage while spilling large amounts of fuel to start extensive fires.

Hundreds of occupants perished at the instant of those crashes, but the damage also developed after the impacts due to fire. While reconstructing the exact cause of events inside the WTC is necessarily difficult, these infernos fundamentally undermined the 110-story structures, leading to the collapse of the two 500,000-ton office buildings, each killing many hundreds more. A similar, if much smaller scale, structural collapse also took place at the Pentagon.

Strikes at American targets not only inflicted severe if localized damage but also had important information warfare objectives. By targeting the WTC in sequence, an organizational trademark method, al Qaeda operatives ensured that the impact of the second airliner would be televised for stunned millions to see. Reports of subsequent crashes in Virginia and Pennsylvania built the impression of a seemingly unstoppable storm of attacks with authorities powerless to resist. Fostering the impression of American defenselessness was certainly key to al Qaeda's psychological objectives. As with most terrorist attacks, the broader aims potentially included either invoking an impression of U.S. ineffectuality, creating domestic political turmoil, or provoking an aggressive, even self-defeating military response. Physical destruction was more a vehicle to prompt a misstep rather than an end in itself.

As the deadliest terrorist strikes in history, the 9/11 attacks are unique. Their execution exploited key weaknesses, surprise, speed, and publicity to create an impact beyond the physical destruction they wrought. Countering such determined attacks is very difficult indeed and remains an intelligence and law enforcement priority for the foreseeable future.

Sarandis Papadopoulos

See also al Qaeda; Bush Doctrine; Global War on Terrorism; 9/11 Attack on Pentagon; 9/11 Commission; North American Aerospace Defense Command (NORAD); Terrorism; USA PATRIOT Act; War in Afghanistan

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9/11 ATTACK ON PENTAGON

The September 11, 2001, attack on the Pentagon came as part of the deadliest terrorist strikes in American history. Understandably overshadowed by the larger scale destruction of the World Trade Center's Twin Towers, it remains an important event on its own. With 184 victims killed, the blow at the U.S. military headquarters in northern Virginia is the second most deadly terrorist strike in American history, smaller only than the simultaneous New York City attacks. This entry discusses the events of that day and rescue efforts following the attack. Despite widespread destruction and human toll, with technical and organizational problems amid the wider confusion of 9/11, the emergency response worked as well as could be hoped.

The attack began with the takeover of American Airlines Flight 77. On one of four jets taken between 8:15 and 9:30 a.m., five passengers, Khalid al Mihdhar, Majed Moqed, Nawaf al Hazmi, Salem al Hazmi, and Hani Hanjour, who boarded at Dulles Airport at Washington, D.C., hijacked the Boeing 757 over southern Indiana. Turning the airplane around, one piloted it toward Washington for about 45 minutes. Approaching the capital, the jet flew along the Potomac River at about 7,000 feet altitude, then made a turning descent over northern Virginia, crashing into the southwest face of the Pentagon just after 9:37 a.m. At the time of impact, the 100-ton 757's speed was about 529 miles per hour, or 850 kilometers per hour.

The resulting conflagration proved gruesome, for American Airlines Flight 77 still carried 18 tons of fuel. Survivors nearest the impact point recounted a tremendous fireball inside the Pentagon, channeled by concrete walls and floors. At once an acre of space on each of the two lowest floors became an inferno of wrecked offices and hallways, destroyed furnishings and equipment, fractured electrical wiring and water pipes, trapping, injuring, or killing office workers on all five floors. Dense, acrid smoke obscured survivors' vision and threatened to suffocate them. Inadvertently, the hijackers flew the jet into part of

the Pentagon largely emptied of employees to permit renovations, a piece of good fortune, limiting casualties inside the building to 125 dead and hospitalizing 106 wounded. Roughly 35 minutes after impact, a segment of the Pentagon's outer section collapsed, undermined by the impact and fire.

Most occupants evacuated immediately, although key personnel continued standing watch or strove to keep water and power flowing, while hundreds more tried to find and save those trapped or injured. Lacking orders or equipment, these last few became informal rescue teams using fire extinguishers to knock back the blaze and masks improvised from moistened T-shirts to ward off smoke. Directly confronting the fire, these rescuers saved dozens either trapped or confused by wrecked spaces. After the first half hour, however, their efforts created friction with security and firefighting personnel, with both parties committed to saving victims yet regarding the other as "civilians."

The Pentagon's location next to Washington, D.C., meant that a wealth of first responders helped the injured and fought the fire. Given the blaze's scope, the 600 firefighters, backed by hundreds more paramedics and doctors (some themselves Pentagon workers), as well as police along the roads leading to the headquarters and a U.S. Army engineer company specialized in search and rescue, was appropriate. Still, given the response's scale, complexities arose. Differing jurisdictions' radios could not transmit to one another, several agencies dispatched rescue workers before being asked, ambulances reported to the Pentagon side far from many injured, and personnel withdrew several times on hearing confused reports of another aircraft approaching. While these and the scale of the 280-acre reservation inhibited command and control, none caused further loss of life, although the withdrawal orders prolonged the fire's duration. Existing procedures under the federally sponsored Emergency Response Plan worked well, and by late afternoon September 12, the fire was declared controlled.

The month after the attack saw the Pentagon emptied of rubble, classified documents, criminal evidence, and human remains. Urban search and rescue teams shored up floors to prevent further collapse. The Dover Air Force Base Port Mortuary in Delaware identified all but five airliner and Pentagon victims by December 2001. (The other remains were too damaged to link them to a specific victim.)

Meanwhile, the Department of Defense and other agencies supported the family members of those killed, establishing an assistance center for their financial, legal, and emotional help. The large-scale and comprehensive response limited damage to the headquarters and helped minimize both death and suffering among the injured. While a grievous incident, these responses to the Pentagon attack stand as strong testament to the effectiveness of mixing improvised and preplanned answers to the terrorist-created building fire.

Sarandis Papadopoulos

See also al Qaeda; Defense, Department of; Global War on Terrorism; 9/11 (2001); 9/11 Commission; Terrorism

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9/11 COMMISSION

On September 11, 2001, two planes flew into the World Trade Center in New York City, and two other planes crashed, one into the Pentagon and another into a deserted field. More Americans died from this disaster than at Pearl Harbor in 1941. The 9/11 Commission was established to investigate the causes of the disaster and to make recommendations for the future to improve American security. These recommendations have influenced and continue to influence American intelligence, foreign policy, and national security. This entry discusses the creation of the commission and its findings and recommendations.

The Members and Mandate of the Commission

When Pearl Harbor was attacked, President Franklin Roosevelt appointed a commission 9 days later to investigate the assault, and the Warren Commission

was created 7 days after John Kennedy was assassinated. But in 2002–2003, Congress and the president took 14 months and 16 days to approve creation of the National Commission on Terrorist Attacks Upon the United States, better known as the 9/11 Commission. Whereas Roosevelt and Lyndon Johnson saw commissions as a way to deflect criticism from their administrations, President George W. Bush and his supporters felt that an inquiry would lead to partisan criticisms of the administration, divert time and attention from the Global War on Terrorism, and help terrorists by publicizing information about American intelligence operations.

Even after centrist Republicans like Senators John McCain and Charles Grassley joined the push for an investigation, the Bush administration resisted efforts to create a commission until the political environment abruptly changed in the spring and summer of 2002. On May 15, CBS News announced that Bush had received an intelligence briefing titled “Bin Laden Determined to Strike in the U.S.,” only 5 weeks before planes crashed into the World Trade Center. Suddenly, conservative commentators like George Will and William Kristol joined the *New York Times* in calls for a national commission. Even more critically, newly organized families of the victims of the 9/11 attacks—wives, husbands, daughters, sons, mothers, fathers, brothers, and sisters—demanded that the government create a blue-ribbon commission to investigate the disaster. Under powerful pressure, Congress finally approved, and the president signed a bill creating the 9/11 Commission on November 27, 2002.

Because the commission was created by Congress, not the president, its membership was largely determined by legislative leaders—four appointed by the Senate and House majority leaders; four, by the minority leaders; a chair, by the president; and a vice chair, by Democratic leaders in Congress. Democrats chose the former Senate majority leader George Mitchell as vice chair, adding the former representative Tim Roemer, the former senator Max Cleland (later replaced by the former senator Bob Kerrey), the former Justice Department member Jamie Gorelick, and attorney Richard Ben-Veniste as members. Bush chose Henry Kissinger as chair, and Republicans in Congress added the former senator Slade Gorton, the former secretary of the navy John Lehman, the former governor James Thompson, and the former Nixon and Reagan counsel Fred Fielding.

Almost immediately, both Kissinger and Mitchell resigned because of requirements that they disclose information about clients of their respective firms.

Democrats next chose the former representative Lee Hamilton as vice chair, and Bush selected Thomas H. Kean, the former governor of New Jersey and current president of Drew University, as chair. The new leaders contributed significantly to the success of the commission. Because of his long experience in the House of Representatives, Hamilton provided gravitas and keen political advice. As a resident of New Jersey, Kean had known several victims of the 9/11 disaster personally and related directly to the organizations representing friends and families of victims. Both men demanded a sharp increase in the funding of the commission from \$3 million to \$12 million, and both aimed to transcend partisan conflicts as much as possible. They acted as cochair; they decided that the final report of the commission should be approved unanimously; they selected an integrated staff, rather than choosing a Republican staff and a Democratic staff; and they opened as many of their meetings as possible to public scrutiny. The result was a commission marked by independence, competence, cooperation, and transparency.

With a deadline to produce a report in 18 (later 20) months, the commission, with Philip Zelickow as executive director, hired and organized a staff of more than 70 lawyers, historians, former government workers, specialists, and others to pursue the documents and interviews that were needed. Nine (later eight) teams of staff members focused on areas Congress mandated for examination: al Qaeda, intelligence, counterterrorism policy, terrorist financing, border security, law enforcement, aviation and transportation security, national response on 9/11, and the emergency response in New York and northern Virginia. Charged with investigating these specific issues, the commission was also tasked with making a full accounting of the causes of the attacks and the American response, while also recommending reforms that would make the nation less vulnerable in the future.

Issues and Controversies

From the beginning, tensions and controversy emerged over access to documents and persons. For instance, the law creating the commission said that it should begin by reviewing information and findings

collected by the recently completed congressional joint inquiry into the attacks, but the report and supporting materials of the committee were classified, leading to months of negotiation with the committee and the White House before the commission gained full access. After 6 months, the commission issued an interim report in the form of a report card, giving grades to 16 federal agencies from which it sought information. Only the State Department was judged fully cooperative. In mid-October 2003, after more problems, the commission, under pressure from families and friends of victims, issued subpoenas to the Federal Aviation Administration and the Defense Department, followed later by a subpoena of the City of New York.

More controversy occurred when the commission insisted on access to the president's daily briefings, which could establish what Bush did and did not know about the possibilities of an attack on the United States. A request for the president's daily briefings was refused; then members considered a subpoena while simultaneously negotiating with the White House. The result was a grand compromise in November 2003, when the administration agreed that two commissioners could see all of the president's daily briefings, two others could see only those that the White House deemed relevant, and the group of four could report on what they read to other members of the commission. In the end, the commission could say that it had seen every document it deemed vital to its investigation.

Trouble also arose over access to people, especially senior officials of the Bush administration. When the commission sought a public interview with Condoleezza Rice, Bush's national security advisor, the administration argued that a public interview violated the principle of separation of powers and the president's need for confidential advice. Ultimately, however, on March 30, 2004, the White House allowed her to testify, a decision that actually aided the president's hopes for reelection. One week earlier, Richard Clarke, the national coordinator for counterterrorism, stunned the nation by apologizing for the failures of government. Rice was able to rebut forcefully, strengthening the president's cause. A final struggle over access occurred when the commission sought to interview Bush. At first, the president would only meet with Kean and Hamilton, but later he agreed to meet with the full commission so long as Vice President Dick Cheney was also present

and the commission did not record the meeting. The result was a cordial 3-hour interview.

The Commission's Findings

Finally, in July 2004, the commission completed its investigation, examining approximately 2.5 million pages of documents, interviewing more than 1,200 witnesses in 10 countries, conducting 12 public hearings, and publishing 19 staff reports on specific issues. Never before had such a commission penetrated so deeply into the secret world of intelligence and classified information. On July 22, a 567-page final report was published. Written in a clear, readable style, the report described the planning and operation of the attacks, analyzed the American government's approach to terrorism and conduct during the emergency, and made recommendations for the future that were approved by all 10 commissioners.

The findings of the commission were devastating. No one—the Clinton or Bush administrations, the Central Intelligence Agency, the Federal Bureau of Investigation, the State Department, or Congress—was prepared to deal with the threat of terrorism. A central failure was of integration and focus. Typical was the finding that the Federal Bureau of Investigation had officially adopted a policy of concentrating on counterterrorism in 1998, but in 2001, only 6% of its workforce focused on terrorism. Similarly, several congressional committees oversaw counterterrorism efforts, which meant that no one committee was accountable. The commission issued 41 recommendations, most of which had been made by earlier investigative bodies. In an unprecedented move, money was raised from private sources to finance 16 months of effort by the commissioners and a small staff to enact the recommendations.

Effects of the Commission

The report became a popular best seller and generated intense debate. Media reception was mostly positive. Representatives of the families and friends of the victims hailed most recommendations. Democratic presidential candidate John Kerry called for quick action, and Bush praised the report. Despite the attention, though, results were mixed. Six months after the report was issued, the commission graded the government's response; over half of the grades were C, D, or F. Progress was achieved, for instance, against terrorist financing, but little achievement was made

in declassifying the intelligence budget. Typical was the major piece of reform legislation, the Intelligence Reform and Terrorism Prevention Act, which was passed by Congress in December 2004. The new law created a director of national intelligence, but because of strong lobbying from the Defense Department and tepid support from the White House, the bill did not give the new director of national intelligence control over budgets and personnel throughout the whole intelligence community.

As of 2012, Kean and Hamilton still believed that progress on the recommendations was uneven. Change is difficult. Preventing terrorist access to weapons of mass destruction, taking oversight of intelligence away from several committees in Congress and assigning it to only one, developing more effective policies toward Pakistan and Afghanistan, and staffing and organizing new institutions like the National Counterterrorism Center or the Civil Liberties Oversight Board—none of this is easy. The Central Intelligence Agency and the Federal Bureau of Investigation have made strenuous efforts to focus more effectively on terrorism, but success has been limited by cultural inertia and the difficulties of transitioning away from Cold War patterns of behavior. Perhaps what is most remarkable about the 9/11 Commission is that the report is still vital 8 years after it was introduced. Usually, the reports of federal commissions are assigned space on forgotten shelves in some library within a year or two of publication, but the Department of Homeland Security continues to introduce reforms recommended by the commission, and the media remind us that the commission's recommendation to provide a broadcast spectrum that will allow police and fire departments to communicate with each other has still not been implemented. Surprisingly, the commission continues to influence policy.

J. Perry Leavell

See also al Qaeda; 9/11 (2001); 9/11 Attack on Pentagon; Terrorism

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Website

National Commission on Terrorist Attacks Upon the United States: www.9-11commission.gov

NONCOMMISSIONED OFFICER ACADEMIES

Education in the military has traditionally been the purview of officers. France has its academy at St. Cyr; the British officers have traditionally attended the Royal Military Academy, now known as Sandhurst, while their American counterparts have received their formal education and training at West Point. However, modern warfare has dictated that even down to the lowest levels of military leadership, education has become an increasingly important factor in the professionalization of the Noncommissioned Officer (NCO) Corps and its ability to train and motivate others to carry out their roles in combat. In the U.S. Army, there have been two key factors that have contributed to the professionalization of the NCO Corps. The first is the maintenance of an NCO's rank while he or she moves to various duty stations throughout his or her career, and the second is the ability of an NCO to obtain standardized training and education that will be relevant wherever an NCO serves his or her country. In the early years of the U.S. Army, there was neither. This entry discusses the evolution of NCO training in the U.S. military, with a focus on U.S. Army NCO academies and programs.

Early History

The American Civil War propelled a small and technologically backward army into the modern warfare techniques of the 19th century. The advent of the telegraph and railroad, along with the development of weaponry such as rifled canon and repeat-

ing rifles, created the need for technically competent NCOs to supplement the officer corps. However, after the war, the military once again fell to the backwater of America's priorities, relegated to keeping the frontier secure from the only danger posed to the United States at that time—the Indians. Additionally, the military was forced to compete with the civilian sector for individuals with skills in critical fields. The military was also at a disadvantage because the pay that it was able to offer was generally not commensurate with its civilian counterparts. In 1878, Major General Emory Upton expressed his concern about the inadequate training the army provided its NCOs in his treatise *The Armies of Asia and Europe*.

However, there was at least a modicum of training provided by the U.S. Army to its NCOs during the second half of the 19th century. Commencing in 1857, medical NCOs received training at Fort Monroe, Virginia. Starting in the 1870s, engineer NCOs were taught skills at Fort Totten, New York, while the Infantry School of Application was located at Jefferson Barracks, Missouri, and the Cavalry School of Application was located in Carlisle Barracks, Pennsylvania. The unfortunate part was that tradition took precedence over keeping up with progress being made in various fields.

Much of the initial success of the German army during the First World War can be attributed to the education that was provided to its NCOs. The creation of national compulsory service stimulated the need for a strong NCO corps. Special courses were made available to these individuals to advance through their military careers. They were presented with instruction on a variety of topics such as geography, languages, and mathematics, which not only fostered their military careers but also were invaluable in civilian life. This was entirely lost on their adversaries such as the United States.

On entering the First World War, the United States rapidly expanded both its training facilities and the NCO corps to meet the war's exigencies. Modern warfare needed competent and well-trained individuals to achieve success. General John "Black Jack" Pershing, who commanded the American Expeditionary Force in France, established schools for NCOs when he realized that there was a deficiency in the NCO corps' leadership abilities. However, this training was limited to the American Expeditionary Force, was standardized army wide, and did not survive the demobilization following the war.

However, following World War I, NCO training in the U.S. Army spiraled downward in the 1920s and 1930s due to the army being downsized and the lack of funding provided by a parsimonious Congress. The U.S. Army expended little effort to establish schools for their training, and this resulted in a degree of loss of both the power and prestige of the NCO corps. Only with the onset of the Second World War did the United States aggressively institute new and improved training methods of its geometrically expanding forces, especially for its nascent armored forces being then trained at Fort Knox, Kentucky. This new innovation to the combat equation necessitated not only highly trained NCOs to man newly developed armored vehicles and master the tactics necessary to obtain eventual victory but also skilled technicians to repair them as machines wore out in both training and combat. Training during the war went on at an unprecedented pace and scale, with NCOs being the driving force in the training of the enlisted force. However, following the war's end, training once again fell to a very low priority as America sought to save funds in the early postwar era.

From World War II to the Present Day

During World War II, there was a serious shortage of NCOs throughout the U.S. Army. Modern warfare consumed more individuals than could be replaced. To combat this problem, the 28th Infantry Division created its own NCO academy in an attempt to remedy the situation, located in Belgium in 1944. Unfortunately, the Battle of the Bulge created such a critical need for combat soldiers that this school came to an untimely end.

The U.S. Army's first attempt to create and implement a formal educational and career development program commenced in 1947 in the early years of the Cold War. Prior to this, the 88th Infantry Division, quartered in Italy at the end of World War II, established the Lido Training Center. However, shortly after the center was opened, the division returned to the United States for demobilization and thus ended the life of the school. The severe shortage of trained NCOs caused the commanding general of the U.S. Constabulary in Germany to open a school to train NCOs located at Sonthofen, Germany, in the German Alps on the border with Austria. However, insufficient funds also doomed

this attempt at establishment of a formal school for the training of NCOs.

Finally, the United States established a permanent academy. The first class of the 2nd Constabulary Brigade began late 1949, located in Stetten Kaserne and Jensen Barracks in Munich, Germany. After training NCOs for 2 years, the Seventh Army took control of the school and changed its name to the Seventh Army Noncommissioned Officers Academy. In 1958, this school was relocated to Flint Kaserne in Bad Toelz, which was formerly an SS (German *Schutzstaffel*, which translates to Protection Squadron) officers training *kaserne* (a German word, which translates to "barracks"). Presently, the Seventh Army NCO Academy is located in Grafenwoehr, which has been its home since 1991 when the United States once again commenced a drawdown in the aftermath of the Persian Gulf War. In keeping with the concept of standardized training for all NCOs, the U.S. Army implemented Army Regulation 350-90, which established standards that would extend throughout the U.S. Army.

During the Vietnam War, the need for NCOs was greatly exacerbated by both attrition in the NCO corps and the vast expansion in the number of personnel serving. In June 1967, the army chief of staff, General Harold K. Johnson, addressed this problem with a radical solution. To meet this growing need, the U.S. Army created the Noncommissioned Officers Candidate Course—derisively known throughout the army as "shake and bake." It was intended to fill the ranks of the combat arms where the attrition rate among NCOs was the highest. New recruits who showed promise were enrolled at one of three schools for a period of 10 weeks: (1) the infantry received training at Fort Benning, Georgia; (2) the mechanized forces trained at Fort Knox, Kentucky; and (3) artillery soldiers went to Fort Sill, Oklahoma. The basic course was 10 weeks, followed by an additional 10 weeks of training before being sent to Vietnam. On successful completion of the course, graduates received promotion to sergeant, with the top 5% being promoted to staff sergeant. These newly created NCOs were often looked down on by veteran career NCOs who believed that the prestige they had worked so long to achieve was undermined by the newcomers.

In 1971, the Noncommissioned Officer Education System was created. This was the U.S. Army's

first army-wide standardized training program in its history. When the Noncommissioned Officer Education System became fully implemented, it became the most progressive system of formal training and education that the army ever had.

In 1973, the U.S. Army established what is considered the epitome of NCO education—the Sergeants Major Academy at Fort Bliss, Texas. Its purpose was to prepare master sergeants and first sergeants to function as either a sergeant major or a command sergeant major in a worldwide army environment. It was a branch-immaterial course that would serve all military occupational specialties. Over the years, the course content had been modified to reflect the changing technical realities and social fabric of today's army as more women and ethnic groups make up an ever more complex military society.

Once again, the army educational system underwent a major revision with the elimination of the Advanced Noncommissioned Officer Course from the Noncommissioned Officer Education System on October 1, 2004. The wars in Iraq and Afghanistan had placed a visible strain on the system for training NCOs. The army felt that training more relevant to the lessons from combat in Southwest Asia needed to be introduced into the educational curriculum that present and future NCOs needed to be adaptive and able to multitask in the asymmetrical combat environment of modern warfare.

The Contemporary Period: Other Branches of the U.S. Armed Forces

The U.S. Army will continue to recalibrate its training of NCOs to meet the needs of modern asymmetrical warfare where small unit leadership and combat tactics are the current focus of its effort. However, when the U.S. Army reverts, once again, into a peacetime model, it should be expected that the training paradigm for NCOs will again face a major shift in its emphasis. Hopefully, it will be geared to preparing for the next possible conflict and not for the situations formerly faced.

Although the U.S. Army has taken the lead in NCO education, the other services also have a formal education system for their NCOs. The Marine Corps has the U.S. Marine Corps Staff NCO Academy with branches in Camp Pendleton, California, and Quantico, Virginia. These operate

under the aegis of the Marine Corps University and the Marine Combat Development Command. Its mission is to provide essential leadership training and education to prepare individuals for greater roles of responsibility within the U.S. Marine Corps. Subjects taught include public speaking, administration, writing, and warfighting skills. As in the army, there are various levels of instruction geared to the service member's rank.

The U.S. Navy has its Senior Enlisted Academy, established in 1981 with an initial class of 16 students. It is located at the Naval War College in Newport, Rhode Island. The navy also has schools for lower ranking petty officers such as the Petty Officer Indoctrination Course located in Sasebo, Japan.

The U.S. Air Force also has various schools for training its NCOs, which are covered under AFI 36-2301. These consist of four levels of education: (1) Airmen Leadership School, (2) NCO Academy, (3) Senior NCO Academy, and (4) the Chief Master Sergeant Course. Schools are located worldwide throughout the United States, the Pacific, and Germany. Like their counterparts in the other services, these schools are designed to teach leadership, professionalism, and communication skills.

Finally, the U.S. Coast Guard operates its Petty Officer Academy. It was initially established in 1982 with 10 students in Yorktown, Virginia. In 1985, the course was moved to Petaluma, California. Its mission mirrors that of other services in training its personnel for assuming greater positions of responsibility within the Coast Guard.

With the ever-increasing demands made by warfare, it is imperative the NCOs of all services be provided with both the technical and leadership training necessary to lead in combat and to emerge victorious. The United States has led the way forward in providing this training. To date, this has proven successful as demonstrated by the junior leaders in the conflicts in both Iraq and Afghanistan.

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See also Noncommissioned Officers

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NONCOMMISSIONED OFFICERS

Noncommissioned officers are enlisted personnel holding a rank—such as corporal or sergeant—giving them leadership over other enlisted personnel. This entry discusses the history, roles, and responsibilities of the noncommissioned officer (NCO).

Ancient Times

The roots of the NCO can be traced to the legions of ancient Rome. The commander of the legion realized that administrative requirements combined with the drill necessary in the field for a then-modern army was consuming an inordinate amount of his available time. The Roman legion was an efficient fighting force for numerous centuries, defeating enemies who were often larger in stature and far more numerous than themselves. The Roman writer Vegetius wrote that few men were born with valor in their hearts and that only by training and the instilling of discipline could an army become victorious. However, the Roman Empire fell into decay and so did the former magnificent fighting machine, the legion, which had undergone numerous changes since its original inception. The fall of Rome led to warfare devolving into general melees where there was little control exercised by an army's leadership after the initial clash of arms. Over a period of centuries, the primary fighting organization centered around the mounted knight who was attended by his squire during the period known as the Middle Ages. The squire was not formally a NCO in the sense we understand one to be today but was a cut above the semiorganized rabble that constituted the infantry levees made up of peasants hastily conscripted for the fighting season.

Effect of Advent of Firearms

This combat equation was radically altered with the advent of gunpowder, which completely revolutionized and changed warfare. Firearms once again made the infantry the primary arm of decisive combat where training and drill were necessary for an effective combat formation to attain victory. Circa the 1500s, NCOs once again surfaced, and by the 1700s, they became a definitive rank of distinction.

In 1445, King Charles VII of France created the first standing army in Europe since the demise of the Roman Empire. Charles organized his forces into *bandes* or regiments, each consisting of eight companies. The senior NCO in each company was called *serjeant* while his principal assistant was known as the *caporal*. Lowest on the NCO chain was the *lance spessade*, which evolved into lance corporal. The senior NCO of the regiment was known as the “sergeant high general,” which is the equivalent of today's sergeant major. His principal responsibilities included the maintenance of order and discipline in garrison and maintaining the order of the regiment while marching in formation.

During its numerous wars to regain control of the Low Countries, Spain developed the basic tactical unit of the 550-man battalion, which out of necessity needed a high degree of organization and discipline. These battalions relied on NCOs to provide leadership. At this point, we see the sure mark of professionalism emerging in European armies.

Early U.S. Army

In the United States, the NCO's status can be traced to the nascent Continental Army, which was formed in 1775 under the leadership of General George Washington. The Continental Army of the colonies was modeled on its British counterparts. By the mid-1700s, the rank structure throughout the various European armies was fairly standardized. While officers received their commissions based on social status, political connections, wealth, and education, NCOs obtained their positions based on their proven performance in combat. However, it has been argued that the U.S. Army has in its lineage traditions that can also be traced to France and Prussia.

Initially, in the Continental Army, there was little uniformity with respect to the qualifications of the NCOs. They were either appointed or elected as a result of their proven valor in combat.

However, all this changed with Baron Von Steuben being appointed the first Inspector General of the Continental Army on May 5, 1778. On March 29, 1779, the *Regulations for the Order and Discipline of the Troops of the United States* made its debut; this is commonly referred to as the “Blue Book.” This publication provides guidance on drill, operations, and guard duty. It also addressed leadership from the regimental commander down to the level of the corporal. von Steuben also stressed that a first sergeant have, at the very least, rudimentary reading and writing skills. The essence of von Steuben’s “Blue Book” has been distilled to form the basis of drill for the modern U.S. Army.

Early NCOs were identified by epaulets in the British army. However, individuals serving in the nascent Continental Army used cloth strips for identification. Washington’s rebel rabble could ill afford such luxuries as epaulets to identify their rank since their priorities were centered on military necessities such as weapons and provisions. While it may appear to be peculiar today, if an NCO left the regiment where he was promoted, his rank did not go with him and remained with the regiment. This was a large incentive for an individual to refrain from transferring to another unit and to maintaining a well-trained cadre. In 1821, the U.S. Army devised a system of chevrons, which prior to 1854 were worn with their points facing downward. Many erroneously believe that the change in chevron direction was due to units losing their regimental colors in the Civil War and done as a form of public humiliation. Later, in 1825, the U.S. Army made its first attempt at a systematic system for the selection of its NCOs.

As America expanded westward, NCOs took an ever-increasing role in the responsibility for care and welfare of the lower enlisted ranks. A small army with a large number of isolated small posts made it impossible for commissioned officers to be with every small contingent of soldiers.

Technological improvements in many ways changed the traditional functions of the NCO. Whereas in earlier times apart from infantry and cavalry, there were only quartermaster, ordnance, and artillery roles for soldiers, modern warfare created the need for communications, intelligence, and numerous other positions that were necessary to support a modern army in both the field and in garrison. The Civil War exacerbated this need for technicians within the army. In the post-Civil War era, the army

was forced into competition with the civilian sector for individuals with technical training. This led to differentiating pay scales to attract individuals with the necessary skills to fill positions as NCOs.

In his 1895 poem *The Heathen*, the epic poet of British Empire, Rudyard Kipling, coined the phrase “backbone of the army” to describe the position of importance the NCO held in the British army and now taken for granted in most modern armies. The U.S. Army almost immediately adopted that phraseology and concept to its NCO corps.

The Early Navy

In contrast to the U.S. Army, the U.S. Navy had what amounted to an ad hoc enlisted force, with sailors generally recruited for a particular voyage and discharged at the end of it. A high proportion of the enlisted sailors were not citizens of the United States; often navy vessels recruited in foreign ports. Petty officers, the equivalent of sergeants in the army, received their appointments from a ship’s captain and served at his pleasure. Only after the Civil War did the navy begin to systematically formalize the rank structure of the noncommissioned ranks by formally creating the ranks of first, second, and third class of petty officers. In 1894, the rank of chief petty officer was formally created, and this NCO acquired legendary status in the battleship navy that emerged in this era.

All armed forces are hierarchical structures, but naval vessels are particularly regimented in this regard. Despite the cramped condition of naval vessels, even in the modern era, officers and sailors led segregated lives, including separate messes and sleeping quarters. NCOs played a crucial function in mediating between officers and enlisted personnel. In a service where the officer corps became increasingly dominated by graduates of the United States Naval Academy, the position of petty officer, especially chief petty officer, was a position in reach for the meritorious sailor. Even during World War II, when the navy needed to greatly expand the ranks of the officer corps, only a small portion were drawn from the enlisted ranks.

The 20th Century and Beyond

During World War I, the rapid expansion from a peacetime army to one mobilized for war necessitated the expansion of the NCO corps in the U.S. Army. NCOs were mainly responsible for the training of

almost 4 million men inducted into the army and the approximately 1 million individuals who served overseas. Many soldiers received promotions that they were otherwise unqualified for, and in the rapid demobilization, they reverted to their former rank.

The professionalism of the U.S. military also suffered as a result of that drawdown and the general malaise that affects an army after a war when politicians viewed the military in the most expedient manner in which to cut the expenses of the nation. As a result, schooling opportunities and pay for NCOs declined, which led to a lowering of both the morale and prestige of the corps. Only the rapid buildup of the military prior to World War II reversed this trend. However, years of neglect could not be corrected overnight.

During World War II, the rapid rise in the use of technology led to a unique method to deal with individuals with the expertise in handling the equipment so necessary for modern warfare. What became known as the “technical” sergeant came into being. This rank remained in the U.S. Army until 1948, when it was replaced by sergeant first class, and in the Marine Corps until 1958, when it became a gunnery sergeant. The U.S. Air Force still has this rank and is the pay grade E-6.

The rapid demobilization following World War II had an extremely negative effect on the NCO corps of the military forces of the United States. Many individuals began to feel that a career in the military was roughly equivalent to a civilian job. This was to have an extremely detrimental effect on combat readiness at the commencement of the Korean War. However, there were still enough grizzled combat veterans of World War II to stave off military disaster, instilling basic values and training new recruits in their combat roles, as NCOs had done for years. One lasting effect that the Korean War had on the U.S. Army was to point out the need for more highly trained small unit leaders. As a result, there was a greater emphasis on the standards for selection and training of individuals to serve as NCOs.

The Navy and the Marine Corps

Since the end of World War II, there has been a radical transformation in the role of the NCO in the various military services. The rapid expansion of the U.S. Navy led to a complete transformation of the petty officer ranks. The “Old Salts” had obtained their positions by years of hard work combined with

a certain degree of luck. Individuals received rapid promotions for which they might have possessed technical competence. However, many did not have sufficient maturity or naval experience to enhance the prestige of the petty officer ranks. They did not understand that part of their job necessitated the enforcement of the trite phrase “good order and discipline” of the navy. However, with the advent of the “nuclear era,” navy technicians have become the primary focus of the enlisted grades. These types of individuals, while exceedingly intelligent and competent from a technical standpoint, tended to exacerbate the problem that commenced during World War II—the lack of the leadership skills of the Old Salts.

Today, the U.S. Navy has set about correcting these systemic problems. The 21st-century navy stresses leadership along with technical competence. To keep abreast of the ever-changing methods of waging modern naval warfare and to have leaders at the lowest possible level, the U.S. Navy has developed three school programs to enhance the Petty Officers Corps. They are (1) the Front Line Leadership Development Program (FLLDP), (2) the Primary Leadership Development Program (PLDP), and (3) the Advanced Leadership Development Program (ALDP). These programs have evolved from the Naval Leadership Continuum and in many ways mirror the U.S. Army’s Noncommissioned Officer Education System.

The creation of a separate air force by the United States also radically changed the enlisted/officer equation. As in the navy, enlisted ranks tended to have more technicians than leaders since the officers generally flew off into combat, leaving the senior NCO leadership in the rear to take charge of the administrative and support functions.

Transformation of the Army

During the 1950s, the U.S. Army, to meet congressionally mandated grade levels, devised a system where the specialist grade came into being. A specialist fell into the position of an NCO at that pay grade and the rank a pay grade lower. Thus, individuals received the pay but not the prestige of an NCO. The argument was that many technical skills required skilled technicians rather than NCOs to perform these tasks. This continued for years until all the specialist ranks were gradually eliminated save the one for the pay grade of E-4 that remains even today in the army.

Vietnam was another lesson the army learned concerning the capability of its NCO corps. Initially, Americans became involved in Vietnam as advisors to train their Vietnamese counterparts. The vast majority of the unit-level training was taught by career NCOs. However, as the combat role of the U.S. military vastly expanded, the NCO became a front-line small unit leader. The army unfortunately underwent a high rate of attrition due to combat casualties, and many individuals received promotions that they would have been otherwise unqualified to receive during a peacetime force.

The army has transformed itself in a much different manner from the other services. With the traditional focus of linear combat becoming supplanted by what is today termed *asymmetrical warfare*, the NCO has become increasingly important in the overall conduct of military operations. The highly educated, motivated, and professional force being marshaled by the United States to fight in such far-off regions of the world as Iraq and Afghanistan has made the NCO indispensable to any hope of victory. NCOs now can make decisions on the ground, formerly the purview of commissioned officers. The success of the U.S. Army in a large measure will be a test of whether the modern corps of NCOs can adapt to the rapidly evolving nature of 21st-century warfare.

Post-9/11 NCO Training

Since the national trauma of September 11, 2001, few American institutions have undergone such a rapid and radical change as the military. While the average citizen is well aware of the long lines at the airports and a higher police profile with more formidable weaponry at their disposal, it is the army that has borne the brunt of the nation's security demands. The low-level insurgencies that the army has committed itself to fighting have required the military leadership to be more adaptive at all levels, especially the NCO. General David Petraeus penned the army's *Counterinsurgency Field Manual*, which was created to develop a military strategy to counter the asymmetrical warfare encountered in both Iraq and Afghanistan. This enabled the army to develop experienced combat leaders down to the squad level as a result of repeated combat deployments. However, there has been a downside that coincided with this positive development.

These repeated deployments, while developing magnificent combat leaders have placed the U.S.

Army in danger of losing many of the traditional skills of the NCO corps. NCOs no longer conduct close order drills, perform in-ranks inspections, and provide the old "Sergeant's Time" training that the army considered essential just a few years ago. The quick turn-around between deployments has left little time for these traditional skills. This has exacerbated the problem that skills such as close-order drill have been virtually eliminated from initial training and have been replaced with training that is more combat oriented to meet the exigencies of today's military situation. Having identified the problem, the army hopes to rectify the situation with its anticipated gradual disengagement from Afghanistan.

Today in Afghanistan, the Marine Corps is taking up an ever-increasing role in combat actions in that desolate landlocked nation. Concomitant with that mission, the U.S. Marine Corps is relying increasingly on its NCOs to provide leadership to its lower ranking enlisted personnel. Despite reliance on an ever-increasing role of technology in combat, the marine or soldier led by the NCO is still the tip of the spear.

Both the U.S. Army and the U.S. Marine Corps have assumed a greater role in the training of the fledgling Afghan National Army that is more akin to the traditional role of NCOs. Unfortunately, this situation has been clouded with an ever-increasing number of "green on blue"—"friendly" fire by Afghan trainees directed against their instructors. Only time will tell whether the efforts to create a viable Afghan military will reach fruition under the current circumstances.

Summation

The role of the NCO in all military services today continues to be that of a primary trainer and leader of junior enlisted personnel, and there will be no shift in the focus of that mission in the foreseeable future as the asymmetric threat to the United States intensifies in the 21st century.

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See also Commissioned Officers

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NORTH AMERICAN AEROSPACE DEFENSE COMMAND (NORAD)

North American Aerospace Defense Command (NORAD), originally the North American Air Defense Command, began its existence on May 12, 1958, as a joint Canada-U.S. command. There is no formal NORAD treaty; rather, technical and diplomatic notes were exchanged in 1957. NORAD was designed to warn against and defend North America from Soviet bomber strikes—work that it did with little fanfare. Indeed, for many North Americans, their only knowledge of NORAD came from childhood memories of television reports about how NORAD was tracking Santa's sleigh on Christmas Eve. Al Qaeda's attacks on the World Trade Center and the Pentagon on September 11, 2001, using hijacked civilian jets and a potential Canadian role in continental ballistic missile defense (BMD), however, have raised concerns about NORAD's long-term viability. This entry examines the history and functions of NORAD and discusses some of the controversies and problems associated with the organization.

The notion of North America as a geostrategic entity in aerial matters has long roots. In the early 1920s, the American air power prophet General Billy Mitchell advocated unsuccessfully for a Canada-U.S. aerial alliance directed against Japan. But World War II highlighted Canada's growing importance as a strategic bulwark for the United States, for Canada

provided bases and other infrastructure allowing the United States to funnel planes and supplies to Britain and the Soviet Union. By 1943, though, worried by the scale and apparent permanence of the U.S. effort and fearful that Canada might become a new battleground if postwar U.S.-Soviet relations deteriorated, nationalist Canadian officials began warning of the possible creation of a U.S.-style Maginot Line in northern Canada. Such warnings bore fruit as Canada, by the war's end, had bought back U.S. interests in military projects on Canadian soil. Moreover, an attempt in 1945 by the U.S. Section of the Permanent Joint Board on Defense to formalize Canada-U.S. continental defense efforts was rebuffed by Canada's government. When a deal to cooperate in Canada's north was reached in 1947, it proved very limited given the Canadian concerns about protecting national sovereignty.

The onset of the Cold War brought dramatic changes. By 1949, Canada joined the North Atlantic Treaty Organization to defend Western Europe against the Soviets. When war erupted in Korea in June 1950, Canada took part in the U.S.-led effort to repulse North Korean aggression by sending combat units to Korea. For the first time, Canada dispatched troops to Europe in peacetime, and then, in 1951, Canada began the largest peacetime rearmament in its history. Continental defense cooperation with the United States also deepened. In 1951, the two nations agreed to build the Pinetree Line, 33 radar stations situated on the Canada-U.S. border, to warn against Soviet bombers. Completed by 1954, Pinetree cost \$450 million, two thirds of which was paid for by Washington. The Mid-Canada Line, 98 radar stations on the 55th Parallel and paid for by Canada, was complete by 1958. The Distant Early Warning Line was more controversial. Ready by 1957, 58 Distant Early Warning radar and warning stations, constructed across the high Arctic from Alaska to Baffin Island, were mostly manned by U.S. personnel, raising questions about sovereignty among Canadian nationalists.

Growing Soviet aerial capabilities pointed to the need for formalized cooperation, and cooperation of the Royal Canadian Air Force was keenly sought. By August 1957, Canada's Liberal government under Prime Minister Louis St. Laurent had agreed to NORAD, with joint operations beginning in September 1957. The final deal, however, was ratified in May 1958, by John Diefenbaker's Conservative government. Headquartered at

Cheyenne Mountain in Colorado, with a Canadian subheadquarters at North Bay, Ontario, NORAD has always been led by a U.S. commander who is aided by a Canadian deputy.

NORAD has faced problems. First, ballistic nuclear missiles made the defense against Soviet attack mostly moot. The ability to give adequate warning of an attack thus became paramount. Second, missiles obviated the need for radar lines, which were largely shut by the 1980s. Third, there were command problems. The most famous contretemps occurred during the 1962 Cuban Missile Crisis when Prime Minister Diefenbaker, unhappy with President John F. Kennedy's policies and misunderstanding how NORAD worked, delayed putting Canada's forces on alert for a number of days after U.S. forces were warned that war was imminent. With the revival of the Cold War confrontation in the early 1980s, a declining NORAD received some new resources, notably a new North Warning System

to replace the obsolete Distant Early Warning Line. But the Soviet Union's collapse in 1991 led many to question NORAD, leading NORAD to justify its existence, in part, by using its resources to track small aircraft smuggling drugs into North America.

The 9/11 attacks both benefited and injured NORAD. First, the need to safeguard North American air defense against unexpected threats was highlighted. Second, while there is some debate as to whether NORAD failed by not intercepting the hijacked planes before they struck their targets, NORAD planes reacted quickly during the crisis to control airspace after the attacks. But increasing U.S. concerns about the threat from rogue nuclear powers and the subsequent trumpeting of the need for continental BMD damaged NORAD as the U.S. military created new and entirely U.S. command systems—notably Northern Command—to deal with such threats, especially after Canada declined to officially participate in BMD in late 2006.



American and Canadian members, working in the North American Aerospace Defense Command's (NORAD) center inside Cheyenne Mountain, Colorado, keep an eye on the sky looking for threats aimed at the continent.

Source: Master Sergeant Val Gempis.

NORAD's Canadian supporters always have noted that NORAD gave Canada a seat at the U.S. strategic decision-making table. This claim was exaggerated. NORAD was, and is, an operational agency, not a policy-making body. Still, Canadian participation in NORAD provided real security benefits to Canada as the nation could not have afforded, on its own, to mount a credible independent air defense in the Cold War. Having a Canadian deputy at NORAD with the power to potentially order a nuclear strike in the absence of his or her U.S. superior points to NORAD's uniqueness among U.S. bilateral security deals with its various global allies.

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See also Air Force, U.S.; Alliances; Canada

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NORTH ATLANTIC TREATY ORGANIZATION

For a long time, the North Atlantic Treaty Organization (NATO), an international alliance, was considered to have a monopoly on deterrence of real and potential enemies for European and North American security. However, it has changed considerably as a military alliance in the past 10 to 15 years: today NATO is more an international crisis manager than a defensive alliance. At the same time, concerns about NATO's commitment to defend some member states have emerged. In light of the new NATO Strategic Concept (which was adopted in November 2010), some allies have asked to broaden the understanding of an "armed attack." The current reading of Article V (stating that "an armed attack against one or more of the allies in Europe or North America shall be considered an attack against them all") does not necessarily cover

a range of actions (e.g., cyber attacks, energy supply disruptions, etc.), to which some allies have already been subjected. This entry provides a brief overview of NATO's history and main current activities and examines the bloc's structure and the main elements of its organizational transformation to reassess NATO's relevance in the 21st century.

Formation and Members

Headquartered in Brussels (Belgium), NATO was formed in 1949 by the Washington Treaty (the 12 founding members of NATO were Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States). NATO was primarily set up to discourage an attack by the Soviet Union on the non-Communist nations of Western Europe, in addition to the goal of maintaining peace among former enemies in Western Europe. In 1955, the Soviet Union and the Communist nations of Eastern Europe (Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Romania) formed their own military alliance to oppose NATO: the Warsaw Pact Organization. At the end of 2010, NATO consisted of 28 countries (Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Slovakia, Slovenia, Turkey, the United Kingdom, and the United States), while the Warsaw Pact Organization was dissolved in 1991.

Since its creation, the alliance has undergone six rounds of enlargement. The first three rounds took place during the Cold War, adding Greece and Turkey (1952), West Germany (1955), and Spain (1982). The reunification of Germany in October 1990 incorporated the territory of the former East Germany into NATO. After the collapse of the Soviet Union, the alliance invited the Czech Republic, Hungary, and Poland (former members of the Warsaw Pact) to join (this happened in 1999). The fifth expansion took place in 2004, when seven other Central-Eastern European countries (Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, and Slovenia) joined NATO. Albania and Croatia subsequently joined NATO in April 2009. In the same year, Bosnia and Herzegovina and Montenegro

were invited to start Intensified Dialogues on their membership aspirations and related reforms. Allied leaders also decided to invite the former Yugoslav Republic of Macedonia to become a member as soon as a mutually acceptable solution to the issue over the country's name has been reached with Greece (Greece opposes the post-1991 constitutional name of its northern neighbor, citing historical and territorial concerns). Member states have also agreed that Georgia and Ukraine will become members in the future. Since its founding, NATO expansion has encouraged and supported democratic reforms; fostered cooperation, consultation, and consensus-building; and contributed to stability and security in the Euro-Atlantic area.

Structure and Operations

Since NATO's creation, the alliance's most important body has been the North Atlantic Council (NAC), consisting of permanent representatives (ambassadors) from each member state. The NAC has overall political authority and ultimate powers of decision making relating to all NATO deployments and operations. NAC meetings are chaired by the secretary general of NATO. There is no voting or decision by majority in the NAC: All decisions must reach unanimous agreement. The Military Committee (consisting of countries' military representatives) is the alliance's second pivotal body. The Military Committee provides military advice to the NAC and is responsible for recommending the measures considered necessary for the common defense or the implementation of operational decisions made by the NAC.

In June 2003, NATO defense ministers agreed on the design of a new streamlined military command structure, which was designed to be more flexible, more efficient, and better able to conduct the full range of alliance missions. As a result, new bodies—the Allied Command Transformation (ACT) and the Allied Command Operations (ACO)—were created. The ACT is responsible for improving the military effectiveness of NATO forces. In doing so, it enhances training, improves capabilities, tests and develops doctrines, and conducts experiments to assess new concepts. Although the ACT headquarters is located in Norfolk, Virginia (the United States), it also includes the Joint Warfare Centre in Norway, the Joint Force Training Centre in Poland,

and the Joint Analysis and Lessons Learned Centre in Portugal. The ACT also supervises the Undersea Research Centre in La Spezia (Italy). There are direct connections between the ACT and the alliance's school in Oberammergau (Germany), the NATO Maritime Interdiction Operational Training Centre (located in Greece), and NATO agencies. In addition, the command supports a number of nationally or multinationally sponsored centers of excellence focused on transformation in specific military fields.

The ACO is responsible for NATO operations worldwide. The ACO's commander is called Supreme Allied Commander Europe and is based at the Supreme Headquarters Allied Powers Europe, located at the Belgian city of Mons. The Supreme Allied Commander Europe traditionally is a U.S. four-star general who simultaneously heads the U.S. European Command headquartered in Stuttgart (Germany). The ACO includes a multinational headquarters called Joint Force Command Brunssum (located in Brunssum, the Netherlands), Joint Force Command Naples (located in Naples, Italy), and Joint Command Lisbon (located in Lisbon, Portugal).

Collective defense is a core aspect of the alliance. However, in its quest to remain relevant in a rapidly evolving political and military context, NATO is constantly reexamining its organizational structure and its proper role. The approval of the New Alliance Strategic Concept (in 1991) emphasizing dialogue and cooperation signaled a shift to a more politically active and nonthreatening alliance. By 1992, the alliance had agreed to support the Organization for Security and Co-operation in Europe (OSCE) and UN peacekeeping operations, thereby expanding NATO's central focus on collective defense to include peacekeeping and crisis management. However, it is expected that new, "unexpected," and asymmetrical dangers related to terrorism will continue to emerge or intensify during the coming decade. Thus, in November 2009, NATO began public debates pertaining to the renewal of its Strategic Concept, which should redefine NATO's core tasks. The new Strategic Concept (which should replace the one from 1999) should serve as an invocation of political will clarifying both what NATO should be doing for each ally and what each ally should be doing for NATO.

NATO's first involvement in cooperative security efforts was the NATO-led Implementation Force

and Stabilization Force missions in the Balkans. In 1995, the United States convinced NATO to initiate these missions in order to safeguard the implementation of the Dayton Accords. Subsequently, in an effort to halt the ethnic cleansing in Kosovo, NATO engaged in an air campaign against Serbia and undertook an additional peacekeeping operation in Kosovo. Due to a lack of political will and an insufficient understanding of the region's social dynamics, the Kosovo mission unintentionally became an instance of "aerial warfare diplomacy" that proved highly problematic morally, politically, and militarily. As a consequence, NATO failed to stop the ethnic cleansing, damaging NATO's reputation and reflecting poorly on the ability of Western governments to legitimize international interventions to prevent mass atrocities.

Those shortcomings notwithstanding, NATO continued to engage in an increasingly diverse array of operations. After the attacks of September 11, 2001, NATO invoked Article V of the Washington Treaty and began two operations: air Operation Eagle Assist (in which NATO Airborne Early

Warning aircraft began assisting in monitoring the skies over North America) and naval Operation Active Endeavour (providing safe passage for allied shipping in the Straits of Gibraltar and operations throughout the Mediterranean). In August 2003, NATO assumed command of the UN-mandated International Security Assistance Force (ISAF), established to provide assistance in restoring stability and self-governance in Afghanistan. Since 2006, NATO/ISAF combat forces have launched several operations, including Operation Medusa in 2006, which was designed to oust Taliban forces in Kandahar Province. In 2007, NATO and Afghan forces conducted operations called Achilles and Silicon against Taliban forces. Beginning in 2008, in reaction to increased Taliban operations, NATO forces enlarged their offensive operations in Afghanistan. Today, roughly 70,000 military personnel are, or recently were, engaged in NATO missions in Afghanistan, Kosovo, Iraq, the Mediterranean, off the Horn of Africa, and in Somalia, managing complex ground, air, and naval operations in all types of environments (see Table 1 for further details).

Table 1 NATO Missions and Operations (1995–2012)

<i>Place</i>	<i>Description of NATO's Activities</i>
<i>Current Missions</i>	
Afghanistan (2003 to the present)	Established by UN mandate in 2001, the ISAF has been under NATO leadership since August 2003. ISAF comprises approximately 85,000 troops from approximately 40 different countries. Its mission is to extend the authority of the Afghan central government in order to create an environment conducive to the functioning of democratic institutions and the establishment of the rule of law.
Kosovo (1999 to the present)	Having first entered Kosovo in June 1999 to end widespread violence and halt the humanitarian disaster, KFOR troops continue to maintain a strong presence throughout the territory, preserving the peace that was imposed by NATO more than a decade earlier. Today, approximately 10,000 allied troops operate in the Balkans as part of NATO's KFOR.
Mediterranean Sea (2001 to the present)	In the aftermath of the September 11, 2001, NATO launched the maritime surveillance Operation Active Endeavour in October 2001. Led by NATO naval forces, Operation Active Endeavour is focused on detecting and deterring terrorist activity in the Mediterranean.
Horn of Africa (2009 to the present)	Building on previous counterpiracy missions conducted by NATO, operation Ocean Shield is focusing on at-sea counterpiracy operations off the Horn of Africa. Approved on August 17, 2009, by the North Atlantic Council, this operation is contributing to international efforts to combat piracy in the area. It is also offering assistance to regional states in developing their capacity to combat piracy activities.

Table I Continued

<i>Place</i>	<i>Description of NATO's Activities</i>
African Union (2007 to the present)	Since June 2007, NATO has assisted the AMISOM by providing airlift support for AU peacekeepers. NATO also continues to work with the AU in identifying further areas where NATO could support the African Standby Force.
<i>Terminated Operations and Missions</i>	
Libyan Civil War (March 31 to October 31, 2011)—Operation Unified Protector (following the United States, Odyssey Dawn etc.)	In late March 2011, NATO launched Operation Unified Protector to absorb command over the multinational coalition led no-fly zone and naval blockade of Libya. Initiated by Britain, France, and the United States of America, the NATO coalition included military assets from 18 nations that struck at forces loyal to Muammar Qaddafi in a mission to protect Libyan civilians. NATO forces flew nearly 10,000 strike missions in support of the National Transitional Council rebel forces that eventually captured and killed Qaddafi. Satisfied in the conclusion of the conflict, NATO ended Operation Unified Protector in October 2011.
Iraq (2004–2011)	At the Istanbul Summit in June 2004, the allies agreed to help Iraq in establishing effective and accountable security forces. The outcome was the creation of the NTM-I. The NTM-I delivered its training, advice, and mentoring support. All NATO member countries contributed to the training effort either in or outside Iraq, through financial contributions or donations of equipment.
Gulf of Aden, Horn of Africa (October–December 2008, March–August 2009)	From October to December 2008, NATO launched Operation Allied Provider, which involved counterpiracy activities off the coast of Somalia. NATO naval forces provided escorts to UN WFP vessels transiting through the waters in the Gulf of Aden. From March to August 2009, NATO launched Operation Allied Protector, conducting surveillance tasks and providing protection to deter and suppress piracy and armed robbery.
Pakistan (October 2005 to February 2006)	The Alliance airlifted close to 3,500 tons of supplies and deployed engineers, medical units, and specialist equipment to assist in relief operations. This was one of NATO's largest humanitarian relief operations.
FYROM (August 2001 to March 2003)	NATO implemented three successive operations in FYROM from August 2001 to March 2003. First, Operation Essential Harvest disarmed ethnic Albanian groups operating on Macedonia's territory. The follow-on Operation Amber Fox provided protection for international monitors overseeing the implementation of the peace plan. Finally, Operation Allied Harmony was launched in December 2002 to provide advisory elements to assist the government in ensuring stability throughout the Macedonian territory.
Bosnia and Herzegovina (1995–2004)	Between 1995 and 2004, NATO led a peace support force in Bosnia and Herzegovina, helping maintain a secure environment and facilitating the country's reconstruction in the wake of the 1992–1995 war. A NATO-led IFOR of 60,000 troops served in Bosnia to implement and monitor the military aspects of the agreement. IFOR was succeeded by a smaller (32,000 troops) NATO-led SFOR, which was aimed to prevent renewed hostilities and stabilize peace. In 2004, SFOR was replaced by the 7,000 troops of the EU.

Abbreviations: NATO, North Atlantic Treaty Organization; ISAF, International Security Assistance Force; KFOR, Kosovo Force; AU, African Union; AMISOM, African Union Mission in Somalia; NTM-I, NATO Training Mission in Iraq; WFP, World Food Programme; FYROM, former Yugoslav Republic of Macedonia; IFOR, International Peacekeeping Force; SFOR, Stabilization Force; EU, European Union.

The recently ratified Lisbon Treaty extending the European Union (EU) engagement in security and defense also introduced a collective defense obligation binding all EU member states to provide aid and assistance “by all means in their power” in the event of another member state becoming a victim of armed aggression. The continued development of the EU Common Security and Defence Policy raises questions about the future of NATO (as 21 out of 27 EU member states are also members of NATO). Specifically, NATO’s relevance is called into question by two related issues. First, in many cases, NATO instruments have proven insufficient to address the most important challenges. For instance, NATO has little or no relevance to the financial crisis, climate change, energy, and other key issues. Even with regard to security and defense issues, a comprehensive approach is required that integrates the political, economic, and social dimensions. Second, the EU is emerging as an actor in its own right, building up capabilities in both defense and in the field of diplomacy. Thus, decision making (at least in regard to security and defense in Europe) may shift from the NATO’s NAC to the EU’s External Action Service in the near future.

Nevertheless, today the EU and NATO are working to support each other’s efforts. The Berlin Plus agreements (the most important of them concluded in 2002) give the EU the authority to use NATO assets in case the EU wants to act independently. The Berlin Plus arrangements cover three main elements directly connected to operations: EU access to NATO’s command arrangements and reconnaissance aircrafts also assists in operational planning. On the other hand, several points suggest the potentially problematic nature of implementing the Berlin Plus agreements. Firstly, when the EU and NATO carry out two simultaneous but separate land or sea operations, the Berlin Plus arrangements do not apply. Second, the Berlin Plus agreements do not provide for the possibility of combining civilian and military instruments. Finally as an organization, NATO does not have many capabilities to offer the EU, and the Berlin Plus agreements do not give the EU the opportunity to access U.S. resources. Therefore, the ability of the EU and NATO to cooperate under the Berlin Plus agreements remains unclear.

Arunas Molis

See also Bosnia Intervention; Europe; Kosovo Intervention; Libya; 9/11 (2001); War in Afghanistan

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NORTHROP GRUMMAN

Northrop Grumman is a leading global security firm possessing a varied portfolio of products and technological competencies. The current corporation traces its origins back to the founding of Northrop Aircraft Incorporated and the Grumman Corporation in 1929 and 1930, respectively. Today, Northrop Grumman specializes in aerospace, electronic, and information systems, as well as technical services. Key products include the B-2 stealth bomber, E-2D Advanced Hawkeye airborne warning and control aircraft, Global Hawk unmanned aerial vehicle, and a variety of radar, communication, sensor, and command and control systems. This entry traces the history of Northrop Grumman and its early aircraft and discusses current products and services.

History

Northrop Grumman’s origins emerged from the founding of two key interwar aircraft manufacturers: (1) Northrop Aircraft Incorporated and (2) the Grumman Corporation. Founded in 1929 by Jack

Northrop, a leading aircraft designer who formerly penned designs for Lockheed aircraft, Northrop Aircraft Incorporated slowly grew into a leading aerospace firm. During the interwar years, the firm produced a series of low-wing metal monoplanes—most notably the Alpha, Gamma, and Delta—that achieved notoriety for their speed and forward-thinking design. The corporation's first military aircraft of consequence was the P-61 Black Widow, a night fighter that first entered military service in 1944. After World War II, Northrop pioneered the development of "flying wing" prototypes, though these aircraft achieved only moderate success. During the Cold War, Northrop produced a number of significant aircraft, including the F-89 Scorpion interceptor, F-5 fighter, the widely used T-38 supersonic trainer, and the F/A-18 Hornet. The firm also pioneered the development of intercontinental guided missiles such as the 1960 SM-63 Snark. In 1989, Northrop successfully ushered the B-2 Spirit stealth bomber into service, finally proving the worth of the company's earlier research into flying wings.

Founded in 1930 by Leroy Grumman, Jake Swirbul, Bill Schwendler, E. Clint Towl, and Ed Poor, the Grumman Corporation also distinguished itself in the aerospace field. The firm's 1931 XFF-1 was the U.S. Navy's first aircraft possessing a retractable undercarriage and a fully enclosed cockpit. During the Second World War, Grumman produced a number of distinguished fighter aircraft, most notably 1940's F4F Wildcat and 1944's F6F Hellcat. After the conflict's end, the company continued to be a vital supplier of naval aircraft, including the F9F Panther jet in 1947, the A-6 Intruder attack bomber and E-2 Hawkeye airborne warning and control platform in 1960, and the F-14 Tomcat fighter in 1974. Grumman also distinguished itself in space technology, producing the 1969 Apollo Lunar Module that carried man to the surface of the moon. Grumman's separate history came to an end in 1994, when Northrop acquired the company, creating the formal origins of today's defense giant.

Since its 1994 founding, the contemporary Northrop Grumman Corporation has brought a number of other significant aerospace and defense-related companies under its corporate umbrella. In 1996, the firm acquired the Westinghouse Electric Corporation, a pioneer in the development of radar and a leader in Cold War and post-Cold War radar technologies. A year later, Northrop Grumman brought the Logicon

Corporation, a leader in information systems and services, under its control. In subsequent years, the firm acquired Teledyne Ryan Aeronautical (1999), Litton Industries (2001), Newport News Shipbuilding (2001), and TRW (2002). Teledyne Ryan traced its roots back to the early 1920s, and produced a number of significant aircraft, most notably Charles Lindbergh's *Spirit of St. Louis*. After World War II, Ryan pioneered the development of unmanned aerial vehicles, culminating in the 1998 RQ-4A Global Hawk, a high-altitude, long-distance aerial reconnaissance platform. Litton and Newport News Shipbuilding specialize in the construction of naval vessels, the former focusing primarily on surface platforms, the latter an expert in nuclear-powered submarines and aircraft carriers. TRW represents one of the world's leading developers of satellite payloads and other space-based systems. Among other accomplishments, the company produced the Pioneer 1 spacecraft, lunar module descent engines for the Apollo program, the Milstar system of military communication satellites, and the Chandra X-ray observatory.

Today's Northrop Grumman

Today, Northrop Grumman stands as a leading defense contractor and global security firm, providing a range of products to the U.S. and world militaries and private corporations around the world. The company organizes its products and development into four distinct business sectors: (1) Aerospace Systems, (2) Electronic Systems, (3) Information Systems, and (4) Technical Services. As befits its aeronautical roots, Northrop Grumman continues to offer a range of air- and space-based platforms, including manned and unmanned aircraft, missiles, and space systems. Notable products in the Aerospace Systems portfolio include the B-2 Spirit stealth bomber, E-2D Advanced Hawkeye airborne warning and control aircraft, E-8C Joint STARS airborne targeting and battle management system, Global Hawk unmanned aerial reconnaissance platform, AEHF satellite strategic and tactical relay communication system for the U.S. military, and the James Webb space telescope. Northrop Grumman's Electronics division provides radar systems for the F-16, F-22, and F-35 aircraft; infrared missile warning systems for U.S. aircraft; fire control radars; and the LITENING targeting pod. In the information arena, the firm specializes in military

command and control systems, secure communication networks, and surveillance and reconnaissance systems and also supports the 9-1-1 public safety system. Northrop Grumman's Technical Services division supports maintenance and training programs for U.S. Air Force, U.S. Army Battle Combat Training Program, and biometric capture services for the Department of Homeland Security.

In the post-Cold War era, Northrop Grumman has committed to the international marketplace. In addition to providing products and technical support for U.S. military and civilian agencies, the corporation offers products and services to clients in 25 other countries in Europe, the Middle East, Africa, Asia, and the Pacific. To support these international commitments, Northrop Grumman maintains more than 30 regional business development offices around the world. Outside the United States, the firm's most significant presence is in the United Kingdom, where the company is a key supplier in the defense, information technology, security, and public safety markets.

The Future

Northrop Grumman's commitment to emerging technologies like unmanned aerial vehicles, cyber security, and space-based communication technologies suggests that the firm will continue to maintain a strong presence in both the military and civilian marketplaces in the years to come. The company's diversified portfolio and ongoing focus on research and development place it in a strong position to expand its market share in the contemporary world. Furthermore, Northrop Grumman's strong international presence in emerging markets suggests the potential for continued growth.

M. Houston Johnson V

See also Airborne Warning and Control System (AWACS) Aircraft; Boeing; General Dynamics; Halliburton; Lockheed Martin; Radar; Raytheon; Research and Development; Stealth Technology; Targeting Systems; Technology; United Technologies Corporation; Unmanned Aerial Vehicles

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Website

Northrop Grumman: <http://www.northropgrumman.com/>

NORWICH UNIVERSITY

An independent institution located on a 1,200-acre campus in Northfield, Vermont, Norwich University originally was situated in Norwich, Vermont, where it was established in 1819 as the American Literary, Scientific and Military Academy, thus earning the distinction of the first private military college in the United States. Norwich University is also the oldest of the six Senior Military Colleges designated by the U.S. Department of Defense and is recognized as the “birthplace” of the Reserve Officers' Training Corps (ROTC). This entry discusses the history of Norwich University and lists some of the university's illustrious alumni.

American System of Education

The founder of Norwich University, Captain Alden Partridge (1785–1854), had previously served as superintendent of the United States Military Academy. Partridge was very influential in promoting military education throughout the United States through his highly innovative “American System of Education,” which included instruction in military tactics. For Partridge, the militia was of vital importance because it provided “an impregnable bunker” that protected the liberties of the nation. He viewed a citizen-soldiery as the ideal defense for a democratic republic.

Partridge sought to reform education by expanding the classical curriculum to include not only military tactics but also instruction in scientific and practical subjects, such as engineering, agriculture, political economy, and modern languages. Partridge was not only the father of the military school movement in the United States but also the author, in 1841, of the first comprehensive proposal presented

to Congress for supporting, through federal land grants, institutions of higher education offering instruction in the practical sciences and military tactics. Partridge's concept ultimately was realized, 8 years after his death, through the passage of the Morrill Land Grant Act in 1862.

When the Vermont state legislature chartered Norwich University in 1834, the trustees were required "constantly to provide a course of military instruction, both practical and theoretical." After a catastrophic fire in 1866, the university moved to its current location, Northfield, Vermont, and in 1898, the Vermont legislature designated the institution the "Military College of Vermont." In 1916, the connection between the Vermont National Guard and the Norwich University Corps of Cadets ended when the university became the first site for a Senior ROTC cavalry unit. Norwich remained distinctively a horse cavalry school until 1947 when the War Department stopped supporting the cavalry program and replaced it with armored cavalry training. In 1948, the War Department authorized the creation at Norwich University of a new ROTC program in mountain and winter warfare, which is now called Mountain and Cold Weather Training and continues to be unique among ROTC detachments. Army ROTC at Norwich was augmented by a U.S. Air Force ROTC unit in 1972 and joined by a U.S. Navy ROTC detachment 12 years later. Another institutional milestone was reached in 1974 when Norwich took the leadership role in accepting women into the Corps of Cadets, 2 years before any of the national service academies.

Norwich Alumni

From the early 19th century to the present, Norwich University alumni have played significant roles as military officers, educators, and policymakers. Illustrative of this distinguished record of service are Captain James H. Ward (1823), first commandant of the U.S. Naval Academy; Colonel Truman B. Ransom (1825), killed leading the assault against the Mexican fortress at Chapultepec; Major Edmund Rice (1859), commander of the 19th Massachusetts Infantry Regiment, who received the Medal of Honor for his role in repelling Pickett's Charge at the Battle of Gettysburg; Gideon Welles (1826), secretary of the U.S. Navy, 1861–1869; Colonel Edward Hatch (1850), commander of the 9th U.S. Cavalry ("Buffalo

Soldiers"), 1866–1869; Commodore George Dewey (1851–1854), the third Norwich alumnus to command the Pacific Squadron; Lieutenant General Edward H. Brooks (1916), commander, VI Armored Corps, 1944–1945; General I. D. White (1922), commanding general of the U.S. Army Pacific Command, 1957–1961; Brigadier General Robert F. McDermott (1937–1939), first dean of the U.S. Air Force Academy; Major General Jonas Platt (1940), chief of staff to commander of the U.S. Marine forces in Vietnam; and General of the Army Gordon R. Sullivan (1959), U.S. Army chief of staff, 1991–1995. As many as 138 alumni have served as general or flag officers in the various state and national armed forces of the United States, and 26 alumni have served as general officers in foreign armies. Seven alumni have received the Medal of Honor, and countless others have received recognition for valor or service.

Norwich Today

In recent years, the university has reached new heights of selectivity, enrollment, academic achievement, and recognition as a center for leadership. Of the total 3,450 students enrolled, approximately 1,570 are in the Corps of Cadets, 480 are civilian students, and 1,400 are online graduate students. The regular, full-time, faculty number 120. Currently, the annual institutional budget is approximately \$93.5 million, and the endowment is around \$161 million.

Following for almost two centuries its traditional mission of preparing its students for the responsibilities of citizenship, leadership, and service, Norwich University continues to make significant contributions to national defense. Norwich is consistently among the top two or three institutions nationally in terms of the number of army and marine officers commissioned annually. Also, Norwich is the leading college with respect to the number of students who are commissioned in the National Guard. The university maintains student exchanges with the Australian Defence Force Academy, the Republic of China Military Academy (Taiwan), the Special Military School of St. Cyr (France), and the University of the Bundeswehr (Germany). Among the 31 undergraduate baccalaureate programs offered at Norwich is a distinctive major, Studies in War and Peace, which examines military institutions and their impact on the social order. Another undergraduate program, Strategic Studies and Defense Analysis, is a degree



Norwich University Corps of Cadets on parade.

Source: Photo by Gary T. Lord.

completion program available online to military personnel who are assigned to the U.S. Special Operations Command. Three online master of arts programs of note include Diplomacy, Military History, and Information Assurance. Norwich was one of the first institutions to be designated a Center of Excellence by the National Security Agency. Two programs among the Norwich University Applied Research Institutes have military applications, the Cyber Conflict Research Institute and the Defense Technologies Institute, the latter focusing on the development of advanced man-portable battlefield systems.

Gary T. Lord

See also Commissioned Officers; ROTC; Training, Army Officers; Training, Naval Officers

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NUCLEAR PROLIFERATION

Nuclear proliferation refers to the acquisition of nuclear weapons technology by nations that did not previously possess them. The spread of nuclear weapons technology has been considered a major threat to global security even before the first nuclear weapons

were developed. Between 1945 and 2006, at least eight different states acquired and tested nuclear weapons: the United States (1945), the Soviet Union (1949), the United Kingdom (1952), France (1960), the People's Republic of China (1964), India (1974), Pakistan (1998), and North Korea (2006). South Africa developed a small arsenal of nuclear weapons in the 1980s but dismantled them in the 1990s. Israel is widely considered to have been a nuclear-armed state since the 1960s, though it has never publicly admitted this. A substantial number of other states have begun nuclear weapons programs of greater or lesser extent but without eventual success. This entry examines the history of nuclear weapons proliferation around the world and discusses nonproliferation regimes and the Nuclear Non-Proliferation Treaty.

Historical Overview

After the 1939 announcement that a fission chain reaction was possible, scientists in the United States, the United Kingdom, the Soviet Union, Germany, and Japan each attempted to notify their governments that a potentially new energy source or weapon was derivable from work in nuclear physics. Each of these countries began small, exploratory nuclear programs. In 1941, encouraged by scientific calculations suggesting the feasibility of a bomb, American officials launched a full-scale industrial effort to manufacture nuclear arms in time for use during World War II, which became what was known as the Manhattan Project. This effort culminated in the nuclear bombs used against the Japanese cities of Hiroshima and Nagasaki in August 1945.

The American program, which had derived considerable initial support and cooperation from the United Kingdom and Canada, was initially launched out of a fear that National Socialist Germany would develop its own nuclear arms. Even when it was discovered, by the end of 1944, that the German nuclear program was insubstantial, the fear of a nuclear-armed Soviet Union led officials on the Manhattan Project to pursue long-term counterproliferation strategies. Most significant of these was an attempt to secure the rights to all significant known deposits of uranium ore, the necessary raw material for any nuclear weapons program.

In the immediate postwar period, the threat of nuclear weapons proliferation and of a clandestine nuclear arms race motivated many scientists and

politicians in the United States to lobby for the international control of atomic energy. Specifically, it was held that the only way to avoid secret proliferation was for an international consortium to have authority over certain weapons-related activities, as well as provide for the inspection mechanisms necessary to verify that states were not creating contraband arms. Political conditions in both the United States and the Soviet Union prevented any workable control scheme from being realized during the 1940s.

The Soviet Union began developing its first nuclear arms out of a desire for security and parity with the United States. The USSR obtained considerable espionage information from the Manhattan Project by means of ideological volunteer spies well placed among scientific and diplomatic ranks. As such, Soviet officials had a reasonably complete picture of what the Manhattan Project efforts had been, and what had worked. It had been long assumed that this espionage information was instrumental to the speed of the development of the Soviet atomic bomb, but archival sources released after the end of the Cold War have shown that the Soviet administrators did not trust the data wholeheartedly and required their scientists to replicate it independently. The primary limiting factor for the development of the first Soviet plutonium bomb, detonated in August 1949, was the availability of raw materials.

Both the United Kingdom and France sought nuclear arms in the 1950s for similar reasons. Both were interested in independent deterrence against the Soviet Union, and both were motivated by the desire for international political and scientific prestige. The United Kingdom had the advantage of having played a significant role in the Manhattan Project, and it was able to draw on that experience to produce a relatively economical bomb by 1952. France had been a world leader in nuclear physics in the 1940s, had begun a serious reactor program by the mid-1950s, and detonated its first plutonium bomb in early 1960.

The People's Republic of China initially sought nuclear capability after confrontations with the United States over Taiwan and Korea in the 1950s, during which the possibility of American use of nuclear forces was publicly entertained by U.S. officials. Until the Sino-Soviet split, the Chinese were aided by Soviet technicians. By the early 1960s, however, they had become autonomous. In 1964, they detonated their first weapon: a comparatively

sophisticated implosion device fueled by enriched uranium.

It is of note that no state has yet been able to develop nuclear weapons without some form of international assistance, in the form of aid from foreign scientists, espionage, or the receipt of assistance in constructing specialized equipment or facilities. In some cases, this assistance from other nations has been involuntary, such as in the case of the United States and the Soviet Union, where the latter was the recipient of considerable information developed by the former, thanks to espionage. In other cases this assistance has been entirely voluntary, such as with France and Israel, where the former provided the latter with nuclear facilities largely out of the belief that a nuclear-armed Israel would aid in French foreign policy ambitions. An ambiguous middle ground exists in nations that received dual-use nuclear assistance and later diverted it toward clandestine nuclear programs. In all cases so far, however, it is worth emphasizing that nuclear proliferation has been an international effort.

Nonproliferation Regimes

The initial plan for the control of nuclear weapons, proposed by the United States to the United Nations in 1946, called for the eventual destruction of existing U.S. nuclear arms should other nations forswear developing them and submit to inspections verifying their renunciation. The Soviet Union, then working on its own clandestine nuclear program, could not be persuaded to submit to such a plan. In 1953, the U.S. president Dwight D. Eisenhower announced a program of "Atoms for Peace," meant to emphasize the sharing of nonmilitary nuclear technology with nonnuclear nations. This activity led to the creation of the International Atomic Energy Agency (IAEA) in 1958, with participation from the United States, the Soviet Union, France, and other nations. The Atoms for Peace program included the distribution of small quantities (not enough individually to produce a weapon) of highly enriched uranium for research reactor development.

In the early 1960s, as a result of increased experience with nuclear technology and the addition of the United Kingdom, France, and eventually China to the "nuclear club," the question of a general treaty to prevent further spread of military nuclear technology was raised repeatedly in the United Nations.

Political obstacles relating to the negotiation of nuclear weapon deployment in NATO states stalled negotiations until the end of the decade. In 1968, however, the United States, the Soviet Union, and the United Kingdom became the founding signatories to the Nuclear Non-Proliferation Treaty (NPT), which went into force in 1970. The NPT divided the world into "nuclear weapons states" and "non-nuclear weapons states," requiring that the states with preexisting nuclear stockpiles should not assist in the spread of nuclear weapons and that those without nuclear stockpiles would refrain from developing them. The treaty asserted that the "research, production and use of nuclear energy for peaceful purposes" was an "inalienable right" of all parties, providing that nonnuclear states submit their peaceful sites to inspections by the IAEA. The IAEA thus became the primary international agency charged with enforcing nuclear weapons safeguards and detecting the diversion of nuclear materials from peaceful purposes to military uses. Nearly all major states eventually became signatories to the NPT. France and China, both nuclear states at the time of initial treaty, did not initially sign, though France pledged to uphold its requirements. Both eventually signed the treaty in 1992 and are recognized as "nuclear weapons states" under the NPT.

Notably, a number of states did not sign the NPT. These included India, Pakistan, Israel, and South Africa. Though India had been a participant in NPT negotiations, it rejected the treaty on the grounds of maintaining sovereign military flexibility, especially in light of the Chinese development of nuclear weapons in 1964. Pakistan similarly rejected the treaty because of its rejection by the rival Indian state. India detonated a nuclear device in 1974, claiming it was a peaceful nuclear explosion and not weaponized. Pakistan similarly developed nuclear weapons capability of its own, with functioning warheads by the late 1980s. Both India and Pakistan detonated nuclear explosions in 1998, announcing themselves as fully nuclear states at that point.

It is widely believed that Israel developed nuclear weapons capability by the 1960s. The Israeli government has neither confirmed nor denied this accusation, despite compelling evidence for Israel's existing nuclear capabilities that has been either leaked or discerned by intelligence agencies. South Africa, initially a nonsigner of the NPT, developed a small arsenal of uranium-based weapons by the 1980s.

These were dismantled in the early 1990s, evidence was submitted to the IAEA, and South Africa became an NPT signatory in 1991.

Numerous other states pursued nuclear weapons research and development programs over the course of the Cold War. These included Argentina, Australia, Brazil, South Korea, Switzerland, and Taiwan, among others. For various reasons, both technical and political, these countries did not develop weapons. Furthermore, many of these nations are now members of various Nuclear-Weapons-Free Zones established by the United Nations since the late 1960s: The Treaty of Tlatelolco (1967) bans the development and basing of nuclear weapons in Latin and South America, the Treaty of Rarotonga establishes such a zone in the South Pacific, and the Treaty of Pelindaba (1996) prohibits nuclear arms in Africa.

Post-Cold War Developments

The end of the Cold War had decidedly mixed effects on existing nonproliferation regimes. There have been notable successes: the three former Soviet republics that had “inherited” nuclear weapons after the collapse of the USSR—Belarus, Kazakhstan, and Ukraine—all agreed to relinquish their stockpiles to the Russian Federation and become NPT signatories after negotiations with both Russia and the United States. On the other hand, however, numerous incidents have highlighted the possibility of NPT signatories purposefully evading IAEA inspections and successfully hiding clandestine nuclear programs until very late dates. Iraq managed to conceal a large nuclear program until just before the Gulf War in 1990; Iran has shown its ability to conceal the development of large nuclear sites from IAEA inspection regimes; and North Korea was able to pull out of the NPT entirely, seize formerly safeguarded facilities, and use them to develop nuclear arms in a relatively short amount of time.

The development of gas centrifuge technology, particularly in the late 1960s through the 1980s, has arguably created novel problems for nonproliferation efforts. Gas centrifuge enrichment of uranium is cheaper and requires less energy than other enrichment processes (e.g., gaseous diffusion or the electromagnetic method). Individual centrifuges are difficult to construct and operate, but the process itself can be done incrementally over time and in comparatively

small and hard-to-detect facilities. Centrifuges are also inherently dual-use: The same setup is used for both civilian and military purposes, and their coverage under the peaceful technologies permitted by the NPT is controversial. These facts raise a number of difficulties for nonproliferation regimes. First, they make clandestine enrichment programs increasingly feasible. Second, they allow for a rapid acceleration of civilian enrichment programs for military purposes. Third, their relative inexpensiveness and their inescapable connection with civilian enrichment make dissuading their use difficult.

The distribution of centrifuge enrichment technology was greatly aided by the Pakistani metallurgist Abdul Qadeer Khan. Khan first learned about the technology through working at a civilian enrichment facility in the Netherlands in the mid-1970s. He later took the blueprints back to Pakistan and developed the infrastructure for Pakistan’s nuclear weapons program. In the early 1990s, Khan began to covertly sell old Pakistani centrifuge technology and engaged an international network of suppliers to manufacture the parts. He sold the technology to Libya, Iran, and North Korea. Libya abandoned its nuclear program in 2003. North Korea has apparently pursued plutonium technology for its main nuclear program, and it detonated its first bomb in 2006. Controversy currently exists over whether Iran is actively pursuing nuclear weapons now.

The threat of nonstate actors acquiring nuclear weapons has been entertained seriously since at least the 1980s. The general conclusions reached are that a sufficiently well-organized and well-financed terrorist group could conceivably acquire and detonate nuclear weapons by means of acquiring fissile nuclear material from a preexisting nuclear state. Securing fissile material in existing states, in particular those in the former Soviet bloc, has hence been a major preoccupation of nonproliferation regimes. The Nunn-Lugar Cooperative Threat Reduction program, for example, begun by the United States in 1992, sought to upgrade critical nuclear infrastructure in the former Soviet states and to aid in deactivating and destroying weapons facilities.

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See also Bombs, Nuclear; Military Science; Missiles, Nuclear; Strategy, Nuclear; United Nations; Weapons, Nuclear

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NUREMBERG WAR CRIMES TRIALS

Between November 20, 1945, and October 1, 1946, an international court consisting of justices from each of the four Allied victors—the United States, Great Britain, France, and the USSR—prosecuted the most prominent surviving members of the defunct Nazi government in the war-shattered city of Nuremberg, Germany. Although the original indictment listed 24 defendants, three of the indicted were not present at trial. The industrialist Gustav Krupp von Bohlen und Halbach was deemed mentally unfit to stand trial; Martin Bormann, the head of the Nazi Party Chancery, was tried in absentia; and Robert Ley, chief of the German Labor Front, committed suicide after being indicted. These reductions left 21 defendants sitting in the dock at Nuremberg when the trial started. This entry discusses the background and proceedings of the trial and its verdicts and legacy.

Background to Nuremberg

The seeds of Nuremberg lay in the years 1942 and 1943, when the first reports of the Holocaust began

to leak out of occupied Poland. The Americans, British, and Soviets all issued warnings that the Nazis would be held judicially accountable for their crimes after the war. In October 1943, representatives of these countries met in Moscow to coordinate a common policy on German war crimes. They published a joint resolution, the “Moscow Declaration,” that limned an approach of returning lower ranking Germans suspected of war crimes to the countries in which they had committed them. The “major criminals,” whose crimes had “no particular geographical location,” would be “punished by a joint decision of the Government of the Allies.” What this “joint decision” consisted of in 1943 was unclear. Initially, the Americans, British, and Soviets all favored a policy of identifying the “grand criminals” and liquidating them by firing squad. U.S. Secretary of War Henry Stimson opposed summary execution, proposing instead to prosecute top Nazis in an international tribunal, where they would enjoy conventional legal rights like notification of the charge and the right to present evidence. By 1944, Stimson’s plan had bested summary execution. When Harry Truman became president in April 1945, he adopted Stimson’s plan as official U.S. policy. By June 1945, Great Britain, France, and the USSR had endorsed it.

In August 1945, the Allies set forth the crimes that would be charged against the Nazi defendants in a charter that would serve as the governing instrument of the international tribunal at Nuremberg. In Article 6, the “London Charter” listed aggression, war crimes, and crimes against humanity as the primary offenses. In addition, Article 6 indicated that the Nazis would be charged with “a Common Plan or Conspiracy” to perpetrate each of these crimes. Articles 9 and 10 authorized the tribunal to identify certain German agencies as “criminal” organizations. In accordance with the prosecution’s indictment, the tribunal would later declare the gestapo (the secret police of Nazi Germany), the *SS* (*Schutzstaffel*; the powerful elite guard of Nazi Germany), *SD* (*Sicherheitsdienst*; intelligence agency of the SS), and the leadership corps of the Nazi Party as criminal organizations.

In selecting defendants for trial, the Allies focused on the leading figures at the summit of the Nazi state—chiefly, men associated with propaganda, the armed forces, the Nazi Party, finance and industry, and slave labor. These included figures such as Julius Streicher, editor of the anti-Semitic newspaper *Der*

Stürmer; chief of army operations General Alfred Jodl; chief of staff of the high command General Wilhelm Keitel; chief of the air force Hermann Göring; the head of the Reich Security Main Office Ernst Kaltenbrunner; Hitler's deputy Rudolf Hess; minister of the Occupied Eastern Territories Alfred Rosenberg; and Albert Speer, minister of armaments and war production, to mention only a handful.

Notable Features of the Trial Proceedings

Several aspects of the year-long trial of the major war criminals are noteworthy. First, 90% of the prosecution's evidence relied exclusively on German government documents in the form of files, photographs, and films, an emphasis that lent an air of tedium

to the proceedings in the view of reporters covering the trial. Second, the indictment at Nuremberg not only closely tracked the offenses outlined in Article 6 of the London Charter but also included a charge of "common plan or conspiracy" to commit crimes against peace, war crimes, and crimes against humanity. Third, the trial was marked by curious tensions between the Soviets and the Anglo-Americans over how the USSR's territory would be defined in the aggression charge (the United States feared that including the Baltic states in the definition of Soviet territory would confer legitimacy on their annexation), and insistence by the Soviets that the indictment include the Katyn Forest massacre of 925 Polish officers, which the United States and Great Britain believed the Soviets had themselves perpetrated.



Nuremberg trials defendants.

Source: Office of the U.S. Chief of Counsel for the Prosecution of Axis Criminality (National Archives).

The Verdict of the International Military Tribunal

Although most of the defendants were convicted at Nuremberg, prosecutors did not enjoy an unblemished triumph. Contrary to their argument, the tribunal only recognized the existence of a conspiracy to wage aggressive war but not to commit war crimes and crimes against humanity. The tribunal also rejected the justiciability of crimes against humanity before September 1, 1939, on the grounds that such acts, because unrelated to waging aggressive war, were not prosecutable under international law. Three defendants were acquitted outright (Hjalmar Schacht, Franz von Papen, and Hans Fritzsche); most of the others were convicted on multiple charges. Twelve were sentenced to death and seven to prison terms of varying lengths (life to 10 years).

Impact and Legacy of Nuremberg

The Nuremberg War Crimes trial has exerted a profound influence on numerous proceedings and international legal instruments after the court adjourned in October 1946. The jurisprudence it created underpinned the Tokyo War Crimes trials and zonal trials conducted under Control Council Law #10. Nuremberg's painstaking documentation of the Holocaust led to passage of the UN Genocide

Convention (1948); the London Charter's tripartite classification of crimes against peace, war crimes, and crimes against humanity was incorporated into the Rome Statute of 1998 (establishing the International Criminal Court).

The legacy of Nuremberg is similarly polyvalent. The most far-reaching of its legacies may be the Nuremberg principles, which are now generally accepted as international customary law. These principles hold that perpetrators of genocide, crimes against humanity, war crimes, and aggression are criminally liable as individuals for their offenses, whether or not they were acting under the mantle of state authority.

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See also Crimes, Military; Geneva Conventions; Genocide; Human Rights; Humanitarian Intervention, Foreign; International Criminal Court

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OATH OF ENLISTMENT

Throughout history, oaths have bound loyal military forces to their leaders and nations. They remain today as a mechanism to ensure such allegiance. The military branches in the United States rely on an Oath of Enlistment for enlisted personnel and an Oath of Office for officers. Although it is common today, the notable difference between oaths concerns the armed forces' specific allegiance to the protection of the U.S. Constitution rather than a leader or political party. In contrast, the English and Canadian armed forces swear allegiance to their monarch. As a past example, Adolf Hitler in 1934 recommitted German military allegiance to himself directly when he replaced the prior oath to the German people and country. The history of the oath in the United States, discussed in this entry, serves as a window into the country's trials, challenges, and concerns for military loyalty dating back to the Revolutionary War.

Birth of the Oath and Revolutionary War

The first Oath of Enlistment in the United States of America was issued by the Continental Congress in June 1775 as a means of binding the men to the Continental Army. The oath was simple; it only required the soldiers to follow the regulations set down by the governing elements of the army during their service. A year later, in September 1776, the Continental Congress revised the oath under the newly formed Articles of War and incorporated some of the terminology that remains today.

The enlisted men swore to be "true to the United States of America" against its "enemies" and to obey the orders of the Continental Congress and officers above them. Those officers later followed an oath of their own.

Officers in the Continental Army recited the Oath of Office passed by the Continental Congress in October 1776. Officers acknowledged the sovereignty of the 13 United States and renounced any allegiance to King George III of Great Britain. They swore to "support, maintain, and defend" the United States against the King of Great Britain and concluded, "So help me God." A subsequent revision in 1778 consolidated the enumerated 13 United States as "the United States of America."

The 1789 revision of the Oath of Enlistment changed significantly from wartime versions in that it recognized the newly ratified Constitution. Although the body of the oath remained, an additional clause preceded it and recognized the importance of the armed forces in protecting the Constitution before everything else. Since 1789, the Constitution remains at the center of the oath as the characteristic that separates the U.S. military's obligations from those of many other nations around the world.

The Oath During the Civil War

After the 1789 revision of the Oath of Enlistment, it remained unchanged until the 1950s. Meanwhile, a revision to the Oath of Office for military officers during the Civil War addressed the need to confront allegiance to the Confederacy. The new version, sometimes called the Ironclad Test Oath of Office,

was passed in 1862 and sought to alleviate worries about officers' allegiance to the Confederate government. Under this oath, officers swore that they never aided or allied themselves with any office or government, especially within the country, that opposed the United States. Also, new to the officers was their affirmation to "support and defend the Constitution . . . against all enemies, foreign and domestic." Furthermore, they did so "without any mental reservation or purpose of evasion." At the time of its passage, the new oath confronted the problem of the Confederate secession and asserted a need for dedication and fortitude in a war that pitted soldiers on either side against their own family. Following the war, another revision in 1884 simplified the Oath once the conclusion of war eliminated concerns of officers with allegiance to the Confederacy.

Current Oaths of Enlistment and Office

The oaths remained untouched until the post-World War II years when a slight modification condensed and combined various past elements to make the current form that exists today. Similar to past versions, the focal point of the oath remains the sworn commitment to support and defend the Constitution against foreign and domestic enemies. Interestingly, enlisted soldiers pledge to obey the orders of the president, officers, and the Uniform Code of Military Justice, but the officers' oath excludes this component. This exclusion allows officers a degree of moral discretion in making a decision in the event that circumstances require a subjective evaluation not prefaced in the Uniform Code of Military Justice. Additionally, while the Oath of Office included the "So help me God" clause, it was not added to the Oath of Enlistment until 1950.

"I, _____, do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to regulations and the Uniform Code of Military Justice. So help me God."

"I, _____ (SSAN), having been appointed an officer in the Army of the United States, as indicated above in the grade of _____ do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic, that I will bear true faith and allegiance to the same;

that I take this obligation freely, without any mental reservations or purpose of evasion; and that I will well and faithfully discharge the duties of the office upon which I am about to enter; So help me God."

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See also Constitution, U.S.; Uniform Code of Military Justice

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OCCUPATIONS

An American military occupation comes into effect once the U.S. military occupies and takes control over a foreign territory. According to The Hague Convention of 1907 and the U.S. Army Field Manual 27-10, territory comes under occupation when it is placed under the authority of occupation forces. Significantly, the occupation concerns only that territory where occupation forces can establish and exercise their authority. As a consequence, small mobile parties such as patrols or reconnaissance missions do not constitute occupation forces. Rather, an occupation must be undertaken by military units capable of controlling an occupied territory. That said, military occupation is meant to be temporary, though some 20th-century American occupations have lasted decades, such as in the case of Okinawa. In general, American occupations of foreign territories have been overseen by U.S. military governments, with the U.S. Army's Civil Affairs branch taking on a key role. Usually, the desired end of an occupation is the creation, or restoration, of a stable democratic state aligned with the United States. In the past several decades, for political reasons, the United States has avoided using the term *occupation*, resulting in some confusion distinguishing

between humanitarian interventions and occupations. This entry describes historical examples of American foreign military occupations as well as their particular characteristics and problems.

Overview of American Occupations of Foreign Territories

Though traditionally ignored by military professionals, who have focused on winning wars rather than on running occupations, the U.S. military has had long experience of conducting occupations in foreign territories, beginning during the Mexican-American War. Indeed, occupations that have involved civil affairs in occupied enemy territory are an inevitable consequence of war. That said, in many instances American service members have had little patience for postcombat routines, preferring demobilization to the boredom of occupation duty.

In retrospect, U.S. military occupations have had mixed results. Some, such as the post-World War II occupations of Austria, Germany, and Japan, arguably have been successful, though the causal connection between the implementation of American occupation policies and the subsequent development of democracies has been disputed. Nevertheless, American occupations have been credited with helping create states that respect the basic rights of their peoples and neighbors. Other occupations have had a poor record if judged against stated aims, such as the recent American occupation of Iraq. In the Iraqi case, U.S. occupation forces became bogged down by an insurgency even as the country devolved into a sectarian civil war. Also, the occupation of Iraq proved vastly more expensive from a financial standpoint than predicted beforehand.

In most cases, American occupations of foreign territories have lasted longer than the wars or combat operations that produced them. In many instances, occupation forces initially have faced a chaotic environment, especially following combat operations and the collapse of an enemy regime. As a consequence, during an occupation's early period and beyond, those living under occupation are dependent on American forces for law and order as well as for a host of necessities. In addition, the occupation force is bound by international law to provide security and relief, all with an eye to begin helping with the reconstruction of an occupied territory. In practice, however, American reconstruction attempts can be undermined, particularly by insurgents or

other lawless elements; the latter sometimes include those who are bent on settling scores about which American occupation forces may only have vague knowledge. As for insurgents, in many instances, they prove difficult to eliminate, as they play on popular resentments against foreign occupation as well as discontent created unintentionally or otherwise by the actions of American occupation forces.

In keeping with American democratic ideology, certainly since World War II, American occupations have included efforts to rebuild or even to create democratic institutions. Going hand in hand with such democratization efforts, American occupation forces have overseen the purging and punishing of defeated leaders and key followers of antidemocratic and militaristic political movements. Such purges, along with other attempts to right past wrongs, have hampered economic revival, though some argue that it is an inevitable price for justice. Unfortunately, in occupied territory once under dictatorships, many individuals needed from a technical standpoint to reconstruct a country have been compromised through their association, willing or otherwise, with the defeated regime. Also, purges breed resentment and even resistance on the part of former elites excluded from positions of prominence.

With the end of the Cold War, the objectives of American occupation forces have increased in terms of scope and complexity. Recently, several U.S. military occupations have provided humanitarian relief and taken on the financially costly task of "nation-building." The latter mission has necessitated juggling the desires and interests of various international organizations, "coalition partners," U.S. government agencies, and local entities. In addition, the U.S. democratization efforts have become more ambitious. Specifically, American occupation forces have attempted to help create stable democratic states, extend the rule of law, and instill respect for human rights in regions of the world that lack such traditions.

American Occupation of Mexican Territory

The first significant U.S. experience with foreign occupation duty came as a result of the Mexican-American War, especially during 1847–1848. Here, the United States employed a force of perhaps 30,000 to oversee thousands of square miles of northern and central Mexico and millions of Mexicans. In northern Mexico (excluding territory that later became part of the United States), occupation troops under General

Zachary Taylor initially consisted of Regular Army units. At first, American occupation forces represented a welcome change from corrupt Mexican soldiers. Soon, however, the introduction of American volunteers changed the situation in northern Mexico, with the new troops raiding Mexican farms and committing crimes against persons and property. As a result, the Mexican population increasingly supported what in more recent times would be labeled an insurgency. Making matters worse, Taylor's military governors operated according to their own rules, imperfectly improvised on the spot.

In central Mexico, the occupation ran somewhat more smoothly. General Winfield Scott consistently maintained military discipline over his men as well as law and order when it came to the Mexicans. In particular, he issued General Order No. 20 (February 19, 1847) to control the abuses of Mexicans perpetrated by American forces and to police Mexicans under his authority, though local Mexican authorities generally retained control over local affairs. The order allowed for the court-martial of Americans for crimes such as assault, rape, and murder. Perhaps most important from the standpoint of quieting the occupied population, the order also stipulated that American soldiers—including volunteers—would be punished if they desecrated Roman Catholic places of worship. In doing so, Scott contained a source of tension between the mainly Protestant volunteers and the Roman Catholic population of Mexico. He also made good the claim that American forces occupied Mexico not as enemies of the Mexican people or its Church but as enemies of a relatively small narrow group of men who had misgoverned the country. Significantly, Scott issued his order not only without guidance from the James K. Polk administration but also in the face of the president's reluctance for political reasons to sanction the discipline of volunteers serving in Mexico. Scott's approach proved more effective in protecting the Roman Catholic Church than Mexico's general Santa Anna's, who was known to confiscate Church property to support his war efforts. Scott was able to occupy Mexico City for several months but was only partly successful in limiting the activities of Mexican partisans.

Post-Spanish-American War Occupations

The next major U.S. occupation of foreign territory came in the wake of the Spanish-American War, with

American forces occupying formerly Spanish held territory such as the Philippines. Here, the United States mistakenly believed that the Filipino population wished to trade Spanish rule for American. As a result, U.S. occupation forces faced an insurgency for more than 3 years. During the period, General Elwell Otis seized ports in the Philippines, thereby controlling the valuable export of hemp. In doing so, however, he avoided harming the local interests that depended on the trade. In terms of reform, U.S. forces oversaw, rewrote, and simplified the Philippine tax code and legal system, eliminating centuries of cumbersome Spanish legal tradition. Finally, the American occupation helped establish local municipal governments. By the end of the occupation, however, a tragic price would be paid; more than 4,000 American soldiers and approximately 100,000 Filipinos were dead, many of the latter from disease and starvation.

In addition to the Philippines, the Spanish-American War brought Cuba under U.S. control. At least in the short run, the American occupation of Cuba proved relatively successful despite some Cuban dissent, with General Leonard Wood importing American practices grounded in the Progressive Movement. Specifically, Wood's occupation forces reformed and standardized the Cuban legal system, attempting to make it speedier and less corrupt. Also, the occupation instituted a number of public health measures, ranging from overseeing the nightly sweeping of the streets of Santiago to the constructing of new sewer systems to control yellow fever. Finally, occupation forces attempted to reconstitute Cuban schools along American lines and to break the power of monopolistic railway interests through regulation.

In the decade or so following the Spanish-American War, American forces increasingly intervened directly in the affairs of various Caribbean and Latin American countries, resulting in several occupations. To give examples, the U.S. Marines occupied Nicaragua beginning in 1909 and continued to do so intermittently until 1933. Also, American forces occupied Haiti from 1915 to 1934 and the Dominican Republic from 1916 to 1924. In part, American occupations in Latin America attempted to produce stable, pliant governments. More significant, the occupations were put into force to protect American economic interests and to prevent the expansion of European influence in the

region, particularly British and German. Years later, the United States again moved to deny an outside power from gaining influence in the region, briefly occupying the Caribbean island of Grenada after removing a pro-Soviet government from power.

American Occupation in the Rhineland

In the aftermath of World War I, American forces for the first time occupied territories far from the Caribbean, including territory in Europe. For instance, the U.S. Army occupied part of the German Rhineland (1918–1923). Without proper training or organization, American forces in the Rhineland were left to muddle through the occupation. To give one of a number of examples, American soldiers received orders to maintain “dignified aloofness” in their relations with the Germans. As some American occupation soldiers were billeted in German homes, such an order proved impossible to enforce. Unfortunately, in this particular instance, the army failed to learn from its Rhineland experience. Immediately following World War II, in Germany, the U.S. Army attempted to impose a “nonfraternization” policy on its troops, which forbade American soldiers from even talking with German civilians. As in the post–World War I case, American soldiers violated the order to such a degree that it proved unenforceable, particularly as it initially was forbidden even to talk with small children. Ironically, in the Rhineland following the Great War, American occupation forces had far more trouble in their dealings with French occupation forces, and to some extent the British, than with the defeated Germans. For instance, the French and the British attempted to convince the American general John J. Pershing that he must impose harsh regulations on the occupied Germans, lest they favor the Americans at the expense of their fellow occupiers, the French and the British. Also, the French covertly used agents to foster a separatist movement in the Rhineland, including in the American bridgehead at Coblenz. Pershing had to go as far as to threaten to withdraw American forces from the occupation to bring an end to French activity. Despite the problems of the Rhineland occupation, the U.S. Army learned from the experience, drawing on it during the next World War as part of the training in various schools for military government established in the United States and abroad.

American Occupations During and Following World War II

During and following World War II, the United States found itself militarily occupying foreign territory in yet even more distant corners of the globe. For instance, during the war, American forces occupied territory in North Africa and Italy. After the war’s end, the United States occupied the whole of Japan and Korea south of the 38th parallel. Also, the United States established, along with the other Allied powers, occupation zones in Austria and Germany. With the postwar occupations came many responsibilities; some of the more important included the following: to restore and maintain public safety, to secure and provide adequate food and fuel supplies, to reform and reopen public and private institutions such as schools and factories, to repatriate persons to their country of origin, and to provide for protection of occupation forces. Generally speaking, the post–World War II American occupations did not lack for planning, though Korea was an exception.

In the cases of the U.S. Zones in Germany and Austria, American forces attempted to transform society. In Germany, according to American policy, General Lucius D. Clay, as commander of the U.S. military government, conducted a policy of demilitarization, decartelization, denazification, and democratization. To put it another way, American occupation forces, in concert with the other Allied powers, were charged with disarming Germany, breaking up its monopolistic industries, punishing Nazis and eliminating Nazi influence from society, and, finally, creating a democracy. In practice, such objectives proved contradictory. For instance, attempts to denazify Germany ran counter to attempts to revive Germany with a sound economy; the latter goal Clay ultimately favored and thought necessary for democracy to thrive. Also, postwar demobilization and the lack of personnel with adequate understanding of the German language undermined American efforts. Finally, the denazification of the German population, which involved sorting and judging millions of people, simply proved beyond the capability of the U.S. Army. Despite such problems, the Germans did not mount an armed resistance, making the occupation a peaceful affair. In any case, the U.S. military government in Germany soon had to concern itself

with an increasingly aggressive Soviet Union bent on extracting wealth from Germany.

Post-1989 American Occupations

Since 1989, U.S. forces have taken part in occupations in Panama, the Balkans, and Iraq. In the case of Panama, the United States intervened to remove an uncooperative dictator. Unfortunately, in contrast to its combat operation for Panama, the U.S. military proved reluctant to plan in detail for the mainly postcombat “stability operation” known as Operation Promote Liberty. Complicating matters, Operation Promote Liberty, when put into practice, overlapped by several weeks the combat operation used to depose the country’s leader, leading to confusion on the ground. To give an example, American occupation forces had only a single military police battalion to deal with the general breakdown of law and order. In the aftermath of combat, and in an effort to remove the influence of Panama’s military, American occupation forces found that U.S. law did not easily allow them to oversee the creation of a national police in Panama.

In the 1990s, the U.S. military demonstrated increased reluctance to engage in the complex problems of occupations. In the wake of the Persian Gulf War, the American occupations could be brief, such as in Kuwait, or coupled with humanitarian efforts, such as in northern Iraq. In addition, Washington’s position could be to deny that an occupation existed, as happened in the Haiti occupation. In yet other cases, American forces participated in occupations as part of multinational peace efforts, as in Bosnia and Kosovo. In the Balkan cases, American forces provided security in territories under international occupation, as well as helped clear mine fields, control unruly crowds, protect refugees, and round up suspected human rights violators. Even further removed from traditional military affairs, American occupation forces had to maintain working relations with various international organizations, non-governmental organizations, and foreign military occupation contingents. Over time, American forces found that the international and local political situations changed. As a result, to give an example, in Bosnia, American occupation forces began their occupation by standing between different factions and demobilizing hostile forces.

Later, they took part in forcibly imposing a truce on all the various groups in the territory.

In the case of Iraq in 2003 and later, the military occupation proved particularly difficult, thanks to a host of problems. One problem was the nature of Iraq itself. Following World War I, the British had established Iraq by force, melding together various antagonistic clans, tribes, and sects. In addition, throughout its history, Iraq had been ruled by authoritarian leaders, with Saddam Hussein being the last and the most heavy-handed. Making matters worse, the UN economic sanctions in the aftermath of the Persian Gulf War of 1991, in crippling Iraq’s middle class, had the unintended consequence of strengthening Hussein and his Baath party.

In addition, the United States prior to the war with Iraq officially refused to acknowledge that American forces would inevitably occupy Iraq, preferring instead to speak of liberation. Taking such a view, the Pentagon leadership failed to commit adequate numbers of soldiers for an initial occupation, despite the warnings of military officers who had studied previous occupations. Also, the uncontrolled disintegration of the Iraqi army ensured that large numbers of young men with at least a degree of military training and access to weapons were at large in the country. With time on their hands, these former Iraqi soldiers provided prime candidates for the subsequent insurgency. The situation in Iraq following hostilities was in sharp contrast to postwar Germany, where most German males were dead, wounded, prisoners of war, or incapable of armed resistance. Ultimately, the United States did acknowledge that Iraq was occupied and created the Coalition Provisional Authority that lasted from April 2003 through June 2004. By the time the Coalition Provisional Authority was established, however, American occupation forces had other problems, ranging from the lack of translators to the inability to provide adequate electricity to Baghdad, all of which suggested that military occupations are not to be undertaken lightly.

Ralph W. Brown III

See also Bosnia Intervention; Civil Affairs; Coalition Provisional Authority; Humanitarian Intervention, Foreign; Kosovo Intervention; Peacekeeping

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OFFICER CANDIDATE SCHOOL

Officer Candidate School (OCS) is one of several commissioning programs run by each branch of the military through which selected candidates earn a commission as a second lieutenant in the U.S. Army, U.S. Marine Corps, or U.S. Air Force, or as an ensign in the U.S. Navy or Coast Guard. Courses run from 6 to 17 weeks straight, depending on the branch, or as long as 16 months, if taken through the Army National Guard. The course at OCS is usually intense, with classroom instruction, physical fitness, field training, and leadership training held under highly regimented conditions. The background of candidates has varied during different periods and in different branches of the military. Some candidates

enter OCS with substantial enlisted service, while others are admitted with no previous military experience. In general, most candidates possess a bachelor's degree, although depending on the need for officers, that requirement has been lowered and even dropped entirely. The OCS concept remains to take candidates with demonstrated potential to serve as officers and put them through an intense training program that will enable graduates to perform the duties of a junior officer. The training is purposefully stressful, providing an opportunity for instructors to observe candidates in difficult situations and remove those deemed unlikely to succeed as officers. Almost all graduates of OCS receive a reserve commission, although many remain on active duty after commissioning and completion of branch-specific training. This entry discusses the history, programs, and role of OCSs, and the impact of the Global War on Terrorism.

History

OCSs are a product of early-20th-century military reforms, specifically over the problem of rapidly expanding the traditionally small peacetime U.S. Army for major wars. The Civil War and Spanish-American War demonstrated the drawbacks of relying on volunteer officers commissioned directly from civilian life to command military forces. OCSs evolved from General Leonard Wood's Citizen Military Training Camps, called Plattsburg Camps after the initial site, which were geared toward graduates from elite civilian universities. Wood believed that while the average American man might take years of training to become an effective officer, men from elite colleges could become effective officers through much shorter yet intense training. Under the initial program, men who had recently completed college would spend 4 or more weeks training in military tasks, after which top graduates were offered provisional commissions, although few would be offered tours on active duty with the Regular Army. Most who accepted the commissions served in either the National Guard or in the Officers Reserve Corps, which was created in 1916 and functioned mainly as a list of reserve officers.

In the National Guard, officers were normally voted into office by the enlisted men in a company, but reforms at the beginning of the 20th century ended this practice. In most states, enlisted men

seeking commissions were encouraged to take a series of correspondence courses offered by the army in order to qualify. The Massachusetts Volunteer Militia took a more direct approach to prepare future officers in 1913 when it established a training school—what would later be called an OCS—as a source of National Guard officers. Graduates were placed on the statewide list of those eligible for commissions in the National Guard and were commissioned as vacancies occurred. The school was suspended when the United States entered World War I but reopened in 1927. Current OCSs run by the Army National Guard trace back to the Massachusetts school.

When the United States entered World War I, the greatly expanded armed forces needed far more officers, especially in the company grades (lieutenants and captains), than the National Guard or the tiny Officers Reserve Corps could provide. As a result, all branches of the military developed OCSs, usually lasting 3 months, for enlisted men who showed the potential to become officers. The military sought men who because of their educational background had potential to serve as officers, rather than selecting men who showed a mastery of military skills. Within each branch of the military, most OCSs were branch specific, meaning that the infantry, artillery, and support services each maintained its own OCS. Graduates of these OCSs received reserve commissions. After the war, the mass of new officers were discharged; very few were able to convert their reserve commissions into regular commissions for service in the peacetime military. If the discharged officers desired, they could preserve their reserve commissions by joining the Organized Reserve or National Guard. The OCSs were all closed, and except for a few states, National Guard programs would not be restarted until shortly before the United States entered World War II.

However, hoping to provide a source of officers for the Organized Reserve, the army began holding Citizens' Military Training Camps, which were based on the prewar Plattsburg model. A series of summer camps were held around the country, mainly targeting college men, but some with businessmen who had been out of college several years. The main purpose was to acquaint civilians with the rudiments of military life rather than as a commissioning program, although men who

completed three or four camps, depending on the period, and later, a correspondence course, could earn a reserve commission through the camps. By the 1930s, fewer than 10% of the men who started a camp completed the entire process and earned a commission, but those who did, such as Ronald Reagan, usually entered the Organized Reserve, and most would later be called to active service in World War II.

When the United States began mobilizing in the fall of 1940, the National Guard and the Organized Reserve did not have nearly enough officers for their own organizations, much less enough to provide for the greatly expanded military being planned. As a result, OCSs were again held at various training camps around the nation and in all branches of the military. The need for company grade officers became so acute that divisions held their own OCS programs, including one in Australia by the Americal Division. OCSs provided the majority of company grade officers during the war. However, as with their World War I forebears, most World War II OCS graduates left the military after the war.

During the Korean War, the army maintained eight branch-specific OCSs and lengthened the course from 17 to 22 weeks. Slightly more than a third of candidates failed to complete the course. Eventually, around 7,000 officers graduated from an army OCS during the war. After the Korean War, OCSs became a permanent fixture of the U.S. military, although reduced from eight to three programs, one each for infantry, artillery, and engineers. OCS rapidly expanded again during the Vietnam War. It was lengthened to a 23-week-long program and experienced a high failure rate. The infantry OCS at Fort Benning, Georgia, graduated 7,000 officers annually in the mid- to late 1960s. During peacetime, OCSs remained small, with few classes held. In 1973, all army OCS programs were consolidated at Fort Benning in the Branch Immaterial Officer Candidate Course, which was largely based on the infantry program.

Role of OCS

While the Reserve Officers' Training Corps (ROTC) remains the largest source of officers, OCSs allowed the military to take advantage of potential officers who had not attended a military academy or served in ROTC, but without the risky former practice of

commissioning such men directly from civilian life. The existence of OCSs gave aspiring enlisted men a method of entering the officer ranks. The existence of OCSs also gave the military greater flexibility in filling its lower officer ranks, especially during wartime. While a military academy took 4 years to commission an officer, and ROTC took at least 2 years, OCS could produce officers in 3 months. Additionally, commissioning an officer through OCS cost the army about one tenth of what was required for an academy graduate.

Global War on Terrorism

The 1990–1991 Persian Gulf War had little impact on OCSs due to the short and decisive nature of the war and the decreasing size of the military following the end of the Cold War. While not totally discontinued during the 1990s, OCSs shrank and functioned more as a hedge against a future need for rapid expansion rather than as a large source of officers. The Global War on Terrorism that began following the attacks of September 11, 2001, led to the expansions of OCSs, especially the army's at Fort Benning. While the military itself expanded only slightly during the war, the need for company-grade officers increased dramatically to fill shortages caused by lower retention rates and a decline in officers commissioned through the ROTC.

The army's OCS is currently a 14-week program. Candidates are either serving enlisted soldiers recommended by their chain of command, or individuals with no prior military service, who must attend basic combat training with other enlisted soldiers before beginning OCS. Army OCS, along with the Military Academy and ROTC, is currently considered the Basic Officer Leadership Course, Phase I. Phase II is a 7-week course in basic infantry tactics, and Phase III is the branch-specific school. The army expanded its OCS almost every year during the first decade of the Global War on Terrorism. In 2000, 484 officers were commissioned through OCS. By 2002, that number had risen to 1,003. In 2006, approximately 1,420 new second lieutenants entered active duty through the army's OCS. However, that number probably represents the peak that the army can commission through OCS in its current facilities. During the same period, the number of new officers commissioned through the academy remained stable, and ROTC peaked in 2004, with 4,408 new

officers, and declined afterward. OCS currently provides between a quarter and a third of all new officers in the active army.

Other OCS and OTS Programs

The Army National Guard in each state also operates an OCS. National Guard OCSs follow the course of instruction of the Fort Benning OCS and must be accredited by the army's Infantry School. The National Guard OCS operates on a 16-month schedule at their state's military academy, normally beginning in the spring with training 1 weekend a month, including two 2-week-long active-duty periods and monthly weekend trainings in between. Depending on the need for officers, the National Guard also sometimes holds regional 8-week OCS programs. Graduates of National Guard programs earned two commissions, a reserve commission in the U.S. Army and a state commission. State OCSs continue to be a major source of new National Guard officers.

The Air Force Officers Training School (OTS) traces its origins to World War II OCS programs for aviation cadets. The air force maintained two programs in the 1950s, with OCS for former enlisted airmen and OTS for candidates from civilian life. In 1963, OCS was ended, and most aspiring officers who had not completed ROTC or the academy had to attend OTS. OTS was held on Lackland Air Force Base, San Antonio, Texas, until the 1990s, when it moved to Maxwell Air Force Base, Alabama. The Air National Guard maintains its own resident OTS called the Academy of Military Sciences. The Academy of Military Sciences was long held on McGhee Tyson Air National Guard Base, in Tennessee, but moved to Maxwell Air Force Base in 2009. While the active-duty air force OTS is 10 weeks, the Air National Guard version lasts only 6 weeks on the theory that most Air Guard candidates have prior enlisted service.

The U.S. Navy currently holds its OCS as a 12-week course at Naval Station Newport, Rhode Island. The navy had two OCS programs, one for aviation candidates at Naval Air Station Pensacola, Florida, and the other in Newport for all other specialties. In 1994, the Newport OCS closed and the OCS at Pensacola became a single-track course. In 2007, the entire OCS program moved back to Newport. The Marine Corps OCS, held at Marine

Corps Base Quantico, Virginia, is the most comprehensive OCS program. All potential marine officers, except Naval Academy graduates, attend OCS in the Platoon Leaders Class or the Officer Candidate Class for either two 6-week periods or one 10-week period. Graduates of Naval ROTC with Marine Option attend OCS for 6 weeks prior to commissioning. The Coast Guard holds its 17-week-long OCS at the Coast Guard Academy in New London, Connecticut, making that installation the source of almost all new Coast Guard officers. Until 1998, the Coast Guard OCS was located at the Coast Guard Reserve Training Center in Yorktown, Virginia.

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See also ROTC; Training, Army Officers; Training, Marine Corps Officers; Training, Naval Officers; U.S. Air Force Academy; U.S. Military Academy; U.S. Naval Academy

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OFFICER CAREER FIELDS

Commissioned officers are military leaders who have earned a commission from the U.S. Congress. There are four paths available to earn a commission: the federal military academies, the Reserve Officers' Training Corps (ROTC) program, Officer Candidate Schools (OCSs), or direct appointment. The United States Military Academy, the United States Naval Academy, and the United States Air Force Academy are the three federal military academies. The ROTC is a program of instruction offered by universities. Each service branch runs an OCS for selected high-quality enlisted personnel. Direct appointments are relatively rare and typically apply to medical specialists such as dentists or surgeons. Congress approves

commissions into the appropriate branch of service for individuals who complete any of these programs. The academies and ROTC typically commission cadets in June and December, while OCS commissions multiple times a year as trainees complete the program. A direct commission is an individual process that may occur at any time. Each officer earns a commission into a specific career field. As officers progress through their career fields, they may have opportunities to transfer into another field depending on the requirements of their service branch. This entry describes the officer career fields available in four branches of the U.S. military.

U.S. Army

The U.S. Army has 16 basic branches organized under three broad career fields. The 16 basic branches are the following: (1) infantry, (2) aviation, (3) armor, (4) engineer, (5) military police, (6) chemical, (7) field artillery, (8) air defense artillery, (9) signal, (10) military intelligence, (11) transportation, (12) ordnance, (13) quartermaster, (14) adjutant general, (15) finance, and (16) medical service. The army groups these fields under Maneuver, Fires, and Effects; Operations Support Division; and Force Sustainment Division.

Officers commission into one of the 16 basic branches, usually serving in that branch until their initial term of service expires when they may apply to change their basic branch. The army augments the Maneuver, Fires, and Effects, and the Operations Support Division groups with specially trained Functional Area officers. There are currently 14 Functional Areas: (1) information operations, (2) public affairs, (3) telecommunication systems engineer, (4) information systems engineer, (5) strategic intelligence, (6) foreign area officers, (7) electronic warfare, (8) space operations, (9) academy professor, (10) operations research and systems analysis, (11) force management, (12) nuclear and counterproliferation, (13) simulations operations, and (14) strategist. Typically, officers apply for positions in the Functional Areas through a centralized board selection process at the seventh year of service.

U.S. Navy

The United States Naval Academy and Navy ROTC program commission midshipmen into the U.S. Navy (USN) or the U.S. Marine Corps (USMC). Those that commission into the USN become

ensigns and may serve in a broad variety of assignments grouped in six career fields. The USN has surface warfare officers, aviators, flight officers, submariners, explosive ordnance disposal officers, and special warfare officers.

All USN officers are required to attain specific qualifications to progress within their career fields. Surface warfare ensigns attain the necessary qualifications through a combination of shipboard on-the-job training and institutional training at the Surface Warfare Officers School Command in Newport, Rhode Island. Aviators attend flight school after commissioning and progress to primary training at one of three locations where the USN assigns them to specific aircraft types. Pilots receive further training for their specific aircrafts at various locations before serving in Fleet Squadrons. Flight officers progress in a similar manner to aviators; however, flight officers train to operate aircraft systems rather than pilot them. Submariners attend an advanced nuclear training course and the Submarine Officer Basic Course before serving on a submarine. Explosive ordnance officers serve in a joint capacity with officers of the other service branches and specialize in safe handling and destruction of explosive devices. Finally, special warfare officers become experts in unconventional warfare techniques. This field includes the Sea, Air, Land and Special Warfare Combatant Craft crewman programs.

U.S. Marine Corps

The USMC groups 20 officer career fields in three broad categories. The Ground category includes adjutant, armor, artillery, aviation command and control, aviation maintenance, aviation supply, combat engineer, communications, financial management, ground supply, infantry, intelligence, logistics, military police, and public affairs. Fixed-wing pilot, rotary-wing pilot, tilt-rotor pilot, and naval flight officer fall under the Air category. The third category, Law, has judge advocate as its only specialty.

The USMC uses an officer selection officer in the recruiting process to screen and identify candidates for commissioning. The officer selection officer helps candidates decide for themselves which commissioning path is best. In addition to the Naval Academy, Marine-option Naval ROTC and OCS candidates may attend the Platoon Leaders Class or Officer Candidate Course as alternative methods of attending OCS. The Platoon Leaders Class is available to college freshmen, sophomores, and juniors as a

summer training course, while the Officer Candidate Course provides a 10-week fast-track course for seniors or graduates. The USMC conducts both courses at Quantico, Virginia.

U.S. Air Force

The U.S. Air Force groups its officer career fields into four categories. The Flight category includes air battle manager, combat systems officer, and pilot. The Technical category includes acquisition manager, civil engineer, developmental engineer, scientist, and weather officer. The U.S. Air Force's nontechnical group is the largest and includes positions in aircraft maintenance, combat rescue, command and control, cyberspace operations, contracting, cost analysis, financial management, intelligence, logistics, logistics readiness, munitions and missile maintenance, personnel and manpower, planning and programming, public affairs, readiness, security forces, services, space and missile operations, and special investigations. The Specialty category includes air liaison, band, chaplain, and judge advocate. Finally, the U.S. Air Force also includes a wide range of professional medical specialties.

David Glenn Williams

See also ROTC; U.S. Military Academy; U.S. Naval Academy

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OODA (OBSERVE, ORIENT, DECIDE, AND ACT)

OODA (observe, orient, decide, and act) refers to a model of combat decision making formulated and popularized by John Boyd (1927–1997), former U.S. Air Force fighter pilot and influential American military thinker. Boyd theorized that adversaries in conflict *observe* the world, incorporate their observations

into a more general *orientation*, make *decisions*, and then translate their decisions into *actions*, the results of which feed back into the cycle, which repeats until the engagement ends. This model, also known as an “OODA loop” or a “Boyd cycle,” is popularly associated with the idea that a decisive advantage will accrue to the combatant who can go through the steps more rapidly over the course of successive decision cycles. However, recent scholarship has emphasized a much more complex interpretation of OODA as a wider-ranging theory with much broader implications. This entry discusses the origins of the OODA model and then describes the basic and the expanded loop models.

Origins

The OODA model has its roots in Boyd’s experiences as a fighter pilot during the Korean War and in a series of analyses he carried out later, first as a fighter tactics instructor and then as a consultant on the design of fighter aircraft. Unlike many of his contemporaries, Boyd theorized that tactical superiority for fighter planes was associated with maneuverability and agility, rather than with such straightforward variables as the aircraft’s speed, acceleration, and range. More maneuverable and agile planes, argued Boyd, enabled pilots to generate a fast-changing tactical situation for their adversaries, allowing them to dictate the terms and tempo of the engagement and ultimately leaving their adversaries unable to respond effectively. Boyd came to believe that this general pattern applied not only to air-to-air combat but also to other types of military conflict as well. Boyd’s ideas had direct influence on the development of the F-15 and F-16 fighter planes.

After retiring from the U.S. Air Force in 1975, Boyd continued to develop his ideas about air-to-air combat into a more general theory of armed conflict. Boyd conducted extensive research on ground warfare, military history, command and control, and organizational learning. He publicized his ideas within the American military community in a series of slide presentations, which he delivered many times over the course of the next several years. In these presentations, Boyd expanded the scope of his ideas and placed them into a larger intellectual context that incorporated insights from physics, biology, mathematics, psychology, and systems theory, as well as military history and military theory.

The Basic and Expanded OODA Loop Models

The most widely recognized image of the OODA loop models’ conflict is a simple competitive four-step decision cycle, which both participants in a confrontation—for example, fighter pilots or military unit commanders—go through over and over (Figure 1). Although it is thought to emphasize the importance of time and tempo, Boyd himself also emphasized the importance of maintaining orientation under conditions of menace and uncertainty, as well as the importance of using deception and ambiguity to affect the adversary’s orientation. For Boyd, operating “inside the adversary’s decision cycle” implies not merely going through the cycle faster but maintaining superior orientation about the developing situation.

This basic model, though well known, falls far short of expressing the full range of Boyd’s ideas. Boyd’s own OODA loop is much more complex, applying not just to individuals and small tactical units but also to larger organizations (up to and including the nation-state), to different levels of warfare (including the tactical, operational, strategic, and grand-strategic levels), and to different kinds of conflict (including guerrilla warfare and, arguably, even peacetime). It takes into account not merely the moment-to-moment situation but also the longer decision cycles associated with large-scale organizational decision making (Figure 2). For large organizations, Boyd argues, the four steps can and often do take place simultaneously and tacitly, rather than in order and explicitly. In addition, feedback into

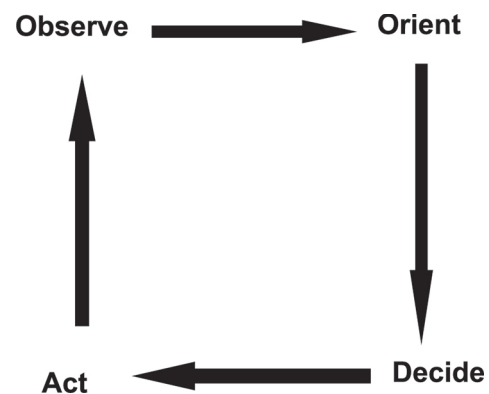


Figure 1 Simple or Basic OODA (Observe, Orient, Decide, and Act) Loop: The OODA Loop in Its Most Widely Recognized Form

observation and orientation comes from both the decision and action steps, rather than just from the action step. Although simple “rapid OODA looping” continues to take place, particularly at the lower levels of the organization, fast decision cycles at the lower levels must remain consistent with overall organizational cohesion.

The OODA model has important implications for training and for military command and control. Most important, it implies that military organizations must allow subordinate units freedom to seek out and exploit temporary advantages within an overall scheme that achieves the commander’s intent. This requires commonality of vision throughout the organization and places a premium on the exercise of initiative by subordinate unit commanders.

Applications

Boyd’s work provides much of the foundation for the contemporary *maneuver warfare* school. As such, it is one of the key sources for current American military doctrine, particularly for the U.S. Army and

the U.S. Marine Corps. Boyd had particular influence on the army’s Field Manual 100-5 *Operations* (1982), which laid out the original concept for AirLand Battle, and continues to be a central touchstone of the Marine Corps’ current doctrinal manuals, especially *MCDP-1 Warfighting* and *MCDP-6 Command and Control*. The OODA concept is also considered to have wide applicability to many other competitive domains, including the business world.

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See also Aircraft, Fighter; Blitzkrieg Warfare; Strategy, Ground War

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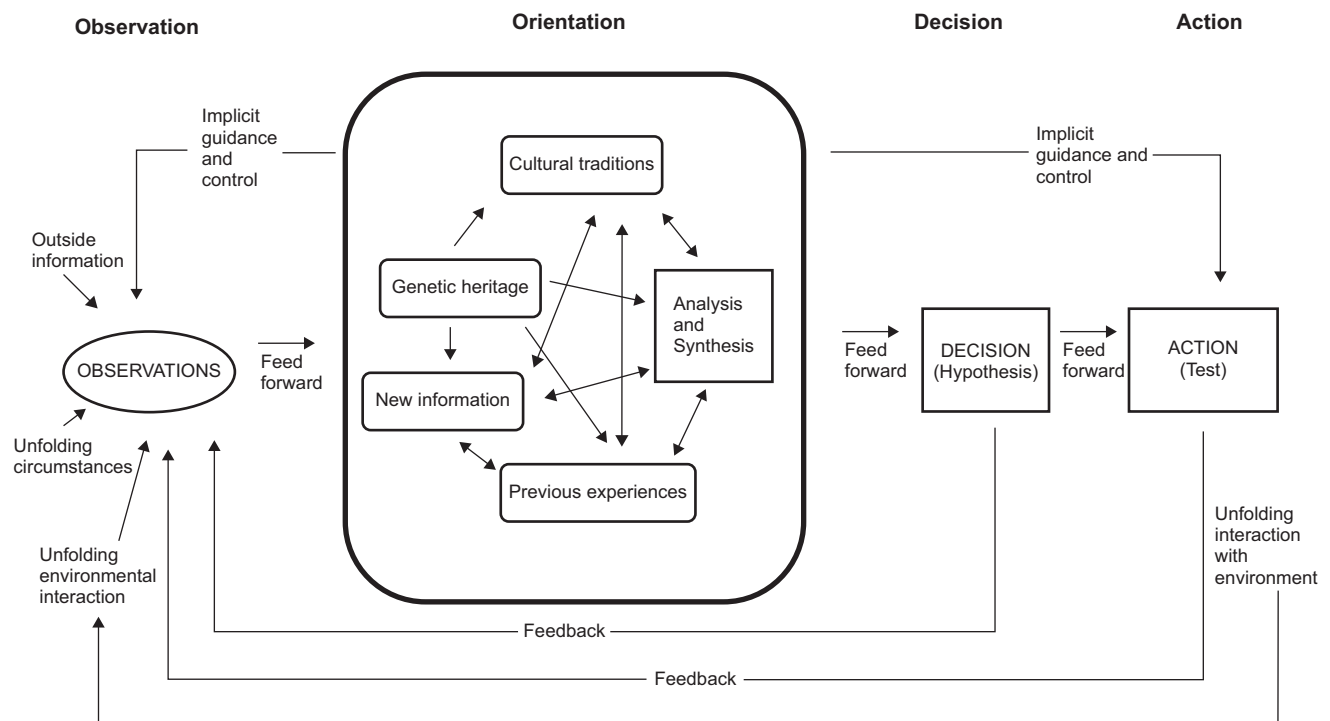


Figure 2 Boyd’s Expanded OODA (Observe, Orient, Decide, and Act) Loop Summarizes a Rich and Complex Strategic Vision

Source: John R. Boyd, *The Essence of Winning and Losing*, 1995. Used with permission of the John R. Boyd estate.

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OPERATIONS, AIR

The basic tenets of contemporary air operations were founded during the interwar years. After the Cold War, both the operational environment and the significance of air operations changed; for the risk- and casualty-averse militaries of the post-Cold War era, technological advancements in munitions and targeting have helped air forces become the first choice in humanitarian interventions and an integral aspect of military interventions and counterinsurgency operations of the post-9/11 period. This entry discusses types of air operations and their effectiveness.

Types of Air Operations

Air superiority represents the central role for air forces. The term refers to control over airspace of the operational area in which friendly forces are operating, thereby denying the adversary the opportunity to attack friendly forces by air. It provides safe operational space for other friendly air operations. In the post-Cold War environment, air superiority operations were conducted to establish no-fly zones, mostly against weak adversaries such as Iraq and Libya. Most of these military operations have been conducted in noncontested airspace.

Bombing, both tactical and strategic, forms another important aspect of air operations. The former targets enemy ground forces beyond the reach of friendly forces, while the latter focuses on breaking the adversaries' will by targeting the leadership and significant war-related assets deep in enemy territory, provided that the adversary is a state. Close air support—related to tactical bombing—provides aid to friendly ground forces by targeting nearby adversaries. In close air support operations, air forces are used as flying artillery, providing fire support where needed by ground forces. Interdiction, focused on disrupting adversaries' movement by targeting command, control, and communication systems; supply

routes; and infrastructure, has become less relevant in the post-Cold War environment. For example, in the 2003 Iraq War, U.S. forces attempted to keep Iraqi infrastructure intact for the postconflict use of friendly forces.

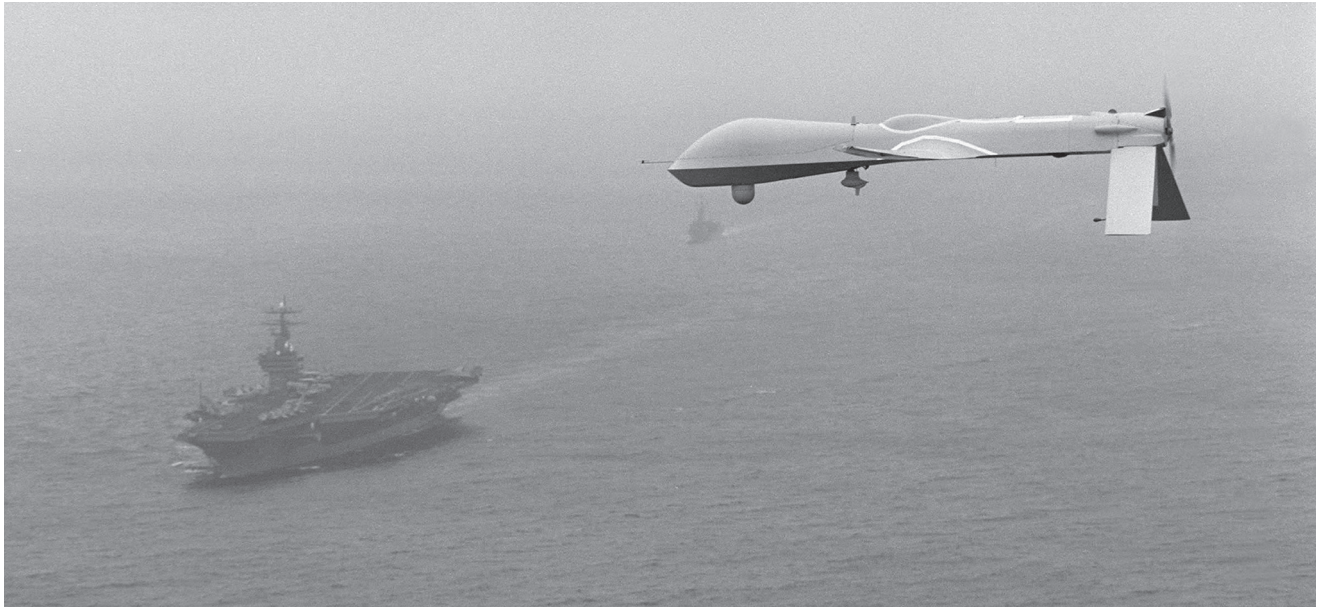
Strategic airlifts have become an integral aspect of military air operations during the past half century, carrying both troops and equipment to and from areas in which the use of civilian aircraft is dangerous. Airlifts can supply troops with critical supplies and can also carry special forces deep into enemy territory to conduct surgical strikes and evacuate wounded soldiers from battle.

Despite the advancement of satellite imagery, air force reconnaissance operations continue to represent an important asset in target acquisition in the post-Cold War environment. Although reconnaissance operations were largely conducted by manned aircrafts during the 1991 Persian Gulf War—specifically in the search of Iraq's Scud missile launchers—in the years since, conflict unmanned aerial vehicles have played an increasingly central role, specifically in operations in Afghanistan, Iraq, and Libya.

Effectiveness of Air Operations

Post-Cold War air operations have yielded mixed results. The 1991 Persian Gulf War represented a turning point for the use of air forces in contemporary conflicts. The lesson drawn from the success of coalition air forces' destruction of Iraqi forces, which rendered the ground invasion largely unnecessary, is that air forces alone are capable of putting hostilities to an end, without the need for ground forces. Although air power proponents had made such an argument for decades—all the way back to the U.S. general William Mitchell's advocacy in the 1920s—maturing munitions technologies, such as precision-guided munitions and Joint Direct Attack Munition, improved targeting systems that enabled precision strikes day and night and all-weather capabilities, including the increasing use of unmanned aerial vehicles for both reconnaissance and attack enabled air forces to inflict more damage on the adversary faster more comprehensively. Furthermore, better technologies enable contemporary air forces to operate at higher altitudes, providing a safer operational area and less risk of attack from the ground.

In the risk- and casualty-averse environment of the post-Cold War era, with decreasing military budgets



A Predator unmanned aerial vehicle near San Nicholas Island off the coast of southern California on November 20, 1995. The unmanned aerial vehicle was being prepared for a simulated U.S. Navy aerial reconnaissance mission, the Predator's first maritime mission with a carrier battle group. The Predator provides near, real-time infrared and color video to intelligence analysts and controllers on the ground and the ship.

Source: Department of Defense photo by Petty Officer 3rd Class Jeffrey S. Viano, U.S. Navy.

and troop levels, the use of air forces has become an increasingly attractive option politically. Air forces were utilized in the humanitarian intervention in Bosnia and Herzegovina first by helping Sarajevo survive the Bosnian Serbs' siege of that city through a strategic airlift, in addition to the UN-sanctioned establishment of a no-fly zone. Second, in August 1995, the North Atlantic Treaty Organization (NATO) initiated a month-long bombing campaign to coerce Bosnian Serbs to end hostilities. Air units undertook similar actions in the Kosovo conflict in 1999. NATO air forces attacked Serbian forces in Kosovo and initiated a strategic bombing campaign in Serbia to end the hostilities in Kosovo and force Serbian forces to withdraw. Air forces are also used as a force multiplier, allowing combatants to enter a conflict with small numbers of friendly ground forces, as in the Iraq War in 2003, or tipping the balance of power without committing any ground forces, as in Afghanistan and more recently Libya in 2011.

Skeptics of air power, however, argue that the high reliance on air forces has limited allied success in contemporary conflicts. The effectiveness of air forces, as the argument goes, depends on factors that

could negate air forces' technological capabilities. While air forces are highly effective in engaging concentrated enemy groups, their effectiveness decreases significantly when the adversary disperses and uses camouflage. In addition, geography is an important factor affecting the effectiveness of air operations. While air forces perform well in areas with clear sight lines like deserts, mountainous areas or dense jungle decreases their effectiveness. Furthermore, it is argued that the coercive power of tactical and strategic bombing is questionable. During the Kosovo War, for example, after-operation evaluations suggested that the damage NATO air forces inflicted on Serbian forces was significantly less than NATO estimates during the campaign. Moreover, air operations failed to prevent Serbian operations in Kosovo and did not force the Serbian government to end hostilities as quickly as was hoped.

Skeptics of air power also argue that the heavy reliance on air forces in contemporary conflicts negatively affects operations on the ground. For instance, they suggest that the small number of troops committed in the Iraq War in 2003 represents one of the main causes of postconflict hostilities, as there were



U.S. Army private first class Christopher Cannon with 2nd Battalion, 5th Cavalry Regiment (2-5 Cavalry), 1st brigade combat team, and 1st Cavalry Division, launches an unmanned aerial vehicle called the Raven to provide an aerial view of the area in support of the Iraqi army. Soldiers from 2-5 Cavalry provided security, while Iraqi soldiers searched the area surrounding Joint Security Station UR, in Baghdad, Iraq, June 22, 2009.

Source: U.S. Army photo by Specialist Joshua E. Powell (released).

not enough “boots on the ground” to contain dissidents and secure critical arms depots. Similarly, the escape of high-ranking Taliban and al Qaeda leaders from Afghanistan was seen as reflective of the lack of sufficient troops on the ground. In conclusion, the debate about the effectiveness and the use of air forces in contemporary conflicts will persist, while air forces continue to be deployed as a spearhead.

Çağlar Kurç

See also Bombs, Smart; Close Air Support; Kosovo Intervention; Unmanned Aerial Vehicles

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OPERATIONS, COLD-WEATHER

Of the many possible weather and terrain environments for military operations, cold-weather environments must rank as the most inhospitable to forces and to humans in general. Throughout the history of warfare, cold weather stands out as a critical determinant of military success, equal and in some cases surpassing the importance of enemy forces. Cold weather has affected the fates of ancient armies, like those of Hannibal, and armed forces performing current operations, like the multinational forces engaged in Operation Anaconda in Afghanistan in 2002. With the increasing national competition for Arctic resources and transportation routes in the 21st century, it seems likely that cold weather will

continue to play a decisive role in military operations into the foreseeable future. This entry defines cold-weather conditions and examines their effects, then discusses the history and challenges of cold-weather operations.

What Defines Cold Weather

Cold-weather conditions are defined by temperature and humidity. Typically, the U.S. Army considers areas of 40° latitude and higher to be regions where cold-weather operations can occur. In the Northern Hemisphere, these regions encompass most of the continents of Europe, North America, and the subcontinent of Eurasia. The extent of land areas in the Southern Hemisphere that are within these regions is limited to Chile and Argentina on the South American continent, the most southern portions of Africa, and southern Australia and New Zealand. The U.S. Marine Corps, following the example of the Norwegian armed forces, divides cold weather into four bands: “wet cold” (40° to 20° F/-4° to -6.5° C); “dry cold” (20° to -5° F/-7° to -21° C); “intense cold” (-5° to -25° F/-21° to -32° C); and “extreme cold” (below -25° F/-32° C). Terrain comes into play at the margins of these areas; the Himalayas and associated high mountain ranges, including the Hindu Kush along the Afghanistan/Pakistan border, allow cold-weather conditions to exist at high elevations as far south as the Tropic of Cancer (23.5° N latitude).

In fact, most cold-weather regions are not always cold. Temperate zones that are closest to the equator generally have 3–6 months of genuinely cold weather. Farther from the equator, the subpolar zones have 6–9 months of cold. Only when one reaches the true polar zones, beyond the Arctic Circle in the Northern Hemisphere and on the mass of the Antarctic continent, does one experience cold-weather conditions year-round.

History

Historically, most military operations in cold weather have occurred in the temperate zones where nations and populations are many; however, there have been exceptions. For example, the Finnish-Soviet War of 1939–1940, the Aleutian campaign in the Pacific Theater of World War II, the Soviet Petsamo-Kirkenes operation in 1944, the Falklands War of 1982, and the Chilean-Argentine dispute

(short of war) concerning Patagonia in the late 1970s all occurred in subpolar and polar climatological zones.

Whenever opposing armed forces meet in cold-weather regions, both sides face a third force that is beyond human control: the cold. In short, cold kills. In 218 BCE, Hannibal lost 50% of his invading forces to the cold during his Italian campaign. The sorrows of the French army during its Russian campaign of 1812 are well known. Likewise, both the Soviet and German armed forces suffered casualties to the cold that equaled or exceeded those from combat on the Eastern Front in World War II.

The United States was not immune to these effects either. During the American Revolutionary War, in both 1777 and 1778, the Continental Army suffered grievously from prolonged exposure to the cold. In World War II, American casualties due to cold weather in the European theater of operations exceeded 10% of total casualties. In the Pacific Theater, the invasion of Attu Island in the Aleutians proved the second most costly operation of the war (in terms of troops involved); most of the casualties were due to cold weather.

Even in the modern era, cold weather continued to make its effects known to armed forces. In the Korean War, more than 90% of the 26th Field Army (People's Republic of China) suffered cold-weather injuries and death. Likewise, during the epic fighting withdrawal of the American X Corps (X Corps was a corps of the U.S. Army in World War II and the Korean War. It was activated in May 1942) from central North Korea to the ports of Hungnam and Wonsan, more Allied casualties occurred from the weather than from combat. The same pattern of cold-to-combat casualties has taken place during the various Pakistani-Indian and Chinese-Indian conflicts in the 1960s, 1970s, and 1980s. Though official statistics are unrevealing, Soviet reports and memoirs of its Afghan War reflect the continuing significance of cold weather on their road-bound major operations. Finally, one of the major reasons attributed to the defeat of a numerically far superior Argentine army to the British forces in the Falklands War was the lack of cold weather gear for the Argentine troops on the main lines of defense.

In the 21st century, cold weather continues to influence military operations. During Operation Joint Endeavor and related operations in the former



Napoleon Bonaparte at the head of the French army in the retreat from Moscow, 1812.

Source: Photo by Bob Thomas/Popperfoto/Getty Images.

Yugoslavia, the tempo of North Atlantic Treaty Organization military action was reduced by half because of challenges posed by weather conditions. In the continuing (as of 2011) Operation Enduring Freedom and related operations in Afghanistan, the North Atlantic Treaty Organization and opposing Taliban forces define their tempo of military activity according to the seasons. In 2002, during Operation Anaconda, high altitudes coupled with cold-weather conditions significantly hindered elite Allied forces from decisively defeating al Qaeda and Taliban forces in the Shah-i-Kot Valley.

Operational Effects

A common method for assessing the effects of cold-weather military forces' performance is to use the operational functions that define every military operation as a guide. There are six doctrinal (U.S.) functions: (1) command and control, (2) fires,

(3) movement and maneuver (mobility), (4) intelligence, (5) force protection, and (6) logistics.

The command and control function is explicitly dependent on two tasks: (1) leadership and (2) communications. In cold-weather operations, the normally stressful military leadership challenge is multiplied many times over because of the insidious effects cold has on a military force composed of human beings. For those who have not personally experienced extended exposure to cold weather without normal shelter, it is difficult to understand the paralyzing effects cold has on the human body. Cold attacks individuals physiologically and psychologically. Physiologically, the effects of cold manifest themselves mainly through frostbite, hypothermia, and immersion (trench) foot. Any one of these manifestations can result in injury requiring immediate medical attention and evacuation from the battlespace; any one or a combination thereof can and has caused death. Of these three, hypothermia is the

most insidious because it can affect humans even in seemingly moderate temperatures (e.g., 40°–60° F). Also, hypothermia is not immediately obvious to either the affected individuals or their companions; sometimes, the delay in recognizing the symptoms causes significant disruptions in military activity, especially if an affected individual is in a leadership position. Equally injurious to effective military activity are the psychological manifestations of cold weather. The most common symptom is the withdrawal of the individual from companions, followed by delusions and hallucinations leading to extremely aberrant behavior that can and has caused injury and death both to the individual and fellow soldiers.

The extreme challenge of leadership to achieve effective command and control under these conditions is to insist on a strong discipline of sound private and communal hygienic practices and to enforce a strong sense of teamwork and positive unit cohesion. Leaders must accomplish this while dealing with the normal set of operational problems and their own physiological and psychological effects from the cold. From experience, one learns that leaders and leadership necessary to conduct effective military conditions in cold weather are a primary requirement for success. The only successful method of achieving this level of leadership is through individual and unit training—not periodic but continuous training for up to 2–3 months before commitment to live operations. Short of actually living in cold-weather conditions as a matter of course (e.g., living in the subpolar or polar regions), training is the only way to achieve effective military forces for operations.

Communications is the second major task of the command and control function. Modern militaries rely on high-technology communications systems that generally have not been proven in extreme cold-weather conditions. This makes armed forces committed to such operations highly vulnerable to the physical eccentricities of cold-weather environments. Today's communications technologies are highly dependent on satellite access. In temperate and subpolar zones, these technologies generally work under all weather conditions. The exceptions to this observation are those technologies that use ultrahigh frequency and higher radio-frequency bands; such communications systems are vulnerable to at least temporary disruption due to rain, sleet, hail, and snow. As a rule of thumb, in high-latitude military operations, the effectiveness of

digital communications noticeably declines with each increasing degree of latitude; this heuristic can begin to be applied as low as 45° latitude. The key variable in all cold-weather communications is the condition of the earth's mid-to-upper atmosphere, particularly the ionosphere. Atmospheric conditions are dependent on the sun's electromagnetic activity and the response of the earth's magnetic fields to such activity. If solar activity is intense, the earth's atmosphere becomes polarized, resulting in the disruption of electronic signals that military radios use. Sometimes the effects on communications can be catastrophic; during periods of prolonged solar activity, it may be impossible to communicate with adjacent and proximate forces for days and even weeks. Polarization of the earth's atmosphere in high-latitude cold-weather regions can also pose a significant risk of damaging or destroying communications equipment, especially integrated circuits, through induced currents generated backward from atmospheric propagation media (e.g., electromagnetic storms generating pulses similar to those generated by nuclear explosions in the atmosphere).

Command and control organizations must take these effects into account before committing decisively to operations. Operations in cold-weather climates generally tend to favor decentralized and smaller (cohesive) unit operations because of the leadership and communications challenges associated with the climate.

Operational fire is the second operational function, which is also affected by cold weather. In this case, the challenge typically relates to hardware. Extreme cold literally changes the caliber of weapons systems; cold temperatures shrink metal. With the close tolerances characteristic of modern weapons systems (e.g., rifles, artillery), the shrinkage can cause weapon malfunctions. Damp cold weather limits the effectiveness of precision-guided munitions to a degree not experienced in other climates. During Operation Allied Force, the poor wintry weather that characterized the operating environment of Kosovo in Spring 1999 limited the North Atlantic Treaty Organization's air sorties to 1/10 of their total capability. Cold weather in all temperature zones tends to reduce the effectiveness of all systems requiring electricity; sometimes this is due to reduced battery life (in extreme cold-temperature conditions), and sometimes this is due to shorting of equipment because of moisture intrusion.

The terrain in cold-weather regions can affect weapons systems capabilities. In the subpolar and some polar zones, the ground is tundra; this means there is a spongy layer of flora, wet during the warm season, that overlays a layer of earth that is permanently frozen—permafrost. Tundra in warm seasons can absorb some destructive effects of munitions; this effect was observed of naval gunfire support during the American invasion of Attu in the Aleutians during World War II. The gunfire came from 14- and 16-inch shells from battleships; the targets were Japanese strong points. Even with direct hits on fortifications using tundra as protection, the shells had highly reduced effects. Under the sea, the effects of polar ice can reduce or foul sensors for submarines. In the air, subpolar and polar zones that encompass maritime environments often include aerial conditions experienced nowhere else on earth; violent wind conditions arise that kick up snow and fog into low altitudes and cause whiteouts that make ground targets invisible to see and very difficult to sense by aircraft, or make it impossible to take off from fields or platforms in those zones.

These observations lead to another rule of thumb for cold-weather operations: The more weapons systems are exposed to cold-weather conditions, the more likely their effectiveness is going to be reduced. Commanders would do well to plan for reduced weapons effectiveness instead of being surprised during operations.

Movement and maneuver (mobility) in cold-weather conditions is very difficult. Seas freeze, making surface movement impossible except for specialized ice-breaking craft. Ground movement is hazardous due to cold rain/snow accumulation, drifts, and whiteouts due to blowing snow. Only in the air the movement of aircraft is not significantly affected by the cold; however, once on the ground, aircraft are subject to the same limitations as other ground movement capabilities. Based on the experience of World War II, the Korean War, and numerous exercises, commanders must realize that routine movements will take at least twice as long in cold weather as in temperate weather. However, this does not mean that maneuver is impossible or undesirable. The Soviet and German forces in World War II and the Chinese forces during the Korean War found that maneuver in cold-weather conditions provided them with tactical and operational advantages against enemy forces and negated certain enemy capabilities (almost always involving technology).

Intelligence in cold-weather operations generally faces the same challenges as operations elsewhere, except in the high latitudes of the subpolar and polar regions. In those exceptions, intelligence on enemy forces and operating environments actually becomes relatively easier because of the thermal emissions from living systems (humans) and from their operating equipment, which stands out in great contrast to the background. Electronic (especially thermal) sensors are very useful in these climates. Human intelligence is very difficult to obtain in all cold-weather climate zones. There is a natural instinct for people to avoid prolonged exposure to the elements of cold weather; patrolling, while absolutely necessary, thus tends to be limited to short-range force protection actions. Long-range patrols in the subpolar and polar regions are extremely difficult for two reasons: First, the conditions are hostile to human survival and, second, logistical support for any but the smallest patrols becomes prohibitive.

Force protection in cold-weather regions often is a matter of ensuring individual and unit survival from the elements, in addition to the enemy. Protection begins with individual requirements. The primary and absolute requirement is for individuals to remain as dry as possible; wetness in clothing or on skin significantly reduces human heat retention, leading to any and all of the big three threats to human health in cold weather: frostbite, hypothermia, and immersion foot. Individuals must be adequately equipped for extended periods of exposure to cold weather prior to being committed to operations. Allied operations in the first year (1943–1944) of the Italian campaign of World War II came to a virtual halt in large part due to poor equipping of soldiers with winter gear. All modern armed forces of nations that conduct operations in cold-weather regions have doctrines and equipment requirements for individual protection from the cold.

Unit force protection is far more difficult to achieve in cold-weather operations than individual protection. For naval and air forces, the challenge is not much different from normal conditions, with the notable exception of individual protection of sailors exposed to cold-weather conditions. Force protection in this case means the construction of fighting positions that can also protect individuals from the effects of the cold as well as from enemy fires. Such protection includes positions that include overhead cover and places for various forms of heating. Tents

may work in rear areas but are useless, even dangerous in combat areas. If engineering materials are inaccessible, the fighting units must carve out of wet or frozen ground some form of protection.

The sixth operational function, logistics, includes personnel resources. It is perhaps the most important function in cold-weather operations. Personnel get used up far quicker in cold-weather operations than in other types of military activity. With good doctrine and training, individuals and units rotate from combat to rear areas at least twice as quickly as in other weather regimes. This rotational difference was the major reason why a highly outnumbered and outgunned Finnish force could withstand and, at least initially, defeat the Soviet armies determined to conquer them in the 1939–1940 war. The Finns had warming huts to which frontline soldiers rotated every two hours; the Soviets had none, and many of their soldiers froze to death in their forward positions.

Another logistical factor affecting personnel and units in cold-weather operations is the need to maintain a high caloric and hydration intake. In cold weather, individual soldiers performing tasks require more than 5,000 calories and a gallon of water a day to be effective. This requirement alone places significant demands on the supply chain. If the requirement cannot be maintained, human fighting efficiency can be expected to decline 50% per day or more depending on what percentage of the daily food/liquid intake can be supplied.

The logistics challenge extends beyond personnel issues in cold-weather operations. All materials for armed forces are affected by cold weather. Under conditions of extreme cold, rubber loses its flexibility, many plastics lose their resilience, glass becomes highly impact sensitive (to simply touching), certain metals become brittle and some shrink, and lubricants thicken or freeze. In the subpolar and polar cold, engines of all types can freeze within minutes if left nonoperational. Supplies that provide heat to personnel and equipment become paramount for delivery to forward units. For the logistics function, this means that normal stocking of parts and major components is insufficient to meet demand in these operations. Because of the mobility issues discussed earlier, transportation of necessary supplies takes longer. As military operations move away from temperate zones, the accessibility of roads, railheads, airports, and seaports decreases, thus complicating the

placement of necessary logistics footprints. All failed historical operations and campaigns in cold weather have one point in common: All had failed logistics. One extraordinary illustration should suffice to demonstrate the criticality of logistics to cold-weather operations: In the siege of Stalingrad, 1942–1943, Marshall Hermann Goering, the German air force commander, insisted to the German General Staff and Fuehrer Adolf Hitler that the air force could provide adequate airlifted supplies to the besieged force. In fact, the Luftwaffe could only airlift one quarter of the supplies necessary for the German army in Stalingrad. By the time the siege ended in the German surrender, German soldiers were eating rats.

Observations

Military operations in cold weather are extremely difficult. They require the maximum effort from individuals and equipment. There are very few specialized military systems for dealing with cold weather: for example, icebreakers for naval operations, skis for people and for aircraft, and snowshoes and snowmobiles for ground operations. Technology is limited in its ability to multiply the combat effectiveness of military forces under cold-weather conditions. There is no technological “magic bullet” that can overcome cold-weather environments. The introduction of unmanned aircraft, for gathering intelligence and for strikes, has proven a great contribution to operational success, not, in least, as a replacement for soldiers’ suffering through difficult and dangerous terrain and weather conditions. However, the same bugaboos that limit human performance also limit unmanned aerial vehicle performance; cold-weather effects blind or fool sensors. In high latitudes, during periods of high solar activity, control of unmanned aerial vehicles becomes problematic as the ground control stations suffer from communication interference or blackout. During Operation Anaconda in 2002, Allied forces had the benefit of the best intelligence-gathering systems available; yet the intelligence underestimated the number of enemy by over half and failed to detect the enemy’s true positions.

Success in cold-weather operations, as historical experience relates, depends on unit and individual training coupled with exceptional leadership, especially at the small unit level. This is a tried-and-true recipe for success in this weather. Now that the

Arctic has taken on strategic importance because of improved access to resources and increased transportation access due to global warming, this basic fact concerning cold-weather operational success becomes critical for military leaders to acknowledge and to prepare for. Yet there are no specialized American units for cold-weather operations, and American training mostly focuses on only the very basics for individual survival in the cold, not continued operations in the cold. In fact, American cold-weather operations' doctrine is for the most part more than 40 years old; cold-weather unit training (i.e., exercises) is limited to an annual affair with Norwegians, and biennial naval exercises. One can contrast this approach with that of the Russians (as well as Canadians and Norwegians—all of whom have interests in the Arctic), who have designated special cold-weather units, developed modern doctrine to conduct operations in the cold, and regularly train to operate in the cold. The Russian approach aims to strategically succeed in the cold-weather realm of the Arctic.

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See also Command and Control; Korean War (1950–1953); Logistics; Medicine, Military; Plans, Operational

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OPERATIONS, JUNGLE

Jungle terrain covers almost 10% of the earth's surface, including large areas of Central and South America, Asia, Oceania, and Africa. This kind of environment has traditionally been considered a mysterious and hostile environment for human life. Some groups have learned to live and fight in this terrain, including the Ticuna and Yanomani tribes. A classical field manual titled *Jungle Warfare*, published in 1942, points out that the jungle fighter has two enemies: man and nature, with the last being particularly important due to the prevalence of wild animals, insects, and diseases including malaria, yellow fever, and dysentery in these areas. At the same time, jungle characteristics such as sudden climate changes, heavy rains, dense vegetation, uncountable rivers and puddles, and rough terrain make these areas suitable for a particular form of military operation in which patience, discretion, and willpower are the best weapons against an enemy.

For these reasons, soldiers who will serve in this type of environment should learn to use nature as an ally, taking advantage of natural cover and camouflage in order to survive under extreme conditions. Historically, military experts have collected information from local settlers and prior military experiences to help train military forces operating in jungle environments. In this way, European colonists between the 15th and 19th centuries learned to carry out incursions and deep-penetration operations in this type of terrain in South America, Southeast Asia, and middle Africa. During the 20th century, the number of jungle operations increased due to the development of modern warfare, where virtually all areas of the globe fell within military forces' reach. At the turn of 21st century, jungle operations have become less common and are limited to particular countries in tropical areas in which guerrilla groups are fighting against governments. This entry

discusses the characteristics, weapons, and equipment of jungle warfare and explores jungle units and operations around the world.

Characteristics of Jungle Warfare

Any kind of military operation has its own characteristics, and jungle warfare is not an exception. According to the book *Military Geography for Professionals and the Public*, written by John Collins, an expert in war operations and environment, there are 10 elements to consider in jungle scenarios: (1) the predominant role of small military units, including special forces teams or medium units such as platoons; (2) the fact that movement is often slow and laborious due to dense vegetation and the prevalence of rivers and small lakes; (3) foot soldiers are the main corps for this environment more than mechanized infantry; (4) airstrips are small and, in some cases, are very difficult to prepare without previous arrangements; (5) visibility is reduced not only at night but also under sunlight; (6) land navigation through jungle requires advanced techniques; (7) heavy weapons and air support are inhibited; (8) control, communications, and logistics are very difficult, and in some cases, soldiers must be fully self-contained; (9) special forces and defenders have a natural advantage with the cover provided by the environment, very useful for ambushes; and (10) technology and the numbers of troops are less important than adaptability. More than inside any other environment, life and war in the jungle necessitate the use of a sixth sense and learning to identify the enemy's traces, sudden changes in the environment, and even animal reactions to survive and fight successfully.

Basic Skills

Jungle operations demand special physical and psychological training due to the high probability of confronting enemy face to face through hand-to-hand combat, close firing, and bloody situations. For these reasons, very good physical condition and mental awareness are key elements to win battles. In contemporary warfare, technological equipment is an important complement to soldiers' duties; however, the jungle renders a number of military technologies less effective, thus corporeal and manual skills are very important for success.

Regarding physical training, it is necessary that jungle infantrymen train for long periods to cultivate

specific skills, including physical acclimatizing and marksmanship in warm and dense areas, hiking and swimming with all military equipment, nocturnal combat exercises, and first aid and preventive sanitary instructions to maintain good health—for instance, the simple but necessary activity of changing socks regularly to avoid immersion foot syndrome and treating drinking water with chloride. These types of skills are vital to maintaining soldiers' morale.

Mental training is also crucial. An environment surrounded by trees and weeds affects soldiers' perceptions about safety; for this reason, it is very important that morale be maintained. Likewise, soldiers should counteract feelings of solitude, particularly in times of inactivity by means of games, variation in the diet, e-mail, painting nature, and so on.

These elements are complementary, and to obtain the best advantages for jungle combat, professionalism should be inculcated during training, in nonfield operational activities, and in other periods of time.

Tactics

Jungle operations are very different from conventional military operations. Jungle actions usually do not involve great battles between formal troops; on the contrary, jungle encounters are reduced to ambushes, brief engagements, and raids. For these reasons, jungle troops should be able to embrace specific tactics effectively on the battlefield. Due to the extensive foliage that reduces visibility, soldiers must have expertise with camouflage, covered movement, and surprise. At the same time, they must take advantage of intelligence techniques (e.g., surveillance, gathering information, collecting information from local settlers) to observe enemy movements and to attack first. These activities include important reconnaissance operations by means of long and short patrols in squad-sized units to collect information about enemy troops. On the other hand, classic jungle deployment takes the form of multiple columns under platoon organization, using Global Positioning System devices and soldiers' sufficient training to guide the unit.

Types of Operations

Jungle operations can be divided into offensive and defensive types. Due to the jungles' unique conditions, each has its own characteristics. Offensive operations should include an appropriate utilization of organic and supportive weapons such as artillery and aerial support. The most common types of

offensive operations are movements across the jungle to contact enemy forces with heavy and rapid fire; another common operation takes the form of a surprise attack, using carefully collected intelligence information. In this kind of offensive, operation soldiers should remain alert for booby traps, snipers, and hidden positions. Infiltration is another basic offensive operation used in jungle terrain, and it is very useful to reduce enemy forces, but its effectiveness depends on discretion and patience to reach targets. Finally, jungle operations may include attacking fortified forces using dense jungle to cover their positions from aerial reconnaissance and other methods of observation. In this type of operation, supporting fire and strong fire against enemy positions are vital.

With regard to defensive operations, the ability to use foliage and cover to protect the troops and movements and to concentrate light weapons in particular places and times to maximize effectiveness are crucial. Additionally, coordinating support from aircraft and helicopters is vitally important. Other considerations include using night vision technologies and warning devices and regularly implementing patrols and ambushes to prevent enemy infiltrations or actions against friendly troops. Therefore, defensive scenarios should be previously organized by commanders to inform troops about measures to respond to enemy attacks or counterattack.

Weapons and Equipment

Jungle infantrymen primarily rely on common light infantry equipment. This characteristic is the norm for jungle units because soldiers must carry all their equipment with them. The main arms used among troops are common and sniper rifles, light machine guns, hand grenades, multigrenade launchers, 60-mm mortars, and occasionally—and under transportation availability—81- and 120-mm mortars. However, technology has improved in recent decades to include Global Positioning System units, portable communications and satellite gadgets, night and thermal vision devices, antimosquito aids, low spectrum lights, and so on. Camouflage has evolved, mainly since the Vietnam War, to help troops conceal themselves and their positions. During the Vietnam era, soldiers wore olive drab uniforms, but in recent years, many troops have begun to use tiger stripes and woodland patterns to improve camouflage. Lately, disruptive patterns have been included in the jungle clothing such as digital camouflages

and *flecktarn* models to improve performance. In recent years, helmets and body armor have also been eschewed, with the exception of the Colombian conflict.

Perhaps the most crucial equipment supporting jungle operations has been the helicopter. Utilized extensively in Indochina operations in the 1960s and 1970s to evacuate troops, support with heavy fire, and transport soldiers quickly in a difficult terrain, helicopters have proved their worth and have become a central player in jungle operations in recent years around the world, including Central American conflicts, the Just Cause Operation in Panama, and the Colombian conflict.

Jungle Units Around the World

Several countries with large jungle zones have organized parts of their armies into jungle corps, training these units in tactics to survive long periods of time in these zones and confront conventional troops throughout

asymmetrical actions. Brazil is the leading army in the world with this type of military unit—including battalions and brigades—dedicated exclusively to jungle operations to protect Amazon regions. Likewise, due to long-lasting guerrilla warfare in jungles areas, the Colombian army has prepared Brigadas and Batallones de Selva. In Asia, the famous Malayan Royal Army Regiment and Indonesian Special Forces' Koppasus engage in these types of operations as well. Other armies have trained regular forces to act in jungle zones; the U.S. Army has the famous “Green Berets,” the United Kingdom has specialized groups inside the Special Air Services, and the French Foreign Legion has the 3rd Foreign Infantry Regiment deployed in Guyana. All of these are considered elite units within these armies.

From Vietnam to Current Counterinsurgency Operations

The involvement of U.S. forces in Vietnam from 1961 until 1973 placed American troops in a jungle



A UH-60 Black Hawk helicopter of Company A, 1st Battalion, 228th Aviation Regiment, passes over a ridge during a flight in support of Operation Just Cause.

Source: Photo by Master Sergeant Ken Hammond.

environment for the first time since World War II, when GIs fought against Japanese troops in the Pacific theater of war. In effect, Vietnam was a laboratory for jungle operations, as combat took place in a country covered by dense foliage and subject to heavy monsoons. U.S. soldiers had to adapt to jungle scenario rapidly, and this period highlighted problems in U.S. training and operations. Nonetheless, U.S. GIs proved their ability to fight in this terrain in spite of their urban origin. Innumerable operations to search for Vietcong and North Vietnamese army units were carried out in the jungles of Vietnam, including some incursions into Cambodian territory with Special Forces patrols. After the Vietnam War, Central American civil wars in Honduras, Nicaragua, El Salvador, and Guatemala forced the centerpiece of jungle fighting. In these countries, insurgency groups acted against governmental troops in a dense jungle. In recent years, jungle operations have been common in the Colombian conflict where local military forces with U.S. support have been fighting against the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia, or FARC) in the Amazonian jungle. In this conflict, guerrilla and counter guerrilla activities have become normal operations within the larger sphere of jungle operations, where infantry jungle skills and aerial support have been fundamental to fighting in this terrain.

Jungle Operations in Contemporary Perspective

It appears that jungle zones will continue to be a critical arena for military operations in the future. Jungles offer an ideal place to hide the activities of illegal groups such as terrorists, organized criminals, drug traffickers, and guerrillas, who use dense vegetation and rivers to carry out criminal activities out of sight of authorities and local settlers. The security of the jungle also offers these groups the opportunity to plan and organize attacks against both governments and private citizens. For this reason, an active jungle training program is still a priority in many militaries, including the U.S. Marines' Jungle Warfare Training Center (Okinawa-Japan), the Colombian army's Escuela de Selva, and the Brazilian Centro de Instrução de Guerra na Selva.

New technologies will continue to play a central role in jungle operations in the future, as intelligence and communications supported by satellite and other electronic devices are crucial in maintaining real-time operational, strategic, and tactical advantage for troops on the ground. At present, the Brazilian

Sistema the Vigilância de la Amazonia (Amazon Surveillance System), which combines satellite and aerial surveillance to prevent and to act against conventional threats in the Amazon Jungle, stands as a model for other nations. Likewise, aerial equipment will continue to be vital for supporting troops and carrying out surveillance and attack operations. Unmanned aerial vehicles appear to be gaining traction with worldwide militaries, but conventional military aircraft—especially helicopters—will continue to play a major role as well. Recently, these new technologies have proven very useful in capturing or attacking so-called high-value targets like the leaders of guerrilla and criminal organizations. Therefore, a combination of aerial capabilities supported by specialized jungle troops represents the best operational model for contemporary jungle operations.

Saul Mauricio Rodriguez-Hernandez

See also Agent Orange; Ambush; Armor, Body; Arms, Small; Combat Load; Counterinsurgency; Force Reconnaissance, Marine; Guerrilla Warfare; Guns, Machine; Panama; School of the Americas; South America; Special Forces, Army; Special Operations, Strategy; U.S. Southern Command; Vietnam War

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OPERATIONS, MOUNTAIN

Mountain warfare and mountain operations in the modern American context refers to the act of, and the specific demands involved with, engaging in combat

operations in winter, hilly, or mountainous terrain. Mountain operations have traditionally been undertaken by specialized regular military units, avoided all together by belligerents due to the adverse and demanding conditions, or utilized by guerrilla, partisan, and nongovernmental combatants as a means to gain an advantage over traditional military opponents. Combat operations in mountainous terrain are especially dangerous since combatant forces need to concern themselves with not only surviving enemy engagement but also the harsh and often lethal conditions typical in high and precarious terrain. This entry discusses the history, equipment, weapons, and tactics of mountain operations.

Early Mountain Operations

Such operations in the 19th and early 20th centuries were often a necessity since belligerent states were frequently separated by mountainous terrain, and thus, operations across these natural barriers were required. The term *mountain operations* became common in military circles during the Late Middle Ages when it became common for warring monarchies to find it difficult or impossible to cross the Swiss Alps—though Swiss forces had the specialized training and familiarity with the terrain. During these periods, such operations typically consisted of smaller, more agile units of the defending army ambushing or cutting off the larger more cumbersome formations of attacking armies by isolating their various parts with the aid of the natural choke-points that such terrain provides. More recently, some specialized units and equipment were developed for mountain operations. Some examples include the Austrian and French mountain troops from the Napoleonic Wars and later specialized artillery for mountain warfare.

Mountain artillery pieces, known as mountain guns or pack guns, were short-barreled infantry support artillery rarely larger than 75 millimeters in diameter. These pieces were developed by states and arms manufacturers since traditional, heavy, long-barreled artillery pieces could not be manipulated or maneuvered in mountainous terrain. These pieces were often easily disassembled for transport via man or pack animal (thus the name pack gun). The first standardized and mass-produced pack guns were developed by two Greek army officers, Majors Lykoudis and Danglis, in 1893. Surprisingly, their designs were not originally popular and were not

utilized until the French army firm Schneider took interest in them in 1904. This was quickly followed by a competing variant made by the German firm Krupp the same year. Since then, mountain guns have been standard members of national arsenals for states that foresaw a need for combat operations in mountainous terrain.

It is generally regarded as essential for units fighting in mountain environments to be light, mobile, and armed with equipment that, while contributing maximum firepower, does not limit or hinder travel over heavy terrain. Since many mountain regions are often covered in snow, many mountain warfare units also train their troops in the use of skis and snowshoes for infantry travel or snow-based tracked vehicles for higher mobility. Finally, due to extreme and often shifting weather conditions, it is considered an absolute necessity that mountain troops be experts at survival and equipped with adequate shelter from prevailing conditions like snow and high winds.

Mountain Operations 1914–1989

Prior to World War I, mountain warfare was a somewhat infrequent practice due to the additional costs in materiel, troops, and capital required to wage successful mountain campaigns. When war broke out across Europe in 1914, however, many of the boundaries of belligerent powers were defined by mountain ranges, and thus, mountain operations became standard practice of both the Entente and Central Powers. Furthermore, nearly all of the warring states (less the United States) had specialized mountain warfare divisions or units on their rosters that had yet to be tried in combat. A majority of World War I mountain operations were conducted between Italy and Austria as well as Russia and the Ottoman Empire since the respective borders were fairly rugged. This was especially true in the south between Austria and Italy where, over the course of the war, the Austro-Hungarian military proved quite adept at defending against Italian forces as the latter attempted, in vain, to move across the Julian and Carnic Alps into the central plains of Austria-Hungary. The only other major mountain campaign of the war occurred in the Caucasus, when in late 1914, the Ottoman forces attempted to attack Russia via the Caucasus Mountains. Due to poor training, a lack of supply, and superior Russian position, Russian forces inflicted appalling casualties on the Ottomans.

In World War II, despite the predominance of mobile armored warfare across Europe, mountain operations dominated the German assault into Norway and played major roles during the Allied assaults against Sicily and the Italian mainland. It was during this time that the first American units specializing in mountain warfare prepared for combat in Europe and Asia. Among these was the reorganized 10th Light Infantry Division, renamed the 10th Mountain Division in 1944. This unit made its name in the mountains of central Italy against fierce German and Italian resistance in the Apennine Mountains. Specially equipped with draft animals, winter clothing, and climbing gear for combat that often took place at 3,000 and 4,000 feet above sea level, the 10th Mountain Division served with distinction until it was withdrawn from Europe in July 1945.

Following World War II, mountain warfare remained the responsibility of specialized units and divisions in national armies, though many such units were deactivated following the end of the war. For the United States, mountain operations would need to be relearned for Cold War conflicts, especially in Korea and Vietnam, where mountainous and rugged terrain would again require the U.S. military to adapt to conditions that required infantry oriented toward reduced size and weight for reasons of both strategic and tactical mobility.

Outside of the United States, other 20th-century conflicts dominated by mountain operations included the Falklands War, the Kashmir Conflict between India and Pakistan, and best known, the Soviet war in Afghanistan. In 1979, Soviet armies entered the Democratic Republic of Afghanistan to prop up the floundering communist regime in place there. Soviet forces entered the country via two ground routes and one air corridor. Within days of the beginning of Soviet operations, Russian troops controlled every major city, military base, and strategic center in the mountainous and wilderness-ridden country. These troops were almost entirely composed of armored divisions or motor-rifle divisions with only a handful of mountain-rifle (mountain light infantry) battalions in the first waves. Despite the efforts of the Soviet occupiers to subdue and pacify the country, nationalist and religious extremists took to the hills of Afghanistan's mountainous interior to wage a guerrilla war of attrition against the Soviet military. Much like in the Vietnam conflict, despite the fact that the regular occupying

forces exercised direct control over every population and military center, a coordinated and well-armed guerrilla force upset logistics and communications by attacking supply convoys, isolated outposts, and units (post-March 1980). When the Soviet's counter-attacked or organized large-scale offensives into the Afghan interior, the treacherous and inhospitable terrain that is quintessential to mountain operations awaited them. On dozens of occasions, entire Soviet divisions supported by rotary and fixed-wing aircraft pushed into the rugged interior to either find well-positioned and concealed rebel fighters holding advantage in the hills and mountains, or only the remains of an elusive enemy that had snuck away under the generous cover of mountain passes and deep valleys.

When Soviet forces did encounter resistance, it was typically from well dug in and defended Afghan rebel units that took full advantage of the mountains to limit Soviet mobility and air power. The Soviet military, armed and equipped with the arms and vehicles to fight a war on the plains of Europe, struggled to adapt to the mountain conditions of Afghanistan. Some of these limitations were most evident in Soviet armor and artillery. The T-62, the main battle tank for the Soviet occupation, was regarded as a fair opponent for Western designs; however, in Afghanistan, with a main cannon that could only be elevated to +16°, operators found it almost impossible to engage rebel units that often attacked Soviet units from high above in the cliffs and crags of mountain passes. For artillery, the Soviets were equipped with heavy and devastating long-range artillery pieces that were often towed into position to be fired. These weapons, far too large and cumbersome to be considered pack guns, were of limited use in the high peaks and narrow passes that represent the predominant features in mountain warfare and the Afghan interior, especially in the north and west of the country.

After more than 9 years of constant fighting and with the Soviet Union and its occupation forces still unable to exercise any major degree of control over the Afghan interior, after suffering more than 9,000 killed in action and 53,000 wounded in action casualties, the Soviet Union officially withdrew the last of its forces from Afghanistan on February 15, 1989. Over the course of the conflict, while the Red Army did attempt to adapt to local conditions on numerous levels, the traditional nature of the training and

equipment provided to the Soviet soldier doomed him to being unable to tame the vast and mountainous interior of Afghanistan.

Modern Equipment and Tactics

Learning from the lessons of the Korean and Vietnam Wars as well as from the Soviet misadventure into Afghanistan, in 1985 the U.S. Army reactivated the 10th Mountain Division as the nation's specialist unit for mountain warfare. The unit served in Operations Desert Shield, Desert Storm, Restore Hope (Somalia), Uphold Democracy (Haiti), Joint Guardian (Bosnia and Herzegovina), and, most recently, in the Global War on Terrorism in Afghanistan and Iraq. Unlike most other U.S. Army divisions, the 10th Mountain is not typically deployed with large complements of armored vehicles or tanks. As a light infantry division adapted for mountain operations, the specialized load out of the division is composed of combat infantry who are not only experts in land navigation, marksmanship, survival, and mountaineering but also equipped with specialized lighter gear and equipment for a higher degree of mobility and tactical agility. For its primary infantry weapon, the 10th Mountain Division and most of its international counterparts tend to favor shortened carbines, such as the Colt M4, as opposed to the longer and heavier assault rifles used by regular units, such as the M16A2. Additionally, for deployments in regions like Afghanistan, modern mountain divisions rely almost entirely on rotary aircraft for their transportation and close support needs.

As the Soviet Union learned in the 1980s, Afghan rebels and terrorist units that operated in the countries' interior often ambushed heavily armored convoys along Afghanistan's road networks, thus reducing road travel to little more than a way to invite attack. Today, when mountain warfare operations are undertaken by the United States or its North Atlantic Treaty Organization allies, the primary mode of troopers moving in and out of the rugged Afghan interior is by air. For the U.S. Army, the workhorses of this detail are the UH-60 Black Hawk and the CH-47 Chinook transport helicopters. Able to deploy troops from a small landing site or simply from a low hover above a mountainside, these aircraft permit the rapid deployment and exfiltration of mountain warfare soldiers in a way never

seen before. Additionally, like their forefathers in the mountain operations units of the early 20th century, the U.S. Army outfits its mountain specialists with lighter, more mobile fixed artillery that is capable of both direct and indirect fire missions. These weapons systems include the M198 155-mm howitzer, the M224 60-mm mortar, and the M252 81-mm mortar. All are capable of being disassembled to various degrees and can be used in conditions short of sheer peaks that mountain specialists experience.

Contemporary Mountain Operations

Mountain operations have evolved over the past century from an aspect of war often avoided by militaries to an arena that has had entire units, weapons systems, and campaign plans developed for it. Equipped with the latest and lightest in firearms, artillery, and transportation, the modern mountain warrior is equipped and trained like never before to engage and defeat the enemy regardless of the difficulty of the terrain or the prevailing inhospitable conditions.

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See also Helicopters; War in Afghanistan; World War I; World War II

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OPERATIONS RESEARCH

Operations research is a discipline that utilizes analytical methods to help make better decisions. It applies techniques such as mathematical modeling to investigate intricate problems. Operations research utilizes a wide array of techniques, including queuing theory,

mathematical optimization, simulation, data envelopment analysis, expert systems, and decision analysis. The aim of operations research is to arrive at an optimal or near-optimal solution to extremely complex problems. While there are subtle distinctions, the terms *operational analysis*, *quantitative management*, *management science*, *operation analysis*, and *systems analysis* are frequently used as synonyms for operations research. In modern times, the use of computers and statistical analysis has caused operations research to frequently overlap with the related fields of computer science and information technologies. It began as a discipline to study military problems with the aim of providing military leaders with a scientific basis to help them make decisions and improve military operations. Now utilized not only by military leaders but also by civilian governments, medical organizations, charitable organizations, and businesses in the commercial and industrial fields, operations research can provide insight into problems of resource allocation, inventory control, and the planning of large-scaled construction projects. For example, airline corporations and airport management employ operations research to schedule flight takeoff schedules and crew timetables, while some cities use operations research to manage the flow of water from reservoirs. It gives people the ability to make informed decisions based on more complete data, consideration of available options, and researched predictions of outcomes and estimated risk, and allows for the use of the latest decision tools and techniques. This entry discusses the history and process of operations research and provides some examples of operations research projects.

Operations research is distinguished by systems engineering, as large-scale problems are examined using models when laboratory testing is impossible. The five principal segments for implementing operations research are (1) definition of the problem, (2) construction of a model, (3) solution to the model, (4) validation of the model, and (5) implementation of the solution. The quality of the results of operations research is only as good as the quality of the model being tested, and part of the process is to repeat the sequence of problem-model-solution-validation-implementation several times, varying the model to determine the best solution. Before the term *operations research* came into use, mathematical modeling was used to solve problems. What was unique to operations research is that it took into consideration important intangible factors that are

not usually quantifiable, such as the importance of the human element, when determining a response. Today, operations research is almost always characterized by extensive computer simulations. Operations research has become such an important tool in so many fields that it has journals dedicated to the topic, with the most important simply named, *Operations Research*.

Early History

Operations research as a modern field can first be traced to the Bawdsey Research Station in the United Kingdom under the station's superintendent, A. P. Rowe, in Britain in 1937. He conceived of operations research as a methodology to analyze and perfect Chain Home, the early warning radar system of the United Kingdom. Such research had historical predecessors, such as Charles Babbage's research into the cost of transporting and sorting British mail. In 1840, Babbage's studies led to England's universal "Penny Post." However, Rowe not only evaluated the radar equipment and related network, but he also considered and analyzed the operating personnel's behavior. Taking into account how stress levels and tiredness could affect the usage of the equipment, Rowe made Chain Home a much more effective system.

Throughout World War II, almost 1,000 American and British scientists engaged in operations research. Teams of scientists and the Royal Air Force worked together to enhance radar detection, leading to an improved system of early warning of enemy aircraft approaching the United Kingdom. Patrick Blackett (Lord Blackett), working for the Royal Aircraft Establishment, created a team of scientists nicknamed "the Circus." The Circus utilized operations research to decrease the number of antiaircraft artillery rounds necessary to bring down an enemy aircraft. Prior to operations research, it took an average of more than 20,000 artillery rounds to shoot down an airplane; by 1941 and the Battle of Britain, this number had been reduced to approximately 4,000 per plane. After his success with the Royal Aircraft Establishment, the British navy requested Blackett's help in 1941. He put together a team to work on navy projects that included not only several prominent operations researchers but also two future Nobel Peace Prize winners. The most important project Blackett's team worked on was how to reduce convoy losses.

As British losses rose from German submarine attacks on their ships, the British initiated a convoy system, including warships to help counteract these losses. The navy wanted Blackett to determine whether small, quicker convoys, or larger convoys with more warships for protection provided more safety to commercial ships. Utilizing operations research, Blackett determined that the deciding element in determining convoy losses was not the overall size of the convoy but the number of warships escorting the ships, suggesting that a few large convoys was the most defensible formation.

The methodology quickly spread to the U.S. military, which first used it to solve problems such as the placement of bomb-dropped naval mines whose purpose was to destroy Japanese shipping. Operations research increased twofold the successful bomb rate of American B-29 airplanes bombing Japan from the Marianas Islands. The American military employed operations research to solve a classical problem that involved patrol planes coming upon enemy submarines on the surface of the ocean. The submarine usually dives immediately on noticing the patrol plane. The patrol plane must then decide what the optimal detonation depth for a depth charge explosion aimed at destroying the submarine is. An analysis of past submarine movements and human reactions helped pilots know where to drop the bombs. Operations research determined that depth charges triggered at 25 feet rather than 100 feet would cause kill ratios to increase. The results of this study were concrete: Before the change from 100 feet to 25 feet, only 1% of submarines were sunk and 14% damaged. After the change, 7% of submarines were sunk and 11% damaged. Another study determined that glossy enamel paint—camouflaged night fighters were more effective than the traditional dull camouflage paint finish. Operations research was also utilized by the Americans and British to help improve the probability that bombers would hit industrial targets rather than soft ones, such as residential neighborhoods, which helped save numerous civilian lives. By the end of the war, the American military realized that operations research was giving them such an edge in the war, and they extended its use to studies on equipment procurement, training, logistics, and infrastructure.

Operations research proved itself useful as the United States entered the Cold War and the space race. During the late 1960s, operations research

garnered media attention as it figured into the discussion about antimissile defenses, the survivability of the Minuteman intercontinental ballistic missile, and the discussion about mutually assured destruction. As the general public worried about Soviet missiles destroying American missiles in their silos, they wanted mathematical reassurance of their safety. However, using operations research, government specialists models showed that defending against a Soviet Union attack would be difficult since a nuclear strike would aim not only against missile silos but also against communications and control centers, which are harder to secure. In short, digging deeper missile silos and burying them under more concrete would not be sufficient to maintain nuclear deterrence.

Despite operations research helping the military to make more informed decisions, some historical tension existed between operations research mathematicians and the military. Particularly in the 1960s, officers generally resented Department of Defense secretary Robert S. McNamara's civilian "whiz kids." The tension was understandable; not only were operations researchers civilians, they also used an entirely different methodology than military leaders. Military leaders would attack a problem by drawing advice from war-experienced experts and take that advice and meld it with current military doctrine. Operations researchers start with a model and apply a numerical measure of effectiveness. However, since the friction of the 1960s, the military has incorporated operations research into its work, both utilizing civilians and teaching the field in military schools, creating officers knowledgeable in its uses. While operations research as a rule has greatly aided the military in making difficult decisions, during the early years, concerns that it could oversimplify an essentially complex situation were valid. However, properly implemented, it became an important tool in military planning. Operations research's successes bridged the gap between military and civilian forces, and key military campaigns, such as Desert Storm during the Persian Gulf War, were preceded by extensive computer simulations that have become the cornerstone of operations research.

In the 21st Century

Heading into the 21st century, operations research remained an important part of military operations. During the wars in both Iraq and Afghanistan,

operations research evolved to be an important tool in detecting roadside bombs and terrorist activity. In Afghanistan, Task Force Odin, in an ongoing effort known as Constant Hawk, utilized pattern analysis to observe a locality and find useful patterns of behavior. Using special video camera equipment, either mounted on special perches or loaded on to aircraft running regular routes, they would note changes in the area. Any differences in an area, whether a new rock or simply birds not in the same area, would be investigated. This has led to the detection of thousands of roadside bombs and terrorist ambushes. In Iraq as well, a related math tool, predictive analysis, has been used to determine who the bombers are, where they are, and where they are most likely to next place bombs. This allows military operations research specialists to offer regular “weather reports” about expected roadside bomb activity. These reports are taken very seriously by the people who plan personnel and supply transportation. The results have been groundbreaking; operations research has helped largely eliminate roadside bomb attacks on supply convoys that travel preplanned, frequently utilized routes. The high accuracy of predictions produced using operations research has saved many lives.

Candice Quinn

See also Plans, War

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ORAL HISTORY

The intersection of oral history and military history has resulted in major changes in the way military history is constructed, written, and received. Through the deliberate effort to record and preserve

an individual's experiences as he or she remembers them, the inclusion of oral history in the research and writing of military history has produced a much more rich and nuanced treatment of the past, and has opened doors to new areas of study in military history. Strengthening the traditional approach to military history—which focused mainly on primary documentary evidence, such as afteraction reports and unit records—the use of oral history reflects the humanistic turn in the history profession over the past several decades and helps provide a more full understanding of military matters. This entry describes approaches to conducting and preserving oral history interviews and discusses the impact of oral history on the study of military history.

Essentially, oral history is the practice of conducting and recording interviews with participants of particular events or developments. Usually, the interviews are transcribed, or at least abstracted, and housed in an archive so that they may be accessed by researchers. In most cases, the interviews are conducted by a trained oral historian or an expert in the relevant field who questions the interviewee, or narrator, about his or her experiences. Oral history interviews are usually conducted in a question-and-answer format, and interviewees are encouraged to be as honest and open about their memories of their experiences as possible. Approaches to and methods of oral history vary, but interviews tend to fall into two basic categories: (1) the issue-specific interview and (2) the full-life interview. Modern technology has aided in the spread of oral history and oral history projects around the world, as increasingly affordable methods of recording interviews are becoming more widely available.

Primary Source Data

As a methodology of historical study, oral history has become a widely accepted practice of gathering primary source data. Historians have looked to oral history interviews to supplement and strengthen their work with more traditional sources. Personal memories add to the historical record, providing individuals' perceptions of events through differing vantage points, and add an element of humanity that helps readers identify with the people and the times. They can also help provide a more complete understanding of events by touching on subjects that often do not find their way into the official record. Also,

the inclusion of oral memories in historical writing provides a personal quality and can add a distinct flavor that is often missing from historical writing. Indeed, if history is the sum total of human experience over time, the inclusion of the voices of those who participated in historical events is not simply interesting but is necessary in any effort to write a full history.

As with all historical sources, oral history interviews should not be seen as the absolute authority on any particular subject, or even of the narrator's place in that subject. Human memory, by its very nature, is subjective and can thus be problematic for those seeking "objective" evidence in their research and writing. In many cases, oral history interviews are conducted many years distant from the narrator's experiences, and his or her memory of events may have faded over those years. Personal experience prior to or following the events often shapes and filters the memory of one's experiences, and narrators are also subjected to the subtle—if unintentional—intricacies of the interview process, such as the interviewer's methods of questioning, the environment in which the interview takes place, and other factors. Having said that, however, serious historians recognize the limits of all sources, documentary and otherwise, and are aware that they should never depend on just one type of source in their research. In the hands of a responsible historian, and used judiciously in combination with other sources, oral history interviews provide a very valuable contribution to the arsenal of historical sources available.

Military History Collections

Over the past several decades, oral history has made a tremendous impact on the writing of military history. All U.S. military branches have embraced the oral history interview to some degree, initially to aid in the writing of official military history—that history commissioned by the U.S. government or the military branches. During World War II, the U.S. Army assigned historians to interview combat veterans in both the European and Pacific theaters in an attempt to fill in the blank spots in the official record. Understanding the importance of postbattle analysis for future military action, these historians—serving in combat historical teams assigned to the War Department Historical Section under the direction of

Lieutenant Colonel John M. Kemper—interviewed combatants both individually and in group settings to help provide a fuller accounting of particular battles.

Members of combat historical teams, influential historians such as James MacGregor Burns, Martin Blumenson, and especially Forrest Pogue and S. L. A. Marshall, devised systems for interviewing combatants and reported their findings to higher headquarters to promote study of "lessons learned" during the war. The combat historian has maintained a presence in war zones in all conflicts since World War II and continues to provide invaluable oral evidence that will serve future generations of military historians. The greatest collection of oral history interviews commissioned by the U.S. Army is conducted and maintained by the U.S. Army Center of Military History.

Other services have embraced oral history, notably the U.S. Marine Corps during the Vietnam War. In a long series of issue-specific interviews with marines returning from duty in South Vietnam in the 1960s, the U.S. Marine Corps commissioned interviews covering specific issues involving the corps' presence in Vietnam, and these are housed in the U.S. Marine Corps History and Museums Division Oral History Collection. Likewise, the U.S. Air Force conducted oral history interviews with returning veterans from Southeast Asia, and these interviews can be found at the U.S. Air Force Historical Research Agency. Additionally, the National Museum of the Marine Corps has been conducting oral history interviews with marines since the 1960s, including marines from World War II through the country's most recent conflicts. The oral history collections held by the U.S. Navy at both the U.S. Naval Institute and the U.S. Naval History and Heritage Command are especially impressive and contain interviews with a great variety of veterans. One should also consult the extensive holdings of the U.S. Coast Guard Oral History Program to provide a fuller account of U.S. military maritime history.

The proliferation of oral history within the armed services has brought about positive change in the study of military history. The original motives for collecting oral history interviews were twofold: (1) to help understand how battles unfolded, how service personnel performed, and how to fight more effectively (both in the short and long terms) and (2) to provide a reservoir of primary source material to aid in the study of past conflicts. By using oral

history in its collective effort to learn from the past, the U.S. military tapped a wellspring of previously unknown material that brought about unforeseen results. Not only did the oral recollections provide numerous rich perspectives, they also showed the complexity of combat operations, especially through the often contradictory recollections of different individuals. This fact has spurred deeper research in these cases where individuals' memories differ in an effort to substantiate the differing claims, resulting in a more complex and nuanced view of military history.

In addition to the richer historical understanding provided by oral history, military history has been able to evolve along historiographical lines that have enabled the field to remain "relevant" and more mainstream in the larger study of history. Although certainly worthy of study in and of itself as a major and often defining entity within societies throughout time, the history of the military in the United States has, with the help of oral history, been reflective of the larger shift in historical study to a "history from below" approach. Though many early efforts in the field of military oral history focused on attaining the recollections of general officers and other top commanders, since the 1960s oral historians have collected the oral memoirs of men and women of all ranks, positions, levels of education, race, ethnicity, and various other defining characteristics.

Emanating from this, numerous subfields have emerged in military history. Imagine studying African American veterans' experiences in the Vietnam War, or the Japanese American experience in World War II, without access to oral histories. Prisoner-of-war studies would be an immensely weaker area of study without recourse to oral history interviews, as would studies of soldier motivation or those focusing on psychological trauma caused by combat; the list can go on almost indefinitely. Military history has long been maligned for its practitioners' seeming obsession with operational history, but oral history has helped infuse a vitality to the field as new areas of study abound, and important historically sound work is being produced in these new areas. Through this effort to record the history of "average" service personnel, oral historians have helped produce a wealth of materials that not only help us detail daily life in the American military, or even the terrible, tragic, chaotic, and heroic events of battle, but have also provided a way to study individual and collective memory in the military.

Other Oral History Projects

As a result of the popularity and utility of oral history, many nonmilitary institutions have been collecting and preserving interviews related to military matters. The U.S. Library of Congress instituted the Veterans History Project in 2000, and this massive oral history effort has collected thousands of interviews with American veterans who served in all of the conflicts of the 20th and 21st centuries. Most other large oral history archives are housed within and sponsored by American universities throughout the country. These oral history projects are typically led by trained oral historians with the goal of providing current and future generations with as broad an array of diverse perspectives as possible. Some of the most notable projects are the Rutgers Oral History Archives, the Oral History Research Office at Columbia University, the Regional Oral History Office at the University of California at Berkeley, the University of California at Los Angeles's Center for Oral History Research, the Louie B. Nunn Center for Oral History at the University of Kentucky, and the Samuel Proctor Oral History Program at the University of Florida. These are all broad-based collections, and they do not focus specifically on military history, but they include thousands of interviews with veterans of many conflicts.

Other oral history projects focus more narrowly on military matters. The Oral History Project at the University of North Texas houses an extensive collection of interviews with veterans of the Second World War, especially those who served in the Pacific Theater. The United States Military Academy's West Point Center for Oral History was created in 2009 and will serve as a major repository of interviews with graduates of the academy. Likewise, the Citadel Oral History Program, founded in 2008, will collect and preserve interviews for generations. The U.S. Latino & Latina World War II Oral History Project at the University of Texas has conducted hundreds of interview with veterans of the Second World War, and it is collecting interviews with veterans of the Korean and Vietnam Wars. The largest and most impressive collection of Vietnam War-related oral history interviews is at the Vietnam Center and Archive at Texas Tech University. The Louie B. Nunn Center for Oral History has initiated a major project for the collection of interviews with veterans of the conflicts in Iraq and Afghanistan. The History Division of the U.S. Marine Corps has

conducted and preserved more than 1,500 interviews with participants in Operation Iraqi Freedom, and the U.S. Army's Center of Military History has a major collection of interviews with veterans of both Operation Iraqi Freedom and Operation Enduring Freedom. The U.S. Air Force Historical Studies Office also maintains a large and growing collection of interviews concerning these conflicts. There are also numerous state and local efforts throughout the country to collect the reminiscences of veterans, reflecting society's desire to learn more about the country's veterans and their experiences. All these efforts to collect and preserve oral history interviews have had a tremendous impact on the way we study and understand the history of the country's military institutions, as well as how we regard and come to understand America's veteran community.

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See also Archives, Military; History, Military: Approaches to; History, Naval: Approaches to; Marshall, S. L. A.

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ORGANIZATION, COAST GUARD

Coast Guard headquarters is in Washington, D.C. The commandant of the U.S. Coast Guard is an admiral (a four-star equivalent). The vice commandant is a vice

admiral (a three-star equivalent) and serves as acting commandant in the absence of the commandant. This entry discusses the organizational structure of the U.S. Coast Guard.

The deputy commandant for mission support (who oversees logistics, acquisition, and human resources) and the deputy commandant for operations (who oversees service operation policies) are also headquartered in Washington. The Force Readiness Command based in Norfolk, Virginia, is responsible for command training units, schools, and training centers.

The Coast Guard reorganized its operational structure in 2007. The U.S. Coast Guard's operational force is now organized into the Atlantic and the Pacific commands. Each is commanded by a vice admiral. The Atlantic Command consists of District 1 (New England, eastern New York, and northern New Jersey), District 5 (Pennsylvania, southern New Jersey, Delaware, Maryland, Virginia, and North Carolina), District 7 (South Carolina, Georgia, eastern Florida, Puerto Rico, and the U.S. Virgin Islands), District 8 (all inland waters in the United States, the Gulf of Mexico), and District 9 (the Great Lakes). The Pacific Command includes District 11 (Arizona, California, Nevada, and Utah), District 13 (Idaho, Montana, Oregon, and Washington), District 14 (Hawaii and U.S. Pacific territories), and District 17 (Alaska).

In 2007, the service established the Deployable Operations Group—the DOG. The DOG places all specialized deployable Coast Guard assets under a single unified command. The Coast Guard's goal is to be able to deploy four “tailored” force packages. A tailored force package would include a mix of ships, aircraft, and special training for tactical missions. The DOG includes the National Strike Force, which manages the service's specialized assets for responding to oil spills and hazardous materials. In addition, the DOG includes two other subordinate commands. One is oriented on the Atlantic Command and the other on the Pacific Command. Each includes Marine Safety and Security Teams, Port Security Units, and Deployable Patrol Boat Squadrons.

The U.S. Coast Guard Reserve is the reserve component of the service. It is organized, trained, and administered under the Coast Guard Headquarters.

The U.S. Coast Guard is also supported by the Coast Guard Auxiliary. The auxiliary is a volunteer organization established by Congress to assist the

U.S. Coast Guard. Auxiliarists perform a range of duties from participating in search and rescue to assisting in the mobilization of the Coast Guard Reserves. The auxiliary members are in all 50 states, Puerto Rico, the Virgin Islands, American Samoa, and Guam. The auxiliary is organized into flotillas (local groups of at least 15 members) and divisions (five or more flotillas). Flotillas and divisions are aligned with Coast Guard Districts. Although the auxiliary operates under the Coast Guard, it has its own board of national officers, which constitute the Auxiliary Headquarters.

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See also Civil Affairs; Civil Defense; Coast Guard, U.S.; Training, Coast Guard Enlisted; Training, Coast Guard Officers; U.S. Coast Guard Academy

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- U.S. Coast Guard Senior Leadership: <http://www.uscg.mil/seniorleadership/>

ORGANIZATION OF AMERICAN STATES

Created in April 1948, the Organization of American States (OAS) is a regional intergovernmental organization of sovereign nations ranging across the Western Hemisphere. It succeeded the Pan-American Union, one of the oldest regional blocs, which was formed in 1890 during the Pan-American Conference. Pan-Americanism is an old continental goal, dating from the Monroe Doctrine and Bolivar's Panama Congress

in the 1820s. The OAS was created in response to post–Second World War security issues. Approved at the Conference of Bogotá, its charter encompassed contemporary concerns about the threat of communism. Two competing forces shaped the organization: (1) the division of nations around the world into two hostile blocs of influence and (2) the creation of the United Nations. These prompted the organization of a hemispheric institution firmly committed to regional safety, as set forth in the charter, “to achieve an order of peace and justice, to promote their solidarity, to strengthen their collaboration, and to defend their sovereignty, their territorial integrity, and their Independence” (OAS, 1967, Pt. 1, chap 1, Article 1, p. 1). This entry discusses the structure, missions, and actions of the OAS.

The OAS headquarters are located in Washington, D.C. They house the General Assembly, the Permanent Council, the Inter-American Economic and Social Council, the Inter-American Council for Science and Culture, the Inter-American Juridical Committee, the Inter-American Commission on Human Rights, and the General Secretariat. The Permanent Council is a committee composed of one representative with ambassadorial status from each member-state. It is responsible for supervising the General Secretariat as well as for overseeing relations among members and ties with other international organizations. The general secretary is responsible for coordinating OAS projects. An elected official, the general secretary receives a 5-year mandate, with the possibility of one additional term. In addition to permanent institutions and staff, special councils, committees, and meetings may gather periodically to discuss specific matters, such as the Consultation of Ministers of Foreign Affairs convened to discuss crises affecting the security of member nations. The General Assembly is the highest organ of the OAS. It convenes regularly in a selected member country to consider an agenda drafted by the Permanent Council. Among other tasks, it determines organizational spending and members' contributions. The OAS is governed by a charter, which has been amended several times since 1948.

Challenges

During its first decades, the organization was a secondary institution within the Inter-American system as U.S. Cold War policies weakened OAS authority

by supporting military coups and the establishment of authoritarian regimes throughout the hemisphere. In 1954, the United States supported a coup against reformist president Jacobo Arbenz in Guatemala. During the 1960s, the OAS faced its first serious challenges. Tensions between the United States and the Cuban revolutionary regime underlined the connections between underdevelopment and social instability. Poverty became a tangible issue confronted by coordinated policies. The establishment of the Alliance for Progress, announced by President John F. Kennedy in 1961, represented the first hemispheric program connecting representative democracy, economic development, and social justice. The OAS fully embraced that agenda. Member nations were encouraged to enroll and adopt recommended protocols. Despite ambitious goals, few countries benefited effectively from these policies and, by the end of the decade, the alliance was no more than a vanished hope. Counterinsurgency surpassed social transformation as a regional priority and most governments invested heavily in military training and weaponry instead of improving standards of living or access to land for impoverished populations.

In certain political arenas, the OAS aligned with the U.S. government. It banned the Marxist Cuban regime from membership, and supported the U.S. invasion of the Dominican Republic (April 1965) when a majority of delegates voted for Operation Push Ahead, the replacement of U.S. forces by inter-American armed forces. However, in spite of OAS support, U.S. intervention in the Dominican Republic did not receive support from the governments of Mexico, Chile, Uruguay, and Venezuela. These constituted important abstentions by OAS founding members. (Intervention was also criticized by U.S. liberal congressmen, including Democratic Senator Robert Kennedy.) Less significant was OAS mediation of the Soccer War (June–July 1969), an armed conflict between Honduras and El Salvador that ended in a negotiated cease-fire. Despite its purported defense of democratic values and governments in the Western Hemisphere, the OAS did little to stop the spread of military dictatorships in Latin America and consequent human rights abuses during the 1960s and 1970s. Clearly, Cold War worries trumped democratic aspirations.

A second wave of Cold War interventions, sanctioning coups and supporting corrupt regimes, opposed U.S. interests to many Latin American

governments. These actions brought OAS authority to its weakest point. During the administration of Ronald Reagan (1981–1989), U.S. foreign policy worked to destabilize the Sandinistas in Nicaragua. Reagan sponsored an anti-Marxist Nicaraguan force, the Contras, while assisting anti-Communist governments in Honduras, El Salvador, and Guatemala. In October 25, 1983, a combined force commanded by U.S. troops invaded Grenada, a small island in the Caribbean. The invasion was criticized by the United Kingdom, Canada, and the UN General Assembly. A proliferation of regional sub-blocs was the main response to the escalation of violence in Central America and the Caribbean. Among them, the Contadora Group (1983) and what became known as the Arias Costa Rica Plan (1987) sought the achievement of regional peace through negotiation.

Redemocratization during the 1980s and the Cold War's end (1989) opened a window for renovation, confronting the Americas with a new set of agendas and issues. The fall of the Soviet Union brought a reevaluation of interventionism as a U.S. policy. Counterinsurgency no longer provided an important issue. At the same time, emerging democracies learned that economic development alone was insufficient to overcome the unequal distribution of wealth or to combat regional inequality. In more developed countries such as Brazil, Argentina, and Mexico, industrialization accelerated rates of migration, urbanization, and income concentration. New problems such as urban sprawl, with accelerated growth of shantytowns and other forms of precarious habitation, promoted functional unemployment, drug use, crime, and even deforestation. Economic recession and the debt crisis aggravated the situation. Economic growth rates were difficult or impossible to sustain under the traditional import substitution pattern. Globalization and liberalization promoted free markets, sometimes at high social costs. Consequently, the concept of national and regional security changed with the end of the Cold War from basic counterinsurgency to broader notions of public safety, human well-being, and civil rights. Of special significance for this shift was the Inter-American Democratic Charter, adopted during the Conference of Lima in 2001, which affirmed in its first article that "the peoples of the Americas have a right to democracy and their governments have an obligation to promote and defend it" (OAS, 2001, Pt. 1, Article 1).

During the so-called lost decade (1980s), broad political competition developed among most member nations. In the context of expanding political rights and promoting democracy, the OAS undertook election supervision as one of its main responsibilities. Election monitors are still sent to member nations to follow ballot returns, reinforcing the role of the OAS as trusted arbiter in political disputes. The organization also worked with humanitarian agencies and stabilization missions to coordinate material support in response to human and natural catastrophes in Haiti, Honduras, El Salvador, Guatemala, and Chile. Although Latin America does not have a tradition of organized violence between states since the 19th century, disputes emerge from time to time. Peacekeeping actions minimize the threat of armed conflicts between member-states. The OAS was involved in mediations in border conflicts between Peru and Ecuador and, most recently, between Venezuela and Colombia, although the last one would be successfully mediated by UNASUR (Union of South American Nations), a regional organization initiated by South American governments.

Tentative efforts to combat drug traffic and confront the cartels and guerrilla forces profiting from it were less effective. The invasion of Panama by U.S. forces and the ouster of General Manuel Noriega (December 20, 1989) were condemned by the majority of OAS member-states. This action was clearly not consensual. Latin American governments feared that such direct political and military intervention in Central America foreshadowed a return of U.S. interference in the internal affairs of the region that had exemplified the gray days of the Roosevelt Corollary, an early-20th century doctrine that asserted the right of the United States to intervene in Central America and the Caribbean to stabilize economic affairs and prevent European intervention. Thus, emerging left-oriented governments often distrusted OAS drug enforcement policies. Suspicions grew out of normal deliberations over national sovereignty as well as conflicting notions regarding the place of coca agriculture in national traditional culture, particularly in countries like Bolivia and Ecuador with large indigenous populations. The Colombian raid against a Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia or FARC) rebel camp across the border in neighboring Ecuador showed how radically different political and social conceptions of drug dealers and guerrillas pushed

countries to the verge of war. The OAS worked to neutralize such tensions. Yet a fundamental conflict lies in two opposing visions concerning the role of the OAS: U.S. officials see the organization as an influence, while many Latin American nations perceive the organization as a way to limit U.S. interference in the region.

Recently, the OAS failed to mediate a negotiated solution for the political crisis in Honduras caused by the overthrow of President Manuel Zelaya by a civil military junta on June 28, 2009. Despite OAS condemnation and international protests, the junta conducted its own presidential elections and installed a new government purged of Zelaya's influence. Currently, a new Honduran ambassador was seated at the OAS, although many Latin American governments still refuse to recognize the new regime.

The Changing Focus of the OAS

The coming years will witness changes in the structure of the OAS, creating room for regional integration and differentiation. As the international political scene evolved from the Cold War to the wars against drugs and terrorism, the United States shifted its attention to other areas of the globe, withholding funds from the OAS. This redirection of American foreign policy enabled pluralism in OAS deliberations and a more even division of responsibilities among the sister nations. Operational reconfigurations will cause inevitable changes in the overall budget and revisions to current members' contributions. The struggle against institutional corruption, the concentration of wealth, the declining state of public security, and environmental issues will likely constitute the main challenges that shape the OAS in the short run. Its future viability will depend on developing creative and effective approaches to counter these challenges.

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See also Cuba; Human Rights; Military Advisors, U.S.; Nation-Building; Political Science and International Relations; Realism in International Relations; Venezuela

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OTTAWA LAND MINE TREATY

The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, informally known as the Ottawa Convention or the Ottawa Treaty, was signed by 122 nations in December 1997 and focused on the complete abolition of a particular class of weaponry—antipersonnel (AP) land mines. It was not the first international law convention or treaty aimed at limiting these weapons, but as the call for the convention was prominently supported by several international luminaries—most notably, Diana, the Princess of Wales—the Ottawa Treaty is probably the most well-known of these efforts. The treaty was also championed by the International Campaign to Ban Landmines, a nongovernmental organization advocating for a global ban on AP mines and cluster munitions, which was awarded the Nobel Peace Prize in recognition of its efforts to bring about the treaty. This entry discusses the origins of the treaty, its articles and amendments, and criticisms.

The critical precursor to the Ottawa Treaty is the UN-convened Convention on the Prohibition or Restrictions of Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (the Convention

on Conventional Weapons, or CCW), adopted in October 1980 after an 85-nation conference, which included the United States. One of the CCW's subsections is the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby Traps and Other Devices, known as Protocol II. Protocol II—which took effect in December 1983, with 36 countries as initial parties—did not completely abrogate AP mines but was intended to protect civilian populations and UN personnel from their hazards, particularly indiscriminate usage that made no differentiation between combatants and noncombatants. The United States has ratified Protocol II.

During the same timeframe that Protocol II was being negotiated and took effect, however, various wars and civil wars took place in which AP mines were used intentionally or indiscriminately against civilians. These included conflicts in Afghanistan, Angola, Bosnia and Herzegovina, Cambodia, Georgia/South Ossetia, Kosovo, Iraqi-held Kurdistan, and Rwanda. Protocol II was criticized as having few clear definitions, as lacking any verification and enforcement processes, and, by its terms, as being inapplicable to virtually all civil wars and internal conflicts. The frequency of “terror mining” against civilian populations led prominent spokespersons like Jody Williams of the Vietnam Veterans of America and the Princess of Wales to seek a campaign to seek an outright prohibition on AP mines and similar weapons, which led to the founding of the International Campaign to Ban Landmines.

In May 1996, the CCW's first review conference adopted significant amendments to Protocol II to correct the original protocol's shortcomings. Most important, Amended Protocol II now covers internal armed conflicts like civil wars and insurgencies. Among the numerous features of Amended Protocol II, AP mines designed to explode on detection by electromagnetic sources were banned outright, clear duties were assigned for demining, all land mines were required to be detectable, with a 9-year period set for signatory states to meet the new standards, controls were added for remotely deliverable (“scatterable”) mines, all unmarked AP mines were required to be “smart” (i.e., 90% must self-destruct within 30 days of emplacement), and additional protections for civilians and noncombatants were added, requiring that all feasible efforts be taken to protect civilians from mine warfare. However, Amended Protocol II, like its predecessor, does not

categorically ban all AP mines, and its verification mechanisms were still criticized for lacking solid enforceability.

The Ottawa Conference was convened in October 1996, with 74 nations participating. The treaty drew heavily from Amended Protocol II but contained several far-reaching provisions beyond the scope of its 1996 precursor. The treaty's Article 1 requires each signatory nation to agree, "never under any circumstances," to use AP mines; to develop, produce, otherwise acquire, stockpile, retain or transfer to anyone, directly or indirectly, AP mines; or to assist, encourage, or induce, in any way, anyone to engage in any activity prohibited to a party under the convention. The treaty also requires each signatory party to agree to either destroy or ensure the destruction of all of its AP mines in accordance with the convention's terms.

For the Ottawa Treaty's purposes, *AP mine* means a mine designed to be exploded by the presence, proximity, or contact of a person and that will incapacitate, injure, or kill one or more persons; antitank mines and other non-AP mines fitted with antihandling devices (i.e., "booby traps") are expressly excluded from its terms, as are command-detonated mines like the U.S. M18A1 Claymore command-fired ("ambush") mine. Besides stopping the production and development of AP mines, under Article 4, each signatory nation is given 4 years to eliminate fully its AP mine stockpile. Under Article 5, moreover, each state that becomes a party to the treaty must clear all AP mines from all mined areas under its jurisdiction or control "as soon as possible" but generally no later than 10 years after the treaty enters into force as to that nation. The Ottawa Treaty also contains several provisions cross-referencing and requiring compliance with Amended Protocol II.

Article 3 provides the option to each signatory to retain a small number of mines for purposes of training in mine clearance and detection. Each signatory nation accepting this option is required to report the numbers of mines kept for this purpose; 64 countries have accepted the option, declaring a total of 289,000 AP mines to the UN secretary-general for purposes of complying with Article 3; 23 other signatories have not declared any figures. Articles 7 and 8 contain extensive provisions requiring measures intended to provide transparency in review and

reporting as to the implementation of and compliance with the treaty's terms by each signatory.

The Ottawa Treaty took effect in March 1999, 6 months after the 40th nation had ratified it. As of 2009, 156 nations had formally ratified the treaty; 2 had signed but not ratified it, and 37 others, including the People's Republic of China, India, Russia, and the United States, had not yet enacted the treaty. Criticisms raised by such nations that have not signed include that the ban imposed by the treaty is overinclusive, in that it takes away all usage of AP mines, including self-destructing "smart" mines, from nations that have not abused the CCW, Protocol II, or other international laws of warfare, and that "rogue" states and terrorist groups will refuse to abide by the ban in any event. The United States has not signed the Ottawa Treaty, despite 1994 statements by President Bill Clinton that ridding the world of land mines was a top U.S. arms control priority. The U.S. government's long-standing objection to ratification of the Ottawa Treaty is that it contains no "Korean Peninsula" exception to the Ottawa Treaty, stating that the more than 1 million mines planted in the Demilitarized Zone between the two Koreas are required for peacekeeping purposes. Similar concerns have periodically been offered by the U.S. military as to the continuing presence of an AP mine belt outside the Guantanamo Bay naval base in Cuba.

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See also Geneva Conventions; Hague Conventions; Laws of War; Mines, Land; Red Cross, International Committee of

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P

PAKISTAN

The country of Pakistan (in Urdu and Persian meaning “Land of the Pure”—a term coined in 1933 by Chaudhary Rahmat Ali, a Muslim movement activist) was to be formed, theoretically, out of the Muslim populations of British India. These populations—or the elites among them—had at times ruled over the Hindu populations of the Indian subcontinent, notably in the course of a succession of Muslim empires in South Asia. The last of these was the Mughal Empire, which ruled from the 16th to the 19th centuries, the architectural apotheosis of which was the creation of the Taj Mahal under Emperor Shah Jahan. The decline of the Mughal Empire, starting in the 18th century, left it an empire in name only as it gave way to the British East India Company. The Sepoy Rebellion in 1857, in which both Hindus and Muslims participated, spelled the end of the East India Company’s rule and its replacement by the British government itself. This direct rule became known as the British Raj, which lasted until the British gave up the Indian subcontinent in 1947. This entry discusses the history, government, and armed forces of Pakistan and Pakistan’s relationship with Afghanistan, India, the United States, and other countries.

Background and Creation of Pakistan

The idea of a separate state for Muslims dates from the anticolonialist period in India prior to World War II, under the leadership of Mahatma Gandhi.

In 1930, Mohammed Iqbal, who is honored as the national poet of Pakistan, advanced his dream of a separate state for Muslims, who, he argued, could not trust the Hindu majority to treat them on an equal basis. Later, as Pakistan was to achieve its independence in the aftermath of World War II, a secular barrister, Mohammed Ali Jinnah, was the driving force behind the Muslim nationalist movement. He became known as the Quaid-i-Azam—the “great leader.”

However, the division of the subcontinent was neither complete nor peaceful, in part because of Great Britain’s haste in ending its colonial rule so that it could turn its attention to national recovery after 5 years of war: Large Muslim populations were left behind in India as a result of the partition. The population transfers that did take place, especially in the relatively prosperous Punjab, among Muslims, Hindus, and Sikhs, as well as in the east in Bengal, were accompanied by scenes of mass murder that worsened the intercommunal atmosphere; the disposition of the princely states in India—theoretically outside British rule—worked to the disadvantage of the Muslims, notably in Kashmir, where the state was turned over to India by its Hindu maharajah despite the fact that its population was heavily Muslim; and finally, the state of Pakistan was created in two pieces—West Pakistan (now the Islamic Republic of Pakistan) and East Pakistan (now the People’s Republic of Bangladesh)—separated by 1,500 miles of Indian territory.

Today, the population of Pakistan (i.e., the former West Pakistan) is upward of 170 million people, the sixth most populous state in the world and the

second most populous Muslim state, after Indonesia. By 2030, Pakistan is expected to surpass Indonesia and become the largest Muslim state by population. (The Muslim population in India is about the same as that of Pakistan and represents about 14% of the total population of India.)

In the process of partition (1947), Pakistan had to be created from scratch, out of the body of "Mother India." Government institutions, buildings, monuments, and other relics of British rule remained in India. Initially, the Pakistani capital was located in the port city of Karachi, and then in the 1960s, a new Pakistani capital, Islamabad, was created alongside the city of Rawalpindi. The assets of the army and the civil service were divided between the two countries. Having rejected its former identity as part of India and its government institutions and, more generally, having rejected their common Muslim and non-Muslim heritage, Pakistan's default identity has gradually moved, for many of its citizens, toward radical Islamism.

Pakistan has a 650-mile coastline along the Arabian Sea and the Gulf of Oman in the south. In the west, it is bordered by Afghanistan and Iran. In the east, it is bordered by India and in the far northeast, by China. In the north, Tajikistan lies adjacent to Pakistan but is separated by the narrow Wakhan Corridor.

Pakistan's history has been punctuated by three wars (1948, 1965, and 1971) and a skirmish (1990) with India, in all of which Pakistan came out on the short end.

Economy

Pakistan has a semi-industrialized economy, which is ranked the 27th largest in the world. However, it remained for a long time impoverished due to internal political disturbances and negligible foreign investment. With a rise in development spending by the Pakistani government, the country's poverty levels were reduced by 10% from 2001 to 2007. The gross domestic product (GDP) grew from 5% to 8% from 2004 to 2007. This was largely due to development in the industrial and service sectors. However, the period after 2007 witnessed considerable political and economic instability, leading to a depreciation of the Pakistani rupee. The growth of the economy was affected once again during the 2008 global economic recession.

Since 1948, the United States has provided more than \$20 billion in direct aid to Pakistan, nearly half of which has gone for military spending. This aid has been cut off or reduced on several occasions, chiefly in disapproval of Pakistan's development of nuclear weapons. The net effect has been an ambiguous and conflicted relationship, although Pakistan is still designated as a "major non-NATO ally" of the United States. In the wake of the killing in May 2011 of Osama bin Laden, who had been living for 5 years in Pakistan, the Obama administration said it would withdraw one third of its military assistance to Pakistan, or some \$800 million, which would include \$300 million for counterinsurgency programs.

Government and Politics

Constitutionally, Pakistan is a federal parliamentary republic, made up of four provinces, namely, (1) Baluchistan, (2) Khyber Pakhtunkhwa, (3) Punjab, and (4) Sindh, and four federal territories, namely, (1) Islamabad Capital Region, (2) Federally Administered Tribal Areas (FATA), including the Frontier regions, (3) Azad Jammu and Kashmir, and (4) Gilgit-Baltistan. With the adoption of its constitution in 1956, Pakistan became an Islamic republic, while remaining in the Commonwealth of Nations. In addition, it is a member of the United Nations, a founding member of the Islamic Conference Organization, and a member of the G20 group of leading and emerging economies.

Though Pakistan, like India, began as a parliamentary democracy, unlike India it succumbed to military rule. Four times the army took over: (1) in 1958–1969, the regime of Ayub Khan; (2) in 1969–1971, the brief regime of Yahya Khan, following the breakaway of East Pakistan, which became Bangladesh; (3) in 1977–1988, the regime of Zia-ul-Haq, who overthrew the 5-year-old civilian government of Zulfikar Ali Bhutto and had him executed; and (4) in 1999–2008, the regime of Pervez Musharraf, after overthrowing the regime of Nawaz Sharif, who had alternated as prime minister with Bhutto's daughter, Benazir Bhutto, during the 1990s. She was later assassinated in 2007 as she was campaigning to become prime minister again.

After the assassination of Benazir Bhutto, parliamentary elections were temporarily postponed, but when they were held in 2008, her Pakistan Peoples

Party won a majority of votes and formed a coalition government with the Pakistan Muslim League. Yousuf Raza Gilani became the prime minister. In August 2008, General Pervez Musharraf resigned as president and went into exile in London after he had been threatened with impeachment over his conflict with the judiciary. In the presidential election that followed, Asif Ali Zardari (widower of Benazir Bhutto) of the Pakistan Peoples Party was elected president by a wide margin.

Political Relationship With the United States

The political relationship between the United States and Pakistan has repeatedly had its ups and downs. There has been distrust, compounded by Pakistan's inferiority complex vis-à-vis India and the perceived lack of diplomatic support by the United States, notably with regard to Pakistan's dispute with India over the Kashmir issue.

In the early days of the Cold War, Pakistan allied with the United States through its adherence to two defensive pacts aimed at containing the Soviet Union: (1) the Central Treaty Organization in the Middle East and (2) the Southeast Asia Treaty Organization. The high point in Pakistan's relation with the United States was in 1971, during the war with India; at that time, Secretary of State Henry Kissinger openly advocated that the United States should "tilt toward Pakistan." This, however, remained in the realm of rhetoric. Pakistan lost not only the war but also its province of East Pakistan. At the same time, and throughout the Cold War, America's relation with India remained frosty. As a leading member of the Non-Aligned Movement, India adhered to the anti-American line of that movement.

In the 1970s, new developments arose that complicated U.S.-Pakistan relations. The first was the developing tie between Pakistan and China, which for the former was motivated by a wish to counterbalance India. The second was the arrival on the scene of Zulfikar Ali Bhutto, who shifted Pakistan's rhetoric in the direction of the Third World and somewhat away from the West, all the while intensifying Pakistan's relationship with China. Third, Pakistan sought to acquire nuclear weapons capability, a so-called green or Islamic bomb, which it later managed to achieve through the efforts of a Pakistani nuclear scientist, Abdul Qadeer Khan.

Yet another era in U.S.-Pakistan relations opened up at the end of the 1970s, with the Soviet invasion of Afghanistan. As a Muslim country on Pakistan's border and with a common ethnic group, the Pashtuns, Afghanistan is considered by Pakistan to be rightfully within its sphere of influence and to constitute its "strategic depth"—as always, vis-à-vis India. The joint U.S.-Saudi-Pakistani sponsorship of the Afghan mujahideen insurgency against the Soviet occupation will be treated separately in this entry.

Still another change in the political relationship between the United States and Pakistan occurred in the aftermath of the terrorist attacks on the United States on September 11, 2001. The attacks were planned and launched from Afghanistan, and with Pakistan offering the best access to that country, President Pervez Musharraf was prevailed on to give his support to the Global War on Terrorism launched by the United States against al Qaeda, the organization led by Osama bin Laden that was behind the attacks, and its protector in Afghanistan, the Taliban, a movement sponsored by the Pakistanis in the 1990s as a means of ending the disorder that followed the withdrawal of Soviet troops from the country and of establishing the Taliban as its proxy of influence in Afghanistan.

But at the same time, in the years that followed the 9/11 attacks, Pakistan felt compelled to maintain tenuous links to the Taliban and other terrorist organizations in Afghanistan that had been essentially the fundamentalist part of the mujahideen movement against the former USSR in the 1980s. Despite these continuing relationships, Pakistan had to face increasing threats from a home-grown Taliban organization that had assassinated Benazir Bhutto, the emerging civilian successor to the ousted Musharraf, and continued to carry out a series of attacks against Pakistani government installations and personnel.

Nearly 10 years after 9/11, Osama bin Laden was discovered and killed in a unilateral American operation deep inside Pakistan, in a villa in the garrison town of Abbottabad. In addition to deeply offending the Pakistanis as a breach of the country's sovereignty, the operation raised the question of whether bin Laden had been sheltered there for years by an element of the Pakistan government, or more specifically by its intelligence service, the Inter-Security Intelligence Directorate, the ISI. The question remains unanswered.

Military Forces

Pakistan's armed forces rank as the eighth largest in the world. The armed forces consist of the separate branches of the army, the navy, and the air force, as well as a number of paramilitary formations that carry out internal security functions and border controls. The Pakistan army, now headed by General Asfaq Parvez Kayani, has an active-duty force of 612,000, plus 513,000 personnel in reserve. Conscription is not in effect but can be instituted in times of emergency. The army is generally considered the most efficient of Pakistan's governmental institutions.

Pakistan is the only country with a Muslim majority that possesses nuclear weapons. The National Command Authority is responsible for the protection and deployment of Pakistan's nuclear forces. In the past several years, Pakistan has sharply increased the number of its nuclear weapons and is now estimated to possess around 100 of them. In addition, Pakistan is believed to be expanding its fissile material stockpile at a higher rate than any other country at present. Pakistan considers that this nuclear capability has brought it up to a strategic parity with India, which the latter does not consider to be the case.

During the Arab-Israeli wars, Pakistan Air Force pilots participated on the Arab side, notably in the Six Day War of 1967. In the subsequent Yom Kippur (aka Ramadan) War in October 1973, Pakistan Air Force pilots again volunteered, but by the time they arrived, Egypt had already agreed to a cease-fire.

Pakistan and Saudi Arabia have a close military relationship. Pakistan provided a military contingent on Saudi soil as a protective force during the Persian Gulf War. Pakistan also considers itself to be a strategic ally of China, and the two countries conduct military exercises together. Additionally, the Pakistan armed forces have contributed to UN peacekeeping efforts and are at present the largest contributor, with 10,700 personnel deployed as of 2009.

The United States and the War in Afghanistan

The Central Intelligence Agency (CIA)-ISI relationship is unique, partly because the ISI, as a military organization within the Pakistani army, is the lead intelligence service in the country, unlike in many other countries where a civilian agency has the lead, as in neighboring India with its Research and Analysis Wing, and partly because the CIA, which is

characteristically in liaison with other civilian foreign counterparts, has a unique historical relationship with the ISI. This goes back to the 1950s and the U-2 espionage flights over the former USSR that originated in Peshawar, in Pakistan's Northwest Frontier Province (now known as Khyber Pakhtunkhwa). The CIA, as the sponsor and manager of the U-2 (a role later shifted to the U.S. Air Force), had to coordinate the operation of these flights with the Pakistani authorities, and in this instance, it was the ISI. Thus, the CIA-ISI relationship goes far back and, at least until recent years, has been largely unaffected by the stormy political relations that the two countries have experienced from time to time.

In the summer of 1979, Pakistan approached the United States for aid to the mujahideen in their uprising against the recently installed communist government. The result was a presidential finding of July 1979, signed by Jimmy Carter, authorizing the CIA to provide nonlethal aid to the mujahideen. This came to be done through the Pakistani authorities, which meant its liaison counterpart, the ISI. Immediately after the Soviet invasion at the end of the year, a new finding authorizing lethal aid was signed. The first arms—mainly Enfield .303 rifles—arrived in Pakistan on January 10, 1980, 14 days after the Soviet invasion.

As a means of keeping a fig leaf of what in intelligence parlance is called "plausible denial," arms furnished to the mujahideen were to be explained away as having been picked up on the battlefield; this meant only Soviet weaponry, apart from the Enfield. Later, in 1986, in a breach of this principle, American Stinger anti-aircraft missiles were provided, and these proved to be quite effective. President Carter had gradually increased the level of aid to the insurgents, and his successor, Ronald Reagan, expanded it considerably. Overall, U.S. covert-action funding for the war as of September 1989, after Soviet forces had left earlier that year, was estimated at about \$2 billion. This figure is probably on the low side.

The Afghan government headed by Mohammed Najib held on for 3 years after Soviet forces left, before being overthrown in 1992. As of January 1, 1992, both the Soviets and the Americans had ceased their aid to the Afghan factions, after the so-called negative symmetry agreement had been signed the previous September.

In the end, the zero-sum mentality evident throughout much of the region prevailed, and the opposing

sides in the Afghan struggle for power could not agree on a compromise settlement. Chaos ensued, and it was ended in 1996 after the Pakistanis sponsored Mullah Omar and the Pashtun-based Taliban as a means of restoring order in the country and ensuring Pakistan's paramount influence in Afghanistan.

During this period of interregnum, the United States, with its military assistance to the mujahideen ended, scaled back its interest in Afghanistan. The same was true for Pakistan itself. The Pressler Amendment cut off aid to Pakistan because of the latter's development of nuclear weapons. This cut-off was voided after the attacks of 9/11. One of the harmful effects of this cutoff of aid in the 1990s was that during this period Pakistani military officers were deprived of the opportunity, as in the past, to avail themselves of programs of training in the United States. This gap might well have produced cohorts of Pakistani officers who were comparatively less disposed toward friendship with the United States.

Charles G. Cogan

See also Afghanistan; Asia; Central Asia; China, People's Republic of; Global War on Terrorism; India; Persian Gulf War; Saudi Arabia; Terrorism; Weapons, Nuclear

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PANAMA

The country of Panama is strategically located in Central America, on the narrowest strip of land between the Atlantic and Pacific Oceans. Resembling

the letter S on its side, the Isthmus of Panama has been home to the eponymous Panama Canal since 1914. Panama's unique and advantageous geographical location has defined its economic, political, and social history for centuries. Along with the Suez Canal, the Panama Canal has been one of the two most important artificial waterways in the world in terms of shipping volume and strategic importance. This entry discusses the history and economy of Panama, its relationship with the United States, and the Panamanian Public Forces (PPF).

History, the Panama Canal, and Economy

Since the Spanish colonization of the region at the beginning of the 16th century, Panama has played a crucial role as a crossroads of commerce as well as a geopolitical point of contention between nation-states. Beginning with the U.S. completion of a French-begun canal in the early 20th century, Panama was for almost a century intimately tied to the foreign policy interests of the United States. From the 1903 treaty establishing Panama's independence and the Isthmian Canal Convention of 1904, which granted the United States occupation and control (as "if it were the sovereign") of the 16-kilometer-wide Canal Zone, to the December 31, 1999, U.S. turn-over of the canal to Panama, the United States maintained six military bases and an infantry brigade in the zone. For most of this period, Panama exercised little real sovereignty over this portion of its country.

In addition, the country's geography has been a strong determinant in its economic development. Panama's economy is unique to the region. Unlike other Central American countries, Panama has never been greatly dependent on agricultural exports because its geographic centrality has meant that mercantile and, later, financial activities would be dominant. Agricultural activities comprise less than 10% of the gross domestic product, while canal revenues and related financial and service industries make up 80%. Light manufacturing makes up the remaining economic activity. The canal and its associated commerce have attracted more than 100 international banks to Panama, which has resulted in Panama City sometimes being referred to as the "Switzerland of Latin America" for both its financial importance and its traditional banking secrecy and incorporation laws. The canal has brought other benefits, such as allowing Panama to become

home to the world's largest ship registry, currently with more than 10,000 vessels registered. In addition, Panama enjoys great monetary stability since it has used the U.S. dollar as its *de facto* currency since independence, though it is locally called the balboa.

The capital and largest city is Panama City, situated on the central southern coast on the eastern side of the Pacific terminus of the Panama Canal. Panama City is home to almost one third of Panama's 3 million inhabitants and thus functions as an archetypical primate city that dominates the country's economic, political, cultural, and social interests. Since the 1989 American invasion and the return of democracy, Panama has been a representative democratic republic, headed by a president who is elected by popular vote to a single 5-year term in office. The legislative branch consists of the unicameral National Assembly, which currently has 71 representatives, chosen by either single-member or plurality voting, depending on the locality.

Military Institutions and the Panamanian Public Forces

The advent of a Panamanian military institution coincided with the country's securing independence from Colombia in 1903 with U.S. assistance. However, at the behest of the United States, under the argument of the dangers of military politicization, the Panamanian military was disbanded the following year in favor of creating the National Police. As in much of Central America, Panamanian society was (and largely still is) dominated by a small, White, economic and political elite. Until 1968, Panama's military, under various names and in various forms, functioned as the ultimate arbiter of Panamanian politics, normally upholding elitist democracy.

In the late 1930s, under the leadership of Commandant José Antonio Remón, the National Police became increasingly a tool of political repression against protesting university students and an instrument of political pressure against challenges to the status quo. Nonetheless, the National Police played a key role in furthering the process of racial and social progress in that the majority of both officers and enlisted personnel were non-Whites. During Remón's tenure, the National Police received both more professionalization and extensive modernization from the United States to counter World War II

and, later, Cold War threats. During the 1950s, the institution was renamed the National Guard (*Guardia Nacional*), and true corporate growth occurred within the ranks through increased professional military training, accrued economic benefits for officers, and ever more political involvement.

A military coup in 1968 opened the way for the National Guard to become an instrument for increased nationalism vis-à-vis the overwhelming U.S. presence in the Canal Zone. Led by Major (and later General) Omar Torrijos, the National Guard instituted numerous labor, social, and general economic reforms focused on garnering the support of the poor and working classes. For the next 13 years, the U.S.-Panama relationship continued to worsen as Torrijos directed nationalistic rhetoric against Washington and increasingly sought to distance Panama from U.S. hegemony. The crowning achievement of this strategy was the signing of the 1977 Panama Canal Treaties, which promised to turn over the canal to Panamanian control on December 31, 1999.

However, Torrijos's sudden death in a plane crash in 1981 opened the way for a second chapter in military rule, this time led by Torrijos's former chief of intelligence, Manuel Noriega. A brutal Machiavellian dictator, Noriega possessed none of the folksy charm or natural political insight of his mentor. Though Noriega had worked for decades as a paid Central Intelligence Agency informant, his ascension to power challenged U.S. interests greatly. He renamed the military the Panamanian Defense Forces and furthered its transformation into his personal guard, shredding all semblance of civil rights and beating the political opposition. On the pretext of defending democracy, combating drug trafficking, and protecting the integrity of the Canal Treaties, the United States invaded Panama on the morning of December 20, 1989. Using overwhelming firepower, the United States quickly routed the National Guard and arrested Noriega after a brief standoff at the Papal Nunciature.

Besides a return to democracy, the American invasion was the catalyst for a dramatic shift in Panama's military history. Today, Panama is one of the two Latin American countries (together with Costa Rica) that have permanently abolished their militaries. The Panamanian Defense Forces were dissolved by a constitutional amendment in 1994. Security in the country has since been assigned to the PPF, which

is composed of the following services: the National Police, National Borders, National Aeronaval, and Institutional Protection Service. While the PPF possesses no major weapon systems and does not have a military command structure, it does possess considerably more armaments than the average national police force in Central America. In theory, the PPF is also supposed to be capable of carrying out limited military activities, though in practice its utility is severely limited by its size, limited armaments, and lack of institutionalization and advanced training.

The PPF maintains an active force of around 15,000 personnel and had a 2010 budget of \$336 million, of which about two thirds was for civilian policing, given the structure of the PPF. Security expenditures account for approximately 2% of Panama's gross domestic product. Its air force consists of one helicopter squadron (mostly Bell Hueys) and two squadrons of light aircraft, consisting of trainers, observation aircraft such as Cessnas, and Brazilian-made transports. The aircraft operate out of Tocumen International Airport and the former American Albrook Air Force Base near the canal. The naval arm is a small organization relegated to coastal protection, with a handful of harbor and patrol craft. Panama has two small swift-attack ships, the GC-201 *Comandante Torrijos* and GC-202 *Presidente Porras*, both built in the United States during the 1980s. The PPF has no armored vehicles or other major land weapon systems and only a handful of mortars.

Today, one of the biggest challenges to Panama's security is related to its proximity to drug trafficking routes to the United States, Canada, and Europe. The problem is exacerbated by the Panamanian government's weak counternarcotics enforcement, due to the lack of resources, weak border enforcement, and endemic corruption. Border clashes between the PPF and Revolutionary Armed Forces of Colombia rebels along the Colombian border have given rise to calls for more militarization of the border and reorganization of the PPF, which so far Panama has resisted. However, the new Panamanian president, Ricardo Martinelli, proposed in 2010 the creation of a new Ministry of Security, which would oversee the National Police, Air Service, Immigration Service, and National Borders Service, which he hoped would address the PPF's shortcomings.

Robert C. Harding

See also Central America; Organization of American States; Panama, U.S. Intervention in

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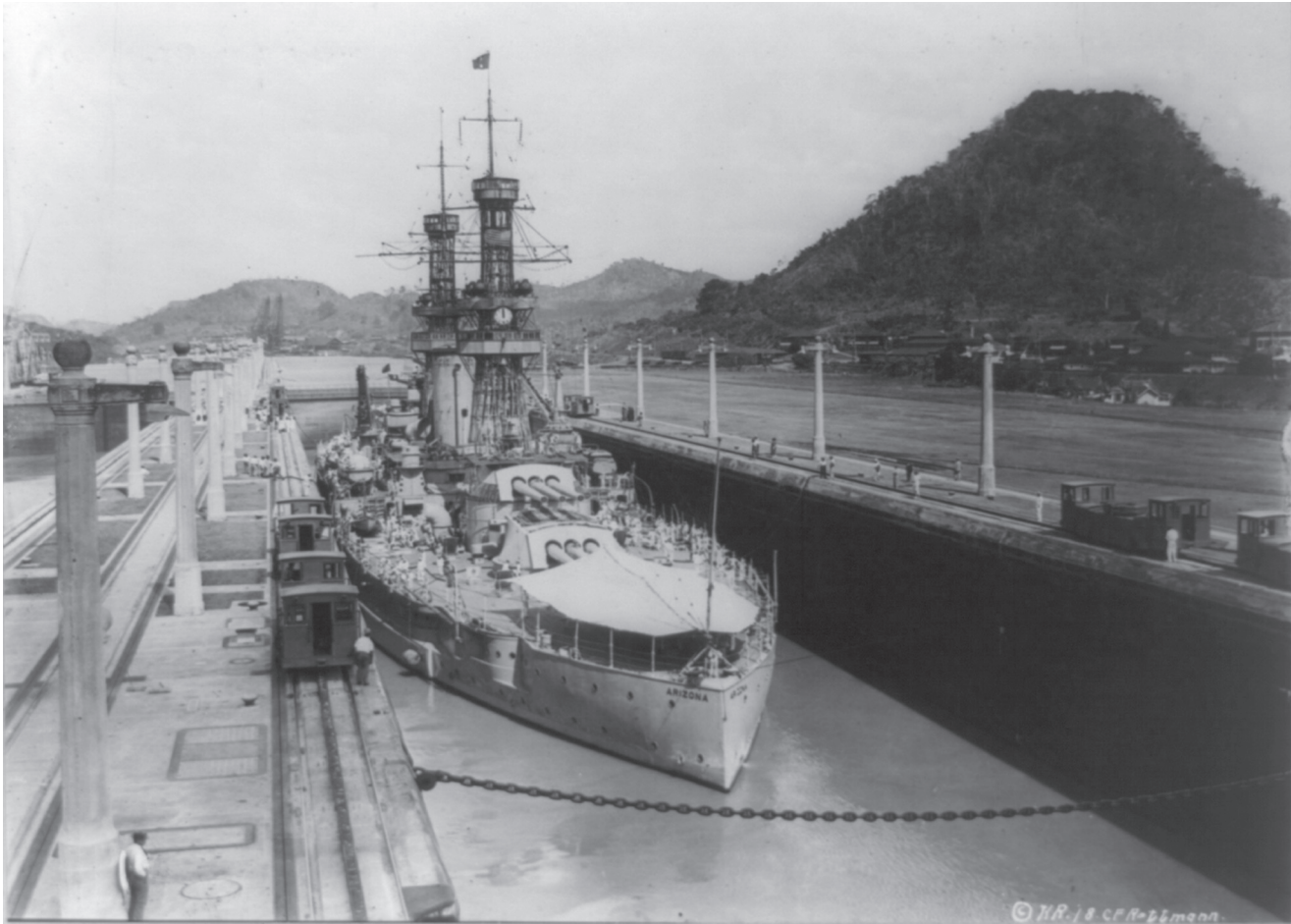
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PANAMA, U.S. INTERVENTION IN

Since its U.S.-assisted independence from Colombia in 1903, Panama has maintained an uneasy, sometimes tense relationship with the United States. The United States occupied the Panama Canal Zone, a 16-kilometer-wide swath that the 1903 treaty said the United States would control as "if it were the sovereign." The Canal Zone bisected Panama and existed as a slice of Americana in Central America, complete with an American high school, bowling alleys, and manicured lawns.

On one side, the Canal Zone provided many well-paying jobs to Panamanians, and the American presence ensured a much higher level of economic development in the Canal Zone region than in the rest of the country. But, regardless of this benefit, the omnipresence of American military forces in the country hurt some Panamanians' nationalistic consciousness and provided populist political leaders with ready rhetorical ammunition to stir nationalistic sentiments among the rural and urban poor as well as university students, who were always very politically attuned.

For the United States, the central importance of the Panama Canal in American foreign policy, especially during the Cold War, cannot be overstated. For most of the 20th century, the canal was the lynchpin in the U.S. Navy's two-ocean strategy, despite the canal's increasing vulnerability to modern missile technology and the fact that its relatively narrow width could not accommodate the passage



USS *Arizona* in lock, Panama Canal, 1921.

Source: Courtesy of the Library of Congress.

of modern aircraft carriers. Thus, the contrast of Panama trying to establish greater national sovereignty and the U.S. national security imperative of protection of the canal can be seen as the primary foundations that led to military conflict. However, a personal element was necessary to light the fuse. This entry discusses the buildup, events, and aftermath of the 1989 U.S. intervention in Panama.

Background

Since Panama's independence, there were periodic, minor confrontations between the United States and Panama over the sovereignty issue. But the level of rhetoric and rancor steadily increased following the 1968 military coup in Panama. The incoming military government was led by Major (later General) Omar Torrijos, a folksy but cunning professional

soldier whose enigmatic decision making and alliance building doggedly perplexed, confounded, and even frightened U.S. policymakers. While he could be bombastic, Torrijos was also broadly seen as a father figure by millions of Panamanians for the political, social, and economic reforms implemented during his rule. During this time, Torrijos successfully negotiated a number of treaties recognizing Panamanian sovereignty; the most important were the Torrijos-Carter Treaties of 1977, which called for the complete handover of the canal to Panama by the end of 1999. But the untimely death of Torrijos in 1981 gave way to the more brutal and caustic dictatorship of Manuel Noriega, who had been the head of the Panama intelligence agency, the G2.

Noriega was perceived by Washington officials as a loyal and dependable asset, especially since U.S. officials had viewed Torrijos as acting contradictory

to U.S. interests and Noriega had been a paid informant for the Central Intelligence Agency for almost two decades. As Panama's leader, Noriega allowed the United States to set up listening posts in Panama and to train the anti-Sandinista *contras* in western Panama near the border with Costa Rica. He also acted as an intermediary with Cuba's Fidel Castro. Noriega was, in fact, playing both sides of the fence for his own financial benefit. While purportedly helping the United States fight regional communism, Noriega expanded his business and intelligence contacts with the Sandinistas, the Cubans, and Colombia's Medellín Cartel.

Firmly ensconced in power by 1983, General Noriega (as he had become by then) turned to intransigence, bellicose ramblings, and infinitely more political meddling than his predecessor. Noriega additionally renamed Panama's National Guard the Panamanian Defense Forces (PDF) and tripled its size to about 15,000 soldiers. Using coercion through the PDF, in 1984 Noriega rigged the first free presidential election in 16 years for his hand-picked candidate, Nicolás Ardito Barletta. The outbreak of riots, strikes, and clashes between the PDF and protesters gave Noriega the excuse to try to eliminate some of his potential opposition and augment his power. The United States used its influence in the World Bank to cancel a \$50 million loan to Panama, quickly crippling its economy. In retaliation, the Panamanian government ordered all U.S. employees of the U.S. Agency for International Development out of the country. Since the U.S. dollar is Panama's currency, Panama began a slow but steady dive into a deep economic depression.

By 1988, U.S. forces in the Canal Zone were frequently engaging in firefights with PDF infiltrators, and a more desperate political environment developed, causing at least \$1 billion in foreign investment to fly out of the country. Panama's National Assembly demanded the expulsion of the U.S. ambassador and accused the United States of interventionist aggression. The last aggravation in the crisis was Noriega's indictment on federal drug charges in the United States. The PDF became more brazen in its harassment of the United States: Servicemen were illegally detained and sometimes physically assaulted, U.S. mail was stopped, and diplomatic dispatches were intercepted.

The heightened brutality, political repression, and degradation of democracy reached its zenith

during the 1989 presidential elections, which pitted the Noriega-sponsored candidate, Carlos Duque, against Guillermo Endara, who fronted a coalition of opposition parties. Though Endara handily won in a landslide, Noriega alleged "outside interference" in the election (a not-so-veiled reference to the United States) and nullified the results. A long-time associate of Noriega, Francisco Rodríguez, was named acting president, but the United States refused to recognize the new government. Encouraged by the United States, Moisés Giraldi, an officer in Noriega's inner circle, carried out a well-planned coup attempt against Noriega, which ultimately failed through lack of communication with U.S. forces.

On March 3, 1989, the PDF seized more than 20 U.S. school buses with children of U.S. military and civilian personnel aboard. U.S. military police intervened and defused the incident, but the provocation had a profound effect on the resident U.S. community in Panama, which sent a slew of messages to the U.S. Congress asking for action against the Noriega regime. During the summer of 1989, more than 50,000 U.S. military dependents living in Panama were ordered to return to the United States while a military buildup commenced in the Canal Zone. Full of bravado, Noriega declared that a "state of war existed" with the United States, and a U.S. Marine was murdered by the PDF the next day. The stage was set for a showdown with the United States.

The PDF had grown from a small paramilitary force of 5,500 in the late 1960s to a reasonably well-armed (including light infantry tanks and machine guns) and more professional military of around 15,000 by the mid-1980s, although only about 4,000 were combat ready. This relative growth of the PDF, however, paled in comparison with the force of almost 28,000 combat-ready troops the United States assembled in the Canal Zone, which included the 82nd Airborne Division, elements of the 5th Infantry Division, the 75th Ranger Regiment, and the XVIII Airborne Corps. In addition, more than 300 air assets were used.

Operation Just Cause

On December 17, 1989, President George H. W. Bush gave the order to execute the invasion, dubbed Operation Just Cause. The public justifications offered for the invasion were to safeguard Americans in the Canal Zone, fight drug trafficking, defend

democracy in Panama, and protect the Panama Canal treaties. On December 20, 1989, the United States invaded Panama in its largest military operation up to that time since the Vietnam War. The United States utilized overwhelming firepower that included the then brand new F-117A Nighthawk Stealth fighter, Apache helicopter gunships, AC-130 Spectre gunships, and bunker-busting 2,000-pound bombs. U.S. forces also enjoyed a great advantage in technology, such as night vision devices. Twenty-seven different sites along the Panama Canal, including Panama City and Colón, were attacked simultaneously. A primary target of the nighttime attack was the PDF headquarters, located in the densely populated, poor neighborhood of Panama City called El Chorillo. Systematically, entire city blocks of El Chorillo's wooden shantytown buildings were bombed or burned to the ground. In a largely symbolic attack, the Río Hato Military Academy was destroyed by

two of the 1-ton bombs. Panamanian military resistance essentially evaporated within the first 12 hours.

Noriega, however, was able to evade capture immediately by seeking refuge in the Papal Nunciature. The U.S. military encircled the papal embassy and blasted it night and day with loud rock music. Though advertised as a psychological operation to rattle Noriega, it was later revealed that the music's purpose was to prevent parabolic microphones from being used to hear the negotiations between U.S. general Marc Cisneros and the Nunciature's Monsignor Laboa. On January 3, 1990, Noriega emerged from the Nunciature in full dress uniform and surrendered to the U.S. forces. He was spirited out of the country to Miami for prosecution on the drug charges. Having been shielded in the Canal Zone by U.S. forces, president-elect Endara was sworn into office, and the PDF was disbanded.



Scorched rifles, machine guns, and rocket launchers lie in a heap after being removed from a Panamanian special forces armory that was destroyed during Operation Just Cause.

Source: Master Sergeant Ken Hammond.

Aftermath of the Invasion

At least 300 Panamanian soldiers and 60 U.S. servicemen died in the conflict, but it is difficult to assess exactly how many Panamanian civilians died. Official U.S. estimates say 250 were killed, while the Central American Human Rights Commission, the International Red Cross, and former U.S. attorney general Ramsey Clark put the figure closer to 3,000. Around 20,000 Panamanians were left homeless, and a postinvasion wave of vandalism is estimated to have inflicted more than \$2 billion in damages to property in and around Panama City.

The U.S. invasion of Panama is broadly seen as the first proof of the shifting geopolitical power since the beginning of the Soviet Union's disintegration. Previously, during the Cold War, such overt interventionist tactics were frequently shunned by the United States for fear of reciprocity by the former USSR elsewhere. But without the counterbalance of the former USSR, no such hesitancy was warranted. Moreover, the United States had largely resisted direct intervention in Latin America during the Cold War because of the perceived danger of tipping the balance in the delicate alliance creation diplomacy that characterized U.S.-Latin American relations during the period. For these reasons, this invasion marks the emergence of the post-Cold War unipolar world, in which U.S. power would be unchallenged for more than a decade to come. The invasion also reflected the evolution for U.S. policymakers of the perceived conditions for the use of U.S. military force in the post-Cold War period.

The aftermath of the invasion was mixed. It took until 1993 for Panama's economy to recover, and a 1994 amendment to Panama's constitution permanently abolished the country's military, leaving only a small police force in its place. Primarily, the contention that still exists regarding the invasion revolves around the lack of concrete evidence to support civilian casualty claims by the United States and the overwhelming use of supporting force in a predominately civilian area, in part attributed to the general lack of experience of the U.S. forces in supporting fire in urban environments. Nonetheless, the invasion cleared the way for the reestablishment of a long-standing democracy in Panama, which has been called by Freedom House one of the freest countries in the Western Hemisphere in terms of its civil liberties.

Robert C. Harding

See also Central America; Organization of American States; Panama

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PAY, MILITARY

The current military pay system in the United States, which attempts to offer military personnel a level of financial compensation comparable to the wages they might reasonably command in the national labor market, is neither the historical norm nor even the most common system in the contemporary world. Although soldiers throughout history have typically received some sort of economic compensation for their service, states seeking military manpower are not bound solely by economic laws of supply and demand in the wages they offer. They enjoy enormous flexibility as the major—and typically the only—employer of military personnel, and they also have the option of bypassing the labor market completely, compelling military service through conscription (the draft). Moreover, individual decisions about whether to join the military are often motivated by nonfinancial considerations. As a result, both the manner in which soldiers have been paid and the relative generosity of that pay have varied widely by time and place. This entry examines military pay policies throughout history, military compensation in the U.S. all-volunteer force, and current issues.

Militia, Mercenary, and Mass Conscript Armies

Paid military establishments seem only to emerge with the rise of the state, and oftentimes not even

then. Members of the citizen armies of the early Greek city-states were organized along militia lines and served at their own expense, although only for relatively short campaigns. By contrast, in late-13th-century Italy, the *condottieri* and the members of their mercenary companies fought under contracts that spelled out, in painstaking detail, both their financial compensation and their corresponding military duties. Somewhere between these extremes lie the political and economic arrangements of feudal societies, the pay offered to members of the mass conscript armies of the modern era, and the pay systems of the professional all-volunteer forces of the contemporary United States and Great Britain.

States throughout history have frequently adjusted their recruitment policies to meet current military requirements, with concomitant effects on levels of military pay. Many armies, particularly during the ancient and medieval eras, included categories of soldiers recruited—and therefore paid—in different ways. English armies during the reign of Edward III of England could include noblemen fulfilling military obligations as feudal landholders, soldiers conscripted at county levies, indentured (paid) soldiers, and hired mercenaries. Also, recruitment and pay policies for a given army or country could change over time, sometimes during the same war or even during the same campaign. For example, although the military establishment of republican Rome was originally organized as an unpaid citizens' militia, Roman soldiers participating in the siege of Veii (406–396 BCE) were given monetary pay to enable them to continue the siege past the usual short campaign season, and professional pay for the Roman army was permanently introduced sometime before the 2nd century BCE.

For much of history, military salaries were not particularly generous. Pay for sailors in the Athenian navy during the Peloponnesian war was comparable to but somewhat lower than a workman's wage, as was pay for Roman soldiers in the 1st century CE and pay in the afore-mentioned medieval army of Edward III of England. Even pay for the professional *condottieri* and their followers was often set at a near-subsistence level, usually covering only the soldiers' living expenses, equipment, and horses. Regular military pay could, however, be supplemented in various ways. For example, victorious soldiers in ancient and medieval armies could profit from booty, plunder, and ransom payments; soldiers

in the Roman imperial armies were accustomed to receiving bonuses from their generals and from new emperors; and professional soldiers, particularly in large and wealthy states, could be given land grants or pensions at the end of their service.

Although states using conscription do not have to offer a generous salary to draftees, military living conditions and pay levels became a potent political issue with the emergence of the modern democratic nation-state. In the years after the French Revolution, for example, pay levels and overall living conditions in the French army improved dramatically from their prior levels under the *ancien regime*. Recruitment through conscription nevertheless allows states to pay less than a market wage for military manpower—a fact emphasized by proponents of an all-volunteer military, who argue that conscription amounts to an implicit tax on the earnings and labor of draftees.

Pay in the American All-Volunteer Force

After a lengthy period during which much of its national military manpower came from the draft, the United States adopted an all-volunteer force structure in 1973. With the American military in direct competition with civilian employers for manpower, military pay had to be competitive with civilian salaries in order to attract sufficient numbers of enlistees, and the level of cash pay for entry-level military personnel was increased drastically, more than doubling the pay prior to the transition. In the decades since, it has periodically proven necessary to increase pay in order to recruit and retain a high-quality force in the face of changing conditions in the civilian economy and the international situation. In the late 1970s, the volunteer force faced its first major challenge as pay levels failed to remain competitive with pay in the civilian sector. In the late 1990s, a booming civilian economy and increased operations tempo led to another manpower crisis. And in the mid-2000s, both the U.S. Army and—to a lesser extent—the Marine Corps faced recruiting challenges during the wars in Afghanistan and Iraq. In each case, bonuses and substantial increases in pay were used to solve the manpower crisis.

Currently, pay in the American armed forces is set at a level that allows the Department of Defense to recruit and retain a force of the size, quality, and composition that it judges necessary to meet the

most important military threats. This is done largely by adjusting the level of military compensation. However, not all adjustments are made by increasing cash pay and benefits, which are not easily decreased once they have been increased. Instead, policymakers use bonuses, special pays, and other incentive pays, which permit them to react to short-term manpower crises with short-term solutions rather than with permanent increases that could drain military and national budgets. These types of financial incentives also allow policymakers to target the particular categories of personnel that are needed, instead of spending resources on individuals who are already satisfied with their level of compensation.

Regular military compensation under the American system consists of three major categories: (1) *basic pay*, (2) an *allowance for housing*, and (3) an *allowance for subsistence*. Basic pay is allotted in accordance with each service member's pay grade and length of service. For enlisted ranks, basic pay starts at roughly \$1,400 per month for service members in Pay Grade E-1 (private, airman basic, or seaman recruit), increases to roughly \$2,400 per month for a typical service member in Grade E-5 (sergeant or petty officer second class), and ultimately rises to well over \$5,500 per month for service members in Grade E-9, the highest enlisted rank (sergeant major, chief master sergeant, or master chief petty officer). For officers, basic pay starts at roughly \$2,800 per month for Grade O-1 (second lieutenant or ensign), increases to roughly \$6,500 per month for Grade O-4 (major or lieutenant commander), and rises to roughly \$15,000 per month for Grade O-10 (four-star general or admiral).

Within each pay grade, service members with greater seniority receive additional basic pay based on their time in service. For example, a sergeant (E-5) with 8 years in service will receive \$2,845, compared with the \$2,487 a sergeant with 4 years of service will receive. Differences in pay can be especially pronounced among junior officers, a small percentage of whom come from the enlisted ranks. A second lieutenant (O-1) with 1 year of service may receive a basic pay of \$2,828 per month, compared with the \$3,940 received by a second lieutenant who has 8 years of service.

Allowances for housing and subsistence cover basic living expenses and are only paid to service members whose housing and meals are not provided by the government. (This generally excludes most of

the lowest ranking enlisted personnel, who live in barracks or on ship and eat their meals in mess halls.) While base pay is the same across the American military for all members of a given pay grade and number of years of service, allowances for housing and subsistence can vary considerably, since they are calculated in terms of the market cost of housing, the number of dependents the service person has, and other variables including rank. For example, service members living in San Diego, California—a relatively expensive location for housing—receive higher allowances for housing than those living in less expensive areas. Similarly, a service member with two dependents will receive higher allowances than a service member without dependents.

Military personnel in special situations or who possess special qualifications may receive special pays and allowances beyond these categories of regular military compensation. Individuals who are deployed at sea or in combat zones, who are separated from their families in the course of their duties, or who perform particularly hazardous duties receive special pays for these situations. Similarly, aircraft pilots and other crew members receive flight pay, airborne-qualified soldiers receive jump pay, and submarine personnel receive submarine pay, so long as they are actively using their qualifications. These special pays can be awarded simultaneously. For example, a paratrooper deployed to a combat zone may receive jump pay, hostile fire pay, and family separations pay in addition to his or her basic pay and allowances. The amount of these special pays can vary: Hostile fire pay, for example, is \$225 per month, while flight pay ranges between \$150 and \$250, depending on the service member's rank.

Finally, certain categories of military personnel receive higher levels of pay for their professional qualifications. For example, attorneys and medical professionals (doctors, dentists, and nurses) enter service at officer rank and are also eligible for special pays related to their legal and medical qualifications. Special operations personnel, many of whom are in the enlisted ranks, may benefit from accelerated promotions, special pays, and retention bonuses.

Bonuses for enlistment or reenlistment may vary from year to year, from service to service, from military occupation to military occupation, and from pay grade to pay grade, depending on the specific needs of the service. For example, in 2008, retention bonuses for U.S. Army infantry captains

were around \$35,000 for a 3-year contract extension, while in 2009, reenlistment bonuses for army infantry sergeants who were ranger and parachutist qualified ranged between \$11,000 and \$12,000 for a 3- to 4-year reenlistment. Individuals with special qualifications—doctors, nurses, attorneys, and special operations personnel—may be eligible for special retention bonuses as well. Bonuses can be phased out once the recruitment or retention targets are met, making them an especially attractive way for policymakers to equalize supply and demand in the labor market.

Current Issues in Military Pay

Although the U.S. all-volunteer force competes with civilian employers for recruits, its pay system continues to differ markedly from compensation practices in the civilian world. Many critics argue that the traditional military pay system fails to take advantage of efficiencies that are increasingly common in the civilian sector. They suggest that officer pay may be too low to retain midlevel officers whose skills and experience can command high salaries in the civilian labor market, while enlisted pay may be more generous than necessary to recruit and retain junior enlisted personnel, whose comparative lack of training and educational credentials are not at a premium in the civilian labor market. These critics also argue that the system of allowances for housing and subsistence creates economic incentives for military personnel to marry earlier and have more children than their civilian counterparts. Finally, these critics suggest that the inflexibility of the military pay system may also contribute to difficulties with recruiting specialized workers, like information technology workers and special operations personnel, whose skills can command a wage premium in the national and international labor markets.

These criticisms have led to periodic proposals to overhaul the military compensation system. It is not clear, however, that all of the military's personnel problems can be solved simply by creating a system that mirrors the compensation practices of the civilian world. Many of the differences between civilian and military compensation systems can be traced to the special circumstances of military service: for example, the military's traditional insistence on a close connection between pay grade and military rank, service members' expectations of a broad

level of pay equity within the services and within pay grades, and the logistical necessity of providing noncash benefits like housing and medical care. Although the U.S. military and other militaries around the world are working to transform themselves and their personnel policies, wholesale adoption of civilian compensation policies seems unlikely, at least in the foreseeable future.

Alfred A. Saucedo

See also All-Volunteer Force; Benefits, Military; Conscription; Contractors, Private; Rank

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PEACE MOVEMENTS

Peace activism and peace movements have played a vital role in the nation's history. The problem is that their contributions to social reform have barely been chronicled in history texts. Yet the American peace movement has occupied a major part of our reform tradition. People have been drawn to peace activism for a variety of reasons. There are those who subscribe to various pacifist ethics, religious or otherwise, or the belief that peace is based on continuing human relationships. Many—not pacifists—have limited their commitment to specific antiwar actions, opposing U.S. involvement in various wars

for a number of reasons. A large number have supported the crusade for internationalism, urging the creation of world bodies designed to mediate disputes among nations. Finally, there are those who support the doctrine of antimilitarism, arguing that large, standing armies threaten constitutional democracy and individual liberties. Whatever the reasons, peace activism and organized movements to end warfare have been a part of the American past. This entry examines the history of peace movements in the United States and discusses the antiwar groups and individuals active today.

The Early Years

From the early years of settlement in the New World to the American Revolution, religious sectarians established a social commitment to the importance of organized peace. The most notable of the pacifist/reform sects was the Religious Society of Friends, or Quakers. Their influence on the early American peace movement during the late 17th century and throughout the 18th century was significant in terms of promoting the doctrine of passive nonresistance, more popularly known as conscientious objection. The Quakers, along with the Mennonites and the Church of the Brethren, formed the core of the Historic Peace Churches. These sectarian peace groups continue to promote nonviolence and refuse to take up arms as part of their religious beliefs. While not politically active today, they still remain vital to the American peace tradition.

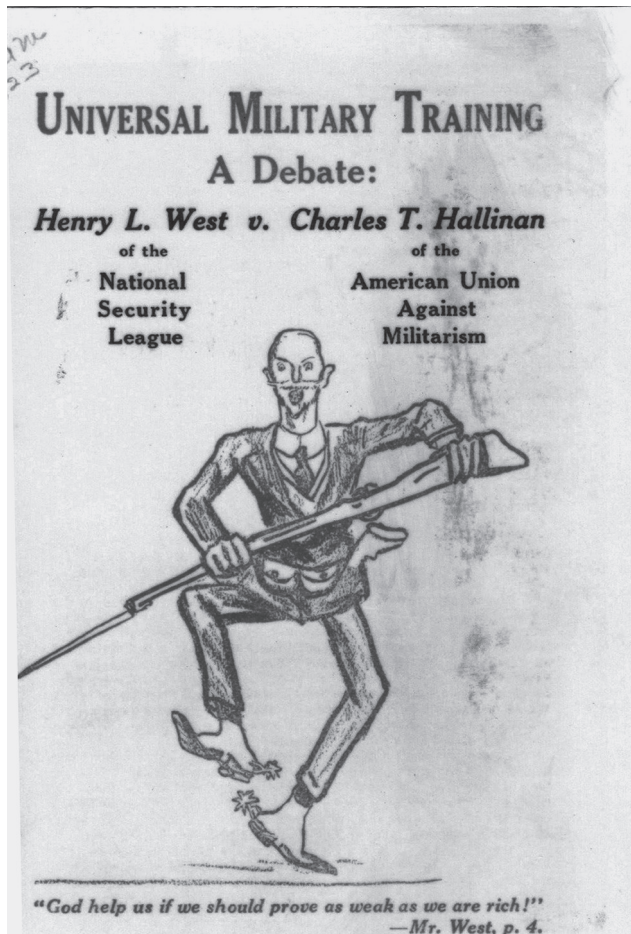
The first modern organized efforts to eliminate war from society began in the United States at the conclusion of the War of 1812. This movement, while bolstered by the spreading spirit of evangelical Christianity and romantic faith in human perfectibility, was nonsectarian. In 1828, the American Peace Society was created to publicize the benefits of peace. It was one of the first national peace organizations in history and represented the views of the various local peace societies that sprang up after the War of 1812. The membership of this group and the local branches was composed primarily of preachers, lawyers, merchants, women, and public servants. During the pre-Civil War period, supporters of world peace established periodicals and published tracts designed to convince humankind that war was un-Christian, wasteful of life and treasure, and ineffective as a method of solving disputes between nations.

After the Civil War, in response to industrialization, the movement for world peace moved away from socially concerned pacifism and nonresistance and became a more cosmopolitan endeavor dominated by an elite cadre of lawyers, business leaders, and politicians. This group valued arbitration, Anglo-American cooperation, and an industrial world of Great Power interdependence. More than 130 new international, nongovernmental organizations, such as the International Arbitration League (1880) and the National Arbitration League (1882), were created in the last quarter of the 19th century. This new movement gave birth to the term *international organization*.

The 20th Century

Prior to the First World War, the movement to abolish war was considered a prestigious calling. It was devoted to the legal settlement of disputes, the maintenance of government contacts, the development of an “international mind,” and the encouragement of the “scientific” study of war and its alternatives. Between 1901 and 1914, 45 new peace organizations appeared, including the American Society of International Law, the World Peace Foundation, and the Carnegie Endowment for International Peace. These groups had a distinctly elitist approach to solving international problems. Proponents of world peace assumed that the literate men of the upper and professional classes would better understand and identify with the “civilized” quality of their movement than the “unenlightened” industrialized masses. Many internationalists were prominent citizens and highly patriotic. Yet in spite of all this intellectual and economic firepower, the movement failed to prevent the greatest war in history up to that time.

The Great War (World War I) led to the modern American peace movement, a movement insisting that peace required social reform as well as social order. Antiwar dissidents included radical groups and socialists who viewed the war as a capitalist conspiracy—one that would lead to further repression of the working classes and other dispossessed peoples. It now became fashionable for government officials to label antiwar protesters as “unpatriotic,” even though they were interested in making America a better place to live. Inspired by organizations such as the Women’s International League for Peace and



Universal Military Training: A Debate. World War I pamphlet cover of the American Union Against Militarism.

Source: Records of American Union Against Militarism; courtesy of Swarthmore College Peace Collection.

Freedom, War Resisters League, and the religious Fellowship of Reconciliation (FOR), the new movement understood justice as the amelioration of social wrongs and not simply the adjudication of courts. It rejected Anglo-Saxon exclusivity and supported cultural diversity. War was seen as a by-product of militarism, nationalism, and imperialism, not merely as an irrational outburst of mass ignorance. The new peace activists sought a reformed and democratized international system by which responsible policymakers would manage peace through world agencies by promoting social justice. Peace became something more than the absence of war. The "modern" American peace movement and its various manifestations characterized antiwar activists until the mid-1950s, when a new coalition of pacifists

and internationalists turned their attention to the threats posed by nuclear destruction.

During World War I, the formation of the American Friends Service Committee (AFSC) signified a dimension to peace work other than opposing militarism and conflict: war relief. The committee sent many young men and women to France, where they worked in cooperation with British Friends to feed and care for refugees, build a maternity hospital, and repair and rebuild destroyed homes and schools. Reconstruction and medical care represented a major part of the committee's relief efforts in both France and Belgium. Once the war ended, the AFSC extended its work to Russia, where relief workers helped fight famine and disease; to Serbia and Poland, where they assisted in agricultural development and constructed orphanages; and, finally, into Austria and Germany, where they fed hungry children. Its efforts established a new trend among peace activists to translate their words into deeds and overcome the stereotypical label of "obstructionists." From that point forward, the newly established post-World War I peace organizations would devote money and volunteers to the area of war relief.

The policy of war relief continued during the Spanish Civil War, when the AFSC and FOR sent food and medical supplies to the victims of the fascist aerial bombings. This policy remained in effect during the Second World War. Peace groups provided more than \$300,000 in assistance to war-torn areas in Poland, France, India, China, and England while also sending relief workers and supplies to France and China. The AFSC operated the Friends Ambulance Unit in China, aided in relief work in India, and cared for war victims in France. The FOR headed up a War Victims Fund during the war, with aid going to individuals and organizations such as the school and community at Le Chambon, France, and to homes for children from concentration camps in Czechoslovakia. Pressured by the Women's International League for Peace and Freedom, moreover, President Franklin D. Roosevelt accepted a plan to expand the number of refugees admitted to the country by establishing the War Refugee Board.

The early Cold War years stunted the effectiveness of the peace movement due to national security concerns and the rise of a garrison-state mentality in America. While war relief and pacifism were the



July 12, 1935, peace demonstration in Massachusetts.

Source: Courtesy of Swarthmore College Peace Collection.

benchmarks of the traditional peace groups, a more direct-action movement surfaced with the Vietnam War (groups such as the AFSC and FOR still sent numerous supplies and aid to Vietnamese peasants whose farms and lands were destroyed by aerial attacks and chemical defoliation). The most visible and widespread antiwar demonstrations in American history took place during the Vietnam War. Acts of civil disobedience and direct action highlighted the antiwar dissent. The war in Vietnam produced a wide variety of resistance activities—including teach-ins on college campuses; the largest peace march in American history, held in Washington on October 15, 1969, involving nearly 2 million people and known as “The Moratorium”; and a mass, nonviolent attempt to shut down the machinery of government in Washington in May 1971. The demonstrations of this era were no longer limited to handfuls of peace

workers but grew from hundreds to thousands and then to tens of thousands of people. The shockwave of opposition covered the political spectrum, from respectable conservative leaders to New Left radicals to the returning veterans, who formed the Vietnam Veterans Against the War.

In the 1980s, the American peace movement not only called for a “freeze” on the development and deployment of nuclear weapons but also began publicizing crimes against humanity—first orchestrated at the Nuremberg Trials in 1945–1946. When former U.S. Marine platoon leader and seriously wounded Vietnam veteran Bobby Muller traveled to Cambodia in 1984, he was shocked to witness the chilling effects of genocide. He was also moved by the tragic reality that many land mines, which remained after the Vietnam War, had killed innocent civilians. With his own group Veterans for America,



1969 Anti-Vietnam War protest, Washington, D.C.

Source: File, Clergy and Laity Concerned About Vietnam; courtesy of Swarthmore College Peace Collection.

he cofounded the International Campaign to Ban Landmines, which received the Nobel Peace Prize in 1997. Continuing to promote world peace and to assist innocent civilian victims in war-ravaged countries, Muller promoted other programs like Information Management and Mine Action Programs. His efforts alerted other peace organizations to focus their attention on ending acts of genocide and encouraging governments to locate and dismantle land mines wherever they existed.

Persian Gulf War

The peace movement's focus on nuclear arms reduction and the indiscriminate use of land mines during the decade of the 1980s gradually shifted to anti-war activism at the start of the 1990s. In response to Iraq's invasion of Kuwait, President George H. W. Bush prepared for a Mideast war. Prior to the commencement of Operation Desert Storm, an antiwar movement was organized. On October 20, 1990, some 15,000 protestors marched in New York and 15 other cities across the country. Between October 1990 and January 1991, when the war began, there were various forms of protest. In San Francisco, a



by Kevin Sparrock, imprisoned at Camp LeJeune

Marine opposing the Persian Gulf War. Cartoon by Marine Kevin Sparrock, who was imprisoned at Camp Lejeune during the Persian Gulf War.

Source: *The Anti-Warrior: A Newsletter of Military Dissent and Resistance* (August 1991, p. 3); courtesy of Swarthmore College Peace Collection.

TV station was interrupted during its broadcast, and the Golden Gate Bridge was blockaded on several occasions. In New York City, groups of protestors, organized by the War Resisters League, marched outside the stock exchange on Wall Street to condemn a possible war fought in the name of oil. Other protestors also gathered outside the United Nations carrying signs urging the Security Council to disapprove a U.S.-sponsored resolution calling for military force.

The FOR, moreover, sent delegations of religious leaders and peace activists to Iraq to try to prevent the war. One peace mission delivered 1,000 pounds of vitamins and antibiotics to evacuees in Jordan and Americans in Iraq and successfully obtained the release of four American citizens held in Baghdad.

When the war started on January 16, 1991, more than 3,000 Bostonians immediately turned out to protest against it. On January 26, a week after

15,000 turned out in force for a demonstration in Washington, D.C., a much larger crowd returned; estimates ranged from 70,000 to as high as 250,000. After only 100 hours of fighting on the ground, however, Iraq accepted an UN-imposed cease-fire. The quick end to the war and the patriotic sentiment expressed over the airwaves mitigated the antiwar protests.

Although estimates vary, Iraqi casualties numbered about 25,000 dead. Some 140,000 U.S. service personnel were exposed to low levels of sarin, and by 2002, more than half had sought medical care or some type of disability assistance. The Iraqi people were subsequently forced to battle typhoid, cholera, and imposed UN sanctions—military and economic—resulting in many more deaths and depravation. In fact, the imposed sanctions from 1990 to the start of the 2003 Iraq War resulted in the death of thousands of Iraqi children. Peace groups in America, such as Voices in the Wilderness and the FOR, provided tons of medical supplies and basic necessities to Iraqi civilians in defiance of U.S. law and despite heavy fines and threatened imprisonment.

Iraq War

Although the peace movement did not condone American military action in Afghanistan despite September 11, 2001, the war in Iraq captured its full attention. While the nation strongly endorsed military action against the Taliban and al Qaeda in Afghanistan, many questioned the legitimacy of the claims raised by the George W. Bush administration that Saddam Hussein's regime in Iraq had weapons of mass destruction. As Bush laid out his justification for going to war in the fall of 2002, peace groups quickly mobilized. On October 3, 2002, an antiwar group, Americans Against War With Iraq, ran a full-page ad in the *New York Times* with blaring headlines, "Bush's Weapons of Mass Distraction: War With Iraq." Surrounding the ad were hundreds and hundreds of names endorsing it as well as encouraging Americans to call on their senators and congressional representatives to vote against an invasion of Iraq. Three days later, thousands rallied at Central Park's East Meadow in New York City. Speaker after speaker denounced the impending invasion. The newly formed antiwar group, Not in Our Name, organized the rally. On October 26, 2002, a

massive antiwar rally, with the antiwar International ANSWER acting as the clearinghouse, was held in Washington, D.C. In December, 99 people were arrested in front of the U.S. mission to the United Nations for protesting the impending war in Iraq; they were arrested for disturbing the peace. Among those arrested were Daniel Ellsberg, author of the Pentagon Papers, and Ben Cohen, cofounder of Ben and Jerry's Ice Cream.

One of the salient aspects of this antiwar movement has been the sheer size of protests and its global scale. The antiwar coalitions were composed of people from all walks of life. There were the elderly, former veterans young and old, college students, and people from all races. Opposition to this war cut across all race and gender lines. Rich and poor also came out to protest the war. Most noticeable, perhaps, were women and men who were in their 70s and 80s. One unique aspect of the anti-Iraq War protests was the focus on saving soldiers' lives. Activists worked hard to avoid the charge of being "unpatriotic" that veterans groups attached to antiwar protest during Vietnam.

As the number of American soldiers killed in action mounted (the number is presently well over 7,000 for Iraq and Afghanistan, with the number as of September 1, 2012, in Afghanistan at 2,109), the American Friends Service Committee initiated its own novel protest. Called "False Pretenses" or "Eyes Wide Open Exhibit," AFSC first introduced the idea of a memorial by placing 500 pairs of boots at the Federal Building Plaza in Chicago to symbolize graphically the number of soldiers killed at that point in the war. Other antiwar activists built mock coffins and stretched out on busy roads.

One antiwar group that did capture the national media's attention is Grandmothers Against the War. This organization is primarily a local, responsive coalition in New York. In late 2005, 17 grandmothers, ranging in age from 49 to 90 years, were arrested. On October 17th, these aging but fiercely determined activists attempted to enlist in the military at New York City's Times Square recruiting station. When they were refused entry into the station, they then sat down and were promptly arrested. At their arraignment, one of the protestors, 65-year-old Eva-Lee Baird, called her arrest "a badge of honor." Their actions inspired other elderly women to take up the cause in cities such as Chicago, San Francisco, and Los Angeles.



Boots 2007: Anti-Iraq War demonstration, Washington, D.C.

Source: Photo courtesy of Diane Greene Lent.

Perhaps no one individual did as much to call attention to the antiwar cause as Gold Star Mother Cindy Sheehan from California. Her personal campaign began in 2004, after her son, Army Specialist Casey Sheehan, was killed in Iraq. She first attracted worldwide attention when, in August 2005, she conducted a 26-day vigil outside President Bush's Texas ranch at Crawford. In September, she was arrested while protesting outside the White House. She was among several hundred demonstrators who marched around the White House and then sat down on the pedestrian walkway on Pennsylvania Avenue. As the police came to arrest the demonstrators, all were singing and chanting, "Stop the war now." Her most dramatic act of civil disobedience occurred in 2006 at the State of the Union Address. Sheehan was removed from the chambers wearing a T-shirt that read "2245 Dead. How many more?"

Numerous peace groups, including CODEPINK for Peace, World Can't Wait, ANSWER, Veterans for Peace, Peace Action (formerly the Committee

for a SANE Nuclear Policy), Historians Against the War, and Not in Our Name, have undertaken traditional and not so traditional forms of protests. These have included staging a war crimes tribunal in New York City to look into the alleged abuses, independent filmmaking such as Michael Moore's controversial movie *Fahrenheit 9/11*, bringing Iraqi women to the United States to describe the horrors of the war, guerrilla theater, opposing military recruiters on campus, mass letter writing to members of Congress as well as to news and media outlets, extensive use of blogging, and protest music, such as the Dixie Chicks and Raging Grannies.

One of the unique aspects of the current peace movement, moreover, has been its online organizing, which has helped many antiwar groups succeed in their efforts to mobilize at the grassroots. One antiwar organization relying heavily on Internet usage is Americans Against Escalation in Iraq. Americans Against Escalation in Iraq is a broad-based coalition of activists, policy outfits, and labor unions that

were brought together in 2007 by MoveOn.org, the 3.4-million-member liberal advocacy group. Using conference calls and e-mail messages to Congress, this organization represents the new wave in protest movements—one aimed at influencing votes in Congress rather than organizing street theater and mass demonstrations. The web-based antiwar network WHY WAR? has provided news and analysis, along with strategies for political activists. Another popular group, United for Peace and Justice, encourages campus activism by offering updates as to what other student activists are doing around the nation, as does ANSWER (aimed at organizing the masses for protest marches), Peaceful Tomorrows (founded by family members of 9/11 victims to encourage non-violent solutions to terrorism), and Win Without War (designed to increase global awareness to prevent future wars). There are also online sites encouraging veterans to participate in a campaign to bring the soldiers home, such as Veterans for Common Sense, Operation Truth, and Iraq Veterans Against the War.

One of the most perplexing problems associated with the Iraq War's unpopularity has been the issue of torture. The revelations at Abu Ghraib in Iraq and Camp X-Ray at Guantanamo Bay, Cuba, were troubling to peace and human rights activists. The American public was stunned to learn of the ill-treatment of prisoners at both the detention camps. In addition, many of the captured enemy combatants have been classified as prisoners of war and have not been afforded legal counsel as required by the Geneva Conventions.

By 2008, peace demonstrations had diminished in number and size. In part, the American public had become tired of this prolonged conflict, and the demand that American troops leave Iraq was pronounced in the presidential election that year. In June 2009, all American combat forces were required to withdraw from Iraqi cities, thus turning over security measures to the Iraqi government and its army. This represented the first clear drawdown of American military presence since the troop surge of late 2007 and 2008. During the 2008 presidential election, Barack Obama promised an end to the Iraq War by the year 2011. Obama's election thus signaled the rejection by the American people of his predecessor's military policies in Iraq. All American troops did depart from Iraq in December 2011. With the departure of all American combat troops, however, it was agreed that a small number of U.S. service members remain in a noncombatant role

to assist and train Iraqi police and security forces. That role has since been turned over entirely to the Iraqi government, and the only remaining American presence is in the form of economic assistance and reconstruction.

The costs of the war in Iraq and the damage inflicted on the Iraqi people were staggering. The cost of the war was estimated by many fiscal experts to be well over \$500 billion and is still rising. The hidden total cost of the wars in Iraq and Afghanistan (oil market disruptions, forgone investments, long-term health care for veterans, and interest payments on borrowed funding for the wars) is expected to balloon to \$3.5 trillion in the decade after 2010.

Furthermore, despite attempts by the American government to reconstruct Iraqi society, the loss of lives and the attendant poverty have led many peace groups to raise money to purchase necessities for many of the displaced Iraqi refugees living in nearby countries, such as Jordan and Syria. A recent estimate put the death toll of Iraqis at more than 110,000. Since the start of the war, the AFSC and the FOR have been sending in food, medicine, and basic survival supplies to the Iraqis. Peace groups have also assisted the War Kids Relief Program, started in 2005 by Captain Jonathan Powers, who served with the Army's 1st Armored Division, as a way to help Iraqi children deal with the devastating effects of the war. War relief has now become one of the peace movement's primary objectives in dealing with the Iraq situation.

Conclusion

The American peace movement that emerged after 9/11 reflects the interconnectedness associated with globalization and new communication technologies. While military theorists state that the future of warfare will revolve around social and communication networks worldwide, antiwar and peace groups are echoing the very same theme and using them to get out the message of peace and justice. Although the Iraq War has finally ended, the battle against the Taliban and al Qaeda in Afghanistan continues gaining the attention of peace groups, although in a less dramatic way—very few antiwar protests or peace marches—since the deadline announced by President Obama for American withdrawal. Presently, one of the more controversial issues is the continuing use of deadly drone attacks against suspected al Qaeda and Taliban leaders in the region. Press reports

indicate that, in the past 3 years, 14 terrorist leaders have been killed by drone strikes, while Pakistani sources estimate that some 700 civilians were killed. This amounts to more than 50 civilians killed for every militant killed, excluding specifically targeted Taliban and al Qaeda leaders. Nonetheless, the number of terrorist leaders killed in 2012, for instance, was nearly doubled through further drone strikes, thus increasing the tension between neighboring Pakistan and the U.S. government. Only time will tell, however, whether or not the peace movement will be able to generate the support it had garnered in its condemnation of the Iraq invasion. Given the targeted year of 2014 for a complete pull-out of U.S. forces, it appears that peace organizations around the globe and in the United States are focusing their efforts on economic reconstruction.

Since the time of colonization to the end of the first decade of the 21st century, sectarian and non-sectarian peace groups have played a vital role in American history. The development of an organized peace movement in world history actually began in the United States in the early part of the 19th century. It continues to be one of the most important social reform endeavors. Moreover, with respect to peace movements, globally, it is safe to say that their importance has grown in size and stature given the realities of modern warfare and nuclear annihilation. The American peace movement is now part of the larger global peace community due to the Internet. While the American peace movement, historically, may not have been effective in preventing past and current wars, it has been responsible for informing the public as to the destructiveness of modern warfare and its effects on the lives of innocent civilians.

Charles F. Howlett

See also American Revolution; Civil War, American; Conscientious Objection; Iraq War (2003); Persian Gulf War; Vietnam War; War in Afghanistan; War of 1812; World War I; World War II

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PEACEKEEPING

Peacekeeping is mostly associated with the United Nations and traditionally took the form of military forces from neutral countries deployed to supervise a cease-fire between adversaries. Initial UN peacekeeping operations during the Cold War era generally involved a relatively small number of lightly armed troops patrolling a neutral zone separating opposing forces. Impartiality remained the hallmark of these operations, which stressed supervising a political agreement or truce negotiated between warring nations. Troops participating in UN operations served in national contingents under the flag of the United Nations and traditionally donned blue helmets to identify themselves as peacekeepers.

With the end of the Cold War, peacekeeping operations expanded in size and scope, increasingly morphing into peacemaking operations.

Instead of supervising a truce or political settlement, peacemaking operations entailed intervention in a failed state to bring stability, provide humanitarian relief, and, in a number of cases, supervise elections to establish a new government. In the 1990s, these operations grew in size, complexity, and cost. Their record included modest success in places like Cambodia and Namibia, and to a degree in Haiti, and clear failures, especially in Somalia, the former Yugoslavia, and Rwanda.

Since its founding in 1945, the United Nations has overseen a total of 67 peacekeeping operations. In 2012, the organization carried out 16 operations costing \$7.2 billion and involving 81,339 troops, 2,006 military observers, 13,552 civilian police, and 5,404 international civil servants. Some current operations are quite small, such as the United Nations Truce Supervision Organization, which was established in 1948 and consists of 149 military observers and a support staff of international civil servants and local civilians totaling 236. One of the largest operations, the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo, includes 16,996 troops, 721 military observers, 1,392 police, and 965 international civil servants. This operation alone has cost more than \$1.4 billion. In fiscal year 2012–2013, approximately \$7.23 billion was budgeted for UN peacekeeping operations. In fiscal year 2011–2012, the United States underwrote 27% of the cost of these operations, with Japan providing 12%, the United Kingdom 8%, Germany 8%, and France 7%, and the remaining cost apportioned to other member nations.

During the Cold War, the United States and the Soviet Union generally embraced a minor role in most peacekeeping operations. UN commanders tended to be drawn from nations that were not permanent members of the UN Security Council. Nations that contributed forces tended to be non-aligned countries, such as Austria, India, and Ireland, or to have a strong commitment to the United Nations, such as Canada and the Nordic countries. With the end of the Cold War, American involvement in peacekeeping operations initially increased but soon diminished after the failed intervention in Somalia in 1993. As UN operations expanded, the participation of troops from foreign nations dramatically increased, with countries including Pakistan, Bangladesh, India, Ethiopia, and Nigeria contributing most of the UN personnel.

Although most peacekeeping and peacemaking operations are conducted by the United Nations, other multilateral organizations have sponsored them, including the North Atlantic Treaty Organization (NATO) and the African Union. Some nations have also responded unilaterally; for instance, in 2007, the British sent ground forces to Sierra Leone to bring stability after a lengthy civil war.

Origins of Peacekeeping/Peacemaking

In 1942, President Franklin D. Roosevelt proclaimed the alliance fighting against the Axis Powers of Germany, Italy, and Japan as the United Nations. The Charter for the United Nations Organization, drafted and ratified in 1945, envisioned the organization promoting collective security, through military force if necessary. Organizationally, the Charter established a military staff committee consisting of the chiefs of staffs of the armed services of the five permanent members of the Security Council to advise the Security Council on military matters. This body quickly became dormant and never played a significant role in advising or planning UN peacekeeping operations.

Early in the organization's history, the United Nations deployed military personnel lent by member nations to supervise truces in the Middle East between Israel and her neighboring countries (United Nations Truce Supervision Organization, 1948) and in the Kashmir region between India and Pakistan (United Nations Military Observer Group in India and Pakistan, 1949). In 1950, the Security Council invoked collective security guarantees to urge member states to come to the aid of South Korea in repelling the North Korean invasion. The United States provided the bulk of the troops for what President Harry S. Truman deemed a police action, with other nations including Canada, Great Britain, France, Turkey, Australia, and New Zealand also contributing contingents.

The first modern peacekeeping operation took place in response to the Suez Crisis of 1956, when Great Britain, France, and Israel seized control of the Suez Canal. Under pressure from both the United States and the Soviet Union, all three countries agreed to return the Canal to Egypt. As part of the settlement, the United Nations deployed an international military force to the region to supervise the withdrawal of the British and French forces and to

serve as a buffer between Egypt and Israel. These UN forces were withdrawn in 1967 on Egypt's request; shortly thereafter, war broke out between Israel, Egypt, Jordan, and Syria (the Six Day War).

The Cold War polarized the Security Council; any action required the agreement of the Soviet Union and the United States since both nations possessed the veto. In the early years of UN history, the Soviet Union made frequent use of its veto. In the 1970s, the U.S. use of the veto increased, often to protect Israeli interests. As a result, UN peacekeeping missions generally reflected either agreement between the Soviet Union and the United States or instances where neither great power had significant national interests. In 1964, one of the longest UN operations was authorized to separate rival Turkish and Greek communities on the island of Cyprus.

The deployment of a UN force to southern Lebanon in 1978 would prove to be one of the most difficult operations of the Cold War era. The force deployed to this region supervised a fragile cease-fire that frequently broke down. For instance, the presence of the United Nations Interim Force in Lebanon (UNIFIL) did not prevent small-scale attacks by the Palestine Liberation Organization against Israel, and in several instances, UNIFIL troops came under attack. In 1982, Israel invaded Lebanon, and the UNIFIL troops were powerless to stop this incursion.

Peacekeeping and the Growing Mandate for Peacemaking

The end of the Cold War expanded the UN role in matters of peace and security. When Saddam Hussein invaded Kuwait in 1990, President George H. W. Bush decided to seek Security Council authorization for a military operation to liberate the country. As a result of skilled negotiation by the U.S. secretary of state James A. Baker, the UN Security Council adopted resolutions calling for military force to be used against Saddam Hussein unless he ended his aggression. The Bush administration not only gained Security Council support for an operation dominated by American and Saudi Arabian forces but also assembled a large and diverse international coalition.

The end of the Cold War proved immensely destabilizing in several world regions, most notably Yugoslavia and the Horn of Africa. A number of nations, including the United States, initially saw UN

action as key to reestablishing stability. In Somalia, the results would be disastrous not only for the Somali people but also for the future of UN peacekeeping/peacemaking measures. Initially, the UN intervention was humanitarian, with the deployment of relief workers to alleviate starvation caused by the ongoing civil war and to supervise a fragile cease-fire. In December 1992, President George H. W. Bush deployed a substantial American force to aid the UN humanitarian relief efforts and to bring stability. This task proved complex, exemplified when a raid designed to capture a major Somali warlord cost the lives of several American servicemen. In 1993, President Bill Clinton withdrew from Somalia. The ending of American support contributed to the collapse of the entire UN effort in Somalia, and the nation descended into chaos.

Somalia had a profound impact on America's support for UN interventions and peacekeeping operations. In the wake of the Somalia intervention, the United States exercised caution in making commitments to UN operations that sought to provide peace and security in failed states. The Clinton administration would not commit ground troops to UN operations in Yugoslavia despite Canada, Great Britain, the Netherlands, and France committing substantial forces, even refusing to intervene in 1994 when there was clear evidence of genocide. Although the United States intervened decisively in 1995 and in 1998, those actions only encompassed the use of U.S. air power under a NATO operation. When the United States did send ground forces to Kosovo in 1999, it did so as part of a larger NATO force.

Support for the United Nations waned among U.S. conservatives after President George H. W. Bush left office. Congressional critics suspended American aid to the United Nations for several years, arguing that the institution squandered funds and worked against American national interests. Widespread criticism existed regarding the practicality or wisdom of supporting nation-building efforts by international organizations. Congressional criticism was not without merit, and even supporters of the United Nations argued that its bureaucracy was bloated and often failed to properly manage UN peacekeeping operations, leading to wasteful spending, failure to provide logistical support to personnel on the ground, and even corruption.

UN operations floundered during this era because of lack of support from the United States and other

major powers, as well as the failures of the secretary general and the UN bureaucracy. In the case of Yugoslavia, UN peacekeepers were placed in the midst of war to enforce nonexistent cease-fires. Although the peacekeepers provided humanitarian assistance to civilians, their presence proved inadequate to provide security. At one point in the conflict, the United Nations tried to create a safe haven for civilians in Kosovo threatened by Serbian forces. UN peacekeepers, however, allowed defenseless individuals under their protection to be taken into custody and murdered at Srebrenica without putting up resistance. In the case of the UN operations in Rwanda, peacekeeping forces proved woefully inadequate, failing to stabilize a delicate political situation and even less prepared to cope with a systematically organized genocide. Despite pleas from the UN commander on the ground for reinforcements, the UN headquarters and the Security Council failed to mount a vigorous intervention until it was too late.

Should the United States or any nation support operations that do not appear to directly bolster their interests? Critics within the United States argue that America should avoid intervening in parts of the world simply for humanitarian reasons or to bolster collective security under the UN Charter. At the same time, allowing failed states to fester clearly incurs a cost for the world community. The failure to stabilize Somalia resulted in that nation becoming a safe haven for pirates, disrupting international commerce on the high seas and costing billions in higher insurance rates, ransom payments, and the deployment of naval forces by a number of nations to the region. Failed states, such as Afghanistan in the 1990s, offered a haven for al Qaeda and other terrorist organizations. In the case of Haiti, UN efforts to stabilize the country potentially benefited the United States by diminishing the number of Haitians fleeing the nation to escape political oppression or impoverishment. In 1994, President Clinton intervened in Haiti and supported a UN peacekeeping operation, partly to stop the flood of refugees seeking asylum in the United States.

UN Operations: Structure and Continuing Relevance

Most UN military operations are authorized by the UN Security Council and require the assent of a majority of that body, including the support of the

five permanent members. In the case of several such operations, such as the Korean and Persian Gulf Wars, member nations were empowered to take necessary military action with no attempt at direct oversight by the UN secretary general. The bulk of peacekeeping operations, however, mandate the creation of an international force with member nations providing troops and contributions.

The United Nations does not possess military forces of its own and depends on member nations to provide forces and underwrite their cost through special assessments. Coordination usually comes under the authority of the secretary general, with the Department of Peacekeeping assuming responsibility for implementation and the Department of Field Support providing logistical support. UN operations include both ground troops and a strong civilian staff presence, especially in operations that require administering elections or rebuilding a failed state. Many operations also include the formation of an international police presence.

Command and control of UN operations has been difficult. The secretary general's powers over peacekeeping operations are *not* comparable to those of the commander in chief of a sovereign nation. The secretary general has no standing military force that can be immediately deployed and no discretion to unilaterally send UN forces to intervene in a conflict. There exists no uniformed military command structure at the United Nations. The lack of adequate military expertise in planning operations represents a long-standing criticism of the organization. Some have suggested attempting to have the military staff committee established under the UN Charter actually carry out this role with regard to peacekeeping/peacemaking operations. Every peacekeeping operation must be created from scratch, and even under the best circumstances, it can take weeks, even months, to secure the necessary troops and funding for them. Countries contributing troops to UN operations have been reluctant to put their forces in harm's way under international command. UN commanders have generally been cautious about how they deploy troops in peacemaking operations, for fear that supporting nations will pull out their units. Moreover, the missions given to UN peacekeepers, UN police, and their civilian support staff are incredibly complex, often calling for disarming rebels, maintaining law and order, ensuring that government services are provided, and supervising free elections.

As they have expanded, UN operations have also resulted in increasing interaction with civilians. Charged with protecting innocent civilians, in several instances UN peacekeepers have engaged in systematic rape and sexual exploitation of civilian populations, most notably in the Congo. To address this issue, the United Nations has sought to increase the number of female soldiers and police officers participating in these peacekeeping operations.

Given the failures of the 1990s, optimism regarding the creation of a new world order has faded. At the same time, there is a realization within much of the international community that UN peacekeeping and peacemaking operations are essential to maintaining international stability. Although their size and cost have expanded dramatically, costs are still modest in comparison with global military spending. The 7.8 billion dollars spent on UN operations constitutes only 0.5% of global military spending, which stood at 1.6 trillion dollars in 2010.

G. Kurt Piehler

See also Bosnia Intervention; Humanitarian Intervention, Foreign; Korean War (1950–1953); Kosovo Intervention; Middle East Conflict; Nation-Building; North Atlantic Treaty Organization; Persian Gulf War; Rwandan Genocide; Somalia Intervention; United Nations

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PENTOMIC ERA

The Pentomic Era is the period in U.S. military history between the Korean and Vietnam Wars known for widespread integration of tactical nuclear

weapons into all four branches of the armed forces. The name is derived from the U.S. Army's five-battle-group division created for the atomic battlefield. This entry examines the origin and development of tactical nuclear weapons in the U.S. arsenal and discusses the structure and criticisms of the Pentomic division.

Ideas for using atomic weapons in a tactical role can be traced back to World War II and the idea of employing the atomic bomb in support of a projected invasion of Japan. The strategic use of the bomb and the ending of the war halted these plans. However, the concept of using nuclear weapons on the battlefield remained, even if nuclear war planning reflected U.S. Air Force strategic bombing.

As strategic weapons grew in yield, weapons of smaller yield coupled with warhead miniaturization enabled planners to imagine a variety of tactical roles. Before the Korean War, the U.S. Army began development of atomic artillery projectiles, as all branches sought various nuclear-capable platforms for tactical purposes.

The Korean War stimulated further thinking when the 1951 joint service "Vista Project" study recommended fielding tactical nuclear weapons in support of ground forces. Concurrently, the Department of Defense began studying the tactical use of atomic weapons at the "Desert Rock" exercises at the Nevada Test Site. In 1952, the North Atlantic Treaty Organization began readying options for tactical nuclear weapons. Planning for a resumption of the UN offensive in Korea in 1953 also included possible nuclear support.

Soon after the Korean Armistice, the Eisenhower administration sped up integration of nuclear weapons at the tactical level as a result of a "New Look" defense policy aimed at curtailing defense spending primarily from manpower reduction. Resulting in a dispute between the army and air force over strategic vision, the air force, reflecting the Eisenhower administration's policy of nuclear deterrence by threat of massive retaliation, saw future general war as a "strategic" bombing campaign of large-yield nuclear weapons. Should deterrence fail, this war would be short, with neither the time nor the need for mobilizing large land forces. The downsized army sought many ways to prove its relevance and "modern" qualities in a general war, and increasingly in a limited war, where, it argued, large strategic nuclear weapons were of little value. Not to

be underestimated as a major driving force, many viewed nuclear armaments as modern—the future of land combat—and that any “modern army” must possess the firepower even in a limited war. Battlefield nuclear weapons could also offset the numerical advantage of the communist bloc and even allow cuts in funding for troop strength.

By 1957, all branches of the U.S. armed forces had tactical nuclear weapons platforms in service or development for a variety of tactical missions. Army reorganization yielded a new dual-capable (atomic-nonatomic) “Pentomic” division. Organized as five semi-independent battle groups for greater mobility and dispersion on a highly lethal atomic battlefield, the division reduced manpower and increased firepower. All divisions included low-yield nuclear artillery in guns and missiles. The army also fielded nuclear nondivisional missile commands and 280-millimeter “atomic cannon” battalions. Engineer units could deploy tactical atomic demolition munitions to block enemy axes of advance. The army also developed atomic surface-to-air missile systems.

The Air Force Tactical Air Command role in supporting army ground forces focused training and procurement on nuclear-capable fighter-bombers. For responding to limited-war crises, the Tactical Air Command created the Composite Air Strike Force and trained primarily to deliver low-yield nuclear bombs. Additionally, the air force deployed nuclear surface-to-air and air-to-air missiles.

The Marine Corps developed greater mobility for amphibious forces by refining helicopter assault from offshore, believing traditional amphibious operations too risky in the atomic age. Marines fielded nondivisional atomic-capable artillery, and marine aviation could provide nuclear support.

Naval aviation was primarily trained and equipped to deliver tactical nuclear ordnance in support of ground forces. In addition, the U.S. Navy followed a nuclear path with atomic depth bombs for antisubmarine warfare and nuclear-capable surface-to-air missiles. Even shore bombardment from 16-inch battleship guns had optional nuclear warheads.

The Pentomic division received much criticism for not being mobile enough to survive an atomic battlefield and for not being strong enough to fight a conventional battle without using its nuclear artillery. By 1964, the army replaced it with a

traditional three-brigade structure. The new division maintained a nuclear capability, but the emphasis lay with conventional firepower. This change came from the realization that conventional war is more likely, especially in limited war. For the European battlefield, U.S. forces always maintained a tactical nuclear capability for the North Atlantic Treaty Organization; however, doctrine emphasized non-nuclear support of ground forces.

The end of the Cold War brought the Presidential Nuclear Initiative of September 27, 1991, which withdrew tactical nuclear weapons from the army, navy, and Marine Corps arsenals. As of 2012, only the air force maintains a stockpile of low-yield nuclear bombs, including the B61 Mod 11 deep-earth penetrator. Today, the use of low-yield nuclear weapons *in any role* is often popularly termed “tactical” use.

The September 11, 2001, attacks spurred debate over further developing tactical nuclear weapons for “bunker busting.” With unknown threats from rogue states given high priority, including the international crisis over Iranian nuclear ambitions, proponents argued that the United States needed improved capabilities to destroy deep underground facilities manufacturing or storing weapons of mass destruction.

However, despite this debate, the U.S. armed forces have not returned to the Pentomic Era, when the future of land combat appeared to include a nuclear battlefield that required dual-equipped forces. The capability remains for U.S. forces to be supported by low-yield “tactical” nuclear firepower; however, the vision of a nuclear battlefield and the perceived requirement for tactical nuclear weapons in multitudinous roles has faded.

David M. Walker

See also Bombs, Nuclear; Missiles, Nuclear; Strategy, Nuclear; Weapons, Nuclear

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PERSIAN GULF WAR

The Persian Gulf War was an international military conflict that occurred from August 2, 1990, to April 11, 1991. The conflict began with the invasion and subsequent occupation of the sovereign State of Kuwait by military forces of the Republic of Iraq. The invasion and occupation drew worldwide criticism, including from fellow Arab countries, which resulted in the passage of several UN Security Council resolutions condemning the aggression. Within hours of the occupation, military forces from the United States were quickly deployed to the region to defend Saudi Arabia against further Iraqi aggression. Over the next several months, an international coalition led by the United States began to assemble and train in the southern deserts of Saudi Arabia. On January 17, 1991, coalition air forces launched a massive air campaign to cripple key military targets both in Iraq and in portions of Kuwait itself. On February 24, 1991, coalition ground forces attacked Iraqi defensive positions along the Kuwait-Saudi and Iraq-Saudi borders. After just 100 hours of deadly combat, coalition ground forces ceased combat operations following the withdrawal of Iraq's military forces from Kuwait. This entry describes the political and military events of the conflict and discusses the war's legacy in its aftermath.

Background

State of Kuwait

In 1899, Sheikh Mubarak bin Sabah Al-Sabah, ruler of Kuwait, entered into an agreement with Great Britain wherein the British would provide military protection in exchange for Mubarak agreeing not to accommodate any foreign dignitaries or emissaries and to seek approval before any land cession or sale. Being perpetual in nature, the agreement also applied to any of Mubarak's future successors. In 1903, a railway proposed by Imperial Germany that would link Berlin with the Ottoman-controlled city of Baghdad was to provide access to the numerous trade routes in the Persian Gulf. Fearing that this railway would provide easy access to British holdings in the region in the event of war, Great Britain signed the Anglo-Ottoman Convention of 1913, which formally defined the limits of Ottoman rule in the Persian Gulf and established the official boundaries

of Qatar, Bahrain, and Kuwait. Ratification of the agreement, however, never came to be, providing a catalyst that later Iraqi rulers would try to exploit.

World War I

With the outbreak of the First World War in 1914, Great Britain, fearing German and Ottoman aggression, officially declared Kuwait an independent district but continued to provide military protection due to the strong German and Ottoman presence in neighboring Iraq. In the aftermath of the war, the newly created League of Nations mandated that Great Britain assume control of most parts of the region, ultimately granting independence to Iraq in 1932 and to Kuwait in 1961. Iraq would not officially recognize Kuwait or the location of its border until 1963. Large oil reserves had been discovered in Iraq in the late 1920s, and then in Kuwait and Saudi Arabia in the 1930s. The discovery of the natural resource resulted in an economic boom in the region but also caused disputes to erupt over border locations and drilling rights for the oil. Through its exportation of oil to nations such as the United States and China, the state of Kuwait had become one of the richest nations in the world by 1990.

Iran-Iraq War (1980–1988)

In 1980, fearing that the revolution that had taken place in neighboring Iran would spread to his country, Iraqi dictator Saddam Hussein ordered Iraq's military forces to invade Iran. Secretly, it was also Hussein's intention for Iraq to replace Iran as the major power in the region, and he believed that the political turmoil in Tehran would enable him to gain a quick victory. The Iraqi offensive quickly stalled, and the war became a stalemate. In 1988, both sides accepted the terms of UN Security Council Resolution 598, and the war came to an end. Despite having oil reserves of its own and accepting large amounts of financial support from Kuwait and Saudi Arabia, Iraq had incurred a huge war debt and faced a mounting financial crisis as the decade came to a close.

Provocation and Invasion

When the Iran-Iraq War ended in 1988, a virtually bankrupt Iraq asked its creditors, of which Saudi Arabia and Kuwait were the primary holders, to forgive its war debt, which totaled more than

\$80 billion. However, both Arab nations refused, citing economic problems of their own due to the surplus of oil on the world market, which was keeping crude prices low. Finding no relief through negotiation, Hussein began to make accusations that members of the Organization of the Petroleum Exporting Countries, particularly Kuwait, were intentionally ignoring the production limits it had set in an effort to keep prices low, which, in turn, prevented Iraq from gaining the badly needed export revenue. Hussein also directly accused Kuwait of stealing oil from Iraqi fields through the practice known in the oil industry as “slant drilling,” a process that allows access to oil that cannot otherwise be obtained through the normal practice of vertical drilling. Elevating his rhetoric, Hussein began making threats that he would attack any oil-producing nation that did not cease the overproduction of oil and began moving troops to the Iraq-Kuwait border in late July 1990. Diplomatic efforts by the United States to stave off an armed conflict between the two Arab nations seemed to hit road blocks at every turn.

The 19th Province

While attempts at a diplomatic solution continued between the United States, Kuwait, and Iraq, Saddam Hussein ordered his military forces to invade Kuwait. During the predawn hours of August 2, 1990, Iraqi military forces crossed the border and overwhelmed the emirate in just a matter of days. To avoid capture and set up a government-in-exile, Kuwait’s emir, Jabir al-Ahmad al-Jabir al-Sabah, along with his family, government officials, and the remaining military forces, fled Kuwait City and sought refuge in neighboring Saudi Arabia. Within hours, the UN Security Council convened and passed Resolution 680, condemning Iraq for its aggressive behavior and demanding that all Iraqi military forces be withdrawn. Meanwhile, a victorious Saddam Hussein proudly announced to the world that Kuwait had become Iraq’s 19th province, claiming that the Anglo-Ottoman Convention of 1913 never received ratification, had no authority, and therefore Kuwait remained a part of Iraq.

Multinational Response

By the time the emir arrived in Saudi Arabia, international outrage over the invasion already had taken center stage thanks in part to the burgeoning

new form of media that broadcast news around the clock. After quickly occupying Kuwait City and its oil fields, the Iraqi military moved south and swiftly closed the border with Saudi Arabia. In addition to asking for the UN Security Council to convene and demand Iraq’s immediate withdrawal, President George H. W. Bush consulted with his top political and military advisors to formulate a response. A strategy that would use a combination of political, economic, and military pressures to force Iraq out of Kuwait took form and was then implemented.

Political and Economic Pressure

Knowing that the United States would be hard pressed to force Iraq out of Kuwait on its own, President Bush began the arduous task of assembling an international coalition. Bush also knew that he would need to work through the UN Security Council to justify and authorize both military and nonmilitary actions that might be implemented. Bush also dispatched Secretary of Defense Dick Cheney and U.S. Central Command Commander General H. Norman Schwarzkopf to Saudi Arabia to personally inform the Saudi king Fahd bin Abdul Aziz Al Saud that if needed, military forces from the United States were available for defense of his kingdom. The king immediately asked for military assistance for Saudi Arabia’s defense and indicated that he would provide troops from his own military forces not only to help in his nation’s defense but also to participate in the eventual liberation of Kuwait. The United Nations imposed severe economic sanctions on Iraq beginning just after the invasion. The European Community imposed economic sanctions of their own in the form of embargoes of oil imports, arms sales, and various other goods and services. Known Iraqi assets in the United States, Great Britain, France, and other coalition countries were frozen, denying Iraq access to millions of dollars in revenue. President Bush also ordered that the United States, for the purpose of denying Iraq revenue gained from trade, impose a complete economic embargo against Iraq.

Israel

Since its official creation in 1948, the State of Israel had fought several wars with its Arab neighbors; so when Iraqi military forces swept into Kuwait, the Israeli government, led by the Israeli

prime minister Yitzhak Shamir, ordered the Israeli Defense Forces to prepare for the possibility of a conventional military strike by Iraq and also a chemical weapons attack. For more than 40 years, Israel had maintained a posture of retaliation to any aggressor, Arab or otherwise, and Saddam Hussein knew that if he could provoke Israel to respond militarily, the Arab members of the coalition forming against him might feel the pressure to come into the conflict as allies or withdraw altogether.

An Unprecedented Military Coalition

To defend Saudi Arabia from possible further aggression by Saddam Hussein, the United States took up defensive positions along the Kuwait-Saudi border and along the Saudi-Iraq border. As the conflict progressed, more than 30 nations, including Muslim nations located in the Middle East, would form an unprecedented yet solid international coalition in support of the effort to free occupied Kuwait. The United States, Saudi Arabia, and the United Kingdom would supply the majority of military personnel, equipment, and supplies needed for ousting Iraq from Kuwait.

Operation Desert Shield

On August 7, 1990, under the operational code name Desert Shield, President Bush ordered naval, ground, and air forces of the United States to Saudi Arabia for its defense and, if needed, for possible offensive operations. Within 48 hours, aircraft and ground units began to arrive. Supplies that had been prepositioned for just such an operation were sent to the region. Within 14 days, the first armor and cavalry units, fielding the new M1A1 Abrams main battle tank, began to arrive. These highly trained units were deployed to help support the light infantry forces that were maintaining a thin line of defense positions just inside the Saudi border with Kuwait. Over the next several weeks, the U.S. Department of Defense began flexing its logistical muscle by activating the forces necessary to meet the demand for supplies required not only to maintain a military force but also to support offensive combat operations when called on to do so. As a result, the Strategic Air Command of the U.S. Air Force and the Military Sealift Command of the U.S. Navy immediately implemented the necessary action plans that had been in place since the 1950s.

Desert Training

General Schwarzkopf and his commanders knew that operating in a desert environment presented challenges for both the military equipment that would be necessary and, more important, for the troops themselves. Schwarzkopf also knew that during the Iran-Iraq War, Saddam Hussein had ordered the use of chemical agents against Iranian military forces, and he stressed this point to his commanders. Among the troops sent in support of the coalition were chemical warfare specialists from the Czech Republic who were familiar with the chemical weapons that Iraq had obtained from Warsaw Pact members and could be deployed. By January 1991, more than 695,000 troops, 1,650 aircraft, and 174 warships from Argentina, Australia, Bahrain, Bangladesh, Belgium, Canada, Denmark, Egypt, France, Greece, Italy, Kuwait, Morocco, The Netherlands, New Zealand, Niger, Norway, Oman, Pakistan, Portugal, Qatar, South Korea, Saudi Arabia, Senegal, Sierra Leone, Singapore, Spain, Syria, the United Arab Emirates, the United Kingdom, and the United States itself were positioned in the Kuwait theater of operations.

One problematic issue regarding the buildup of coalition forces on the Arabian Peninsula concerned how Israel would respond if attacked by Iraqi military forces, as had been insinuated by Saddam Hussein and his foreign minister, Tariq Aziz. Both the Israeli Defense Forces and the coalition forces now assembling in southern Saudi Arabia knew that the Iraqi military had Soviet-built Scud medium-range ballistic missiles in its arsenal. What concerned them the most was an upgraded version of the Scud known as the "Al Hussein," which had an extended range and could be fired from mobile launchers, making it easily concealable and difficult to defend against.

Desert Shield Becomes Desert Storm

On November 29, 1990, the UN Security Council passed its final resolution demanding that Iraq must unconditionally withdraw from Kuwait. This resolution, however, added a deadline for withdrawal of January 15, 1991, and authorized the use of military force if Iraq did not comply. With Saudi Arabia's airports jammed with coalition war planes and the waters of the Persian Gulf crowded with coalition warships, the world held its breath as this final

deadline approached and then passed. On January 17, 1991, with Iraqi military forces still firmly occupying Kuwait, the coalition forces launched their military campaign, codenamed "Desert Storm," to liberate Kuwait.

Air Campaign

During the early morning hours of January 17, 1991, more than 700 coalition aircraft assembled and then proceeded to their designated targets in Iraq, most notably Baghdad. As the opening attack unfolded, Cable News Network reporters Bernard Shaw, John Holliman, and Peter Arnett reported on the attack live from Al-Rashid Hotel in Baghdad. Engineered by U.S. Air Force Lieutenant General Charles A. Horner, more than 110,000 sorties would be flown over the next 43 days, with more than 88,000 tons of ordnance being dropped on targets in Iraq and Kuwait. U.S. Air Force Captain Steve "Tater" Tate recorded the first aerial kill of the campaign when he downed an Iraqi Mirage F1 near Baghdad on January 17, 1991.

Scud Missile Attacks

During the later part of the air campaign, coalition air forces began an active search for any remaining targets, especially Scud missile launch sites. From the outset, the problematic issue of a possible Israeli military response if attacked by Iraq remained a primary concern. Leaders of both the Israeli Defense Forces and the coalition forces now assembling in the desert knew that the Iraqi military maintained an arsenal of ballistic missiles capable of delivering not only a conventional high-explosive warhead but also a warhead loaded with biological and chemical weapons. Another concern involved the fact that these missiles could be launched from a stationary platform or from a mobile launcher that could easily be moved between launch sites and could also be hidden in buildings or even underground. Hussein knew that a military response by Israel against Iraq would hurt the efforts of the United States to keep the coalition forces together. On January 18, 1991, Iraq launched its first Scud attack of the war, targeting Israel and Saudi Arabia. Uncharacteristically, Israel did not respond to the attack or to any of the more than 40 other Scud attacks during the war. To aid in its defense, the United States sent a battalion of MIM-14 Patriot missile batteries to Israel. Though

largely ineffective, one Scud missile did hit a barracks that housed U.S. military personnel in Dhahran, Saudi Arabia, killing 28 and wounding more than 100 others. U.S. and British Special Forces had been operating for several weeks in Iraq before the actual air and ground campaigns began.

Ground Campaign

For 38 days, coalition air forces pummeled Iraqi defense positions, air defense and radar stations, known troop locations, airfields, and other military emplacements that posed a threat, inside Kuwait and Iraq itself. Coalition ground forces had been building and training for months, and on February 24, 1991, they began a massive ground campaign to liberate the State of Kuwait. Two days earlier, at designated points along the heavily defended border, two U.S. Marine Corps Task Forces crossed into Kuwait and began clearing minefields, tank traps, and bunkers. Iraqi intelligence had expected the attack to begin in the exact spots where the marines were now operating, and the area had been heavily reinforced. As the Iraqi military forces focused on the actions of the marines, they failed to notice the northern movement of other coalition forces along the Saudi-Iraqi border. On February 24, 1991, spearheaded by the U.S. VII Corps (the army unit deployed during Operation Desert Storm) and XVIII Airborne Corps (designed for rapid deployment anywhere in the world), along with the British 1st Armored Division and the French 6th Light Armored Division, the coalition forces quickly drove through the lightly defended border and executed what would be described as a "left-hook" blow. The plan called for coalition forces that had been spread out along both the Kuwait and Iraq borders with Saudi Arabia to quickly destroy and maneuver through the Iraqi defenses and penetrate deep into southern Iraq. Then, at the appointed time and place, the coalition forces turned 90 degrees right and hit the Iraqi military, just like a boxer would turn his body right to throw a left-hook punch at his opponent. Stunned and overwhelmed, Iraqi troops could only offer token resistance and began to retreat or surrender in large numbers. On the right flank of the advance, British units attacked Iraq's elite Republican Guard, which put up a much stiffer defense than those Iraqi units encountered during the early hours of the attack. The advance moved

much quicker than expected, and within 48 hours, coalition forces had reached the Euphrates River, had turned south, and were approaching Kuwait from the north.

Liberation and Cease-Fire

Simultaneously, on the eastern end of the line of attack, the 1st Marine Expeditionary Force, consisting of the 1st and 2nd Divisions and the U.S. Army's 1st Brigade of the 2nd Armored Division, and supported by various units of Islamic troops, attacked and pushed through the Iraqi defenses on its way to securing the Al-Jabr air field. As the force approached Kuwait City, the Iraqi defense hardened but quickly collapsed altogether when the coalition forces secured Kuwait International Airport and began preparing for the final push into Kuwait City itself. On February 27, 1991, after Saddam Hussein ordered his troops to withdraw from Kuwait, resistance collapsed as coalition troops from Saudi Arabia and Kuwait spearheaded the final push into the city. With coalition forces approaching from the north and the south, the situation became hopeless for the retreating Iraqi forces. Hundreds of tanks, trucks, artillery pieces, and weapons systems that had not already been destroyed were abandoned as the Iraqi troops retreated. In the final hours of the conflict, a road clogged with fleeing Iraqis came under attack by coalition aircraft and was decimated, with hundreds of destroyed vehicles and lifeless bodies littering the highway. A few hours later, realizing that the coalition's primary objective of liberating Kuwait had been achieved, President Bush ordered a halt to offensive military operations, effective February 27, 1991, 100 hours after the operation to free Kuwait began.

Legacy

Coalition forces began to redeploy back to their homelands beginning in March, but military forces would remain in the area until 1995 due to the volatility of the region, caused primarily by the formidable military force still brandished by Saddam Hussein. From 1991 until his capture by the allied forces in 2003, Saddam Hussein would pose a threat not only to his Arab neighbors but also to his own people. For the United States, the Persian Gulf War forced the Department of Defense to

further rethink its offensive and defensive strategies beyond what changes had taken place as a result of the decline of the communist influence in Europe in 1989. For years, the United States, along with its North Atlantic Treaty Organization allies, had concentrated on defending Western Europe against a Soviet-led attack. Now, these forces had to take into consideration the Middle East in its military planning. The changes would include the possibility of a long-term presence in the area, such as what occurred in Europe in the aftermath of World War II. Also, new and improved equipment for the military forces would have to be designed for the harsh desert climate. Many questions concerning what the future would hold for the region were answered when another coalition, led by another President Bush, invaded Iraq in 2003.

Richard B. Davis

See also AirLand Battle Doctrine; Coalition, Warfare; Gulf War Syndrome; Iraq; Iraq War (2003); Iraq War, Planning for; Logistics; Plans, War; Powell, Colin; Special Operations, Strategy; Tanks; U.S. Central Command

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PERSONNEL EVALUATION

Just as many of the country's civilian, private sector employees receive personnel evaluations assessing their on-the-job performance, so, too, do our nation's men and women in uniform. Each of the five branches of the U.S. armed forces evaluates its personnel somewhat differently; although personnel are generally evaluated annually, raters are usually the immediate supervisor of the individual being evaluated, and an appeals process exists for those who feel they have been evaluated unfairly. These military personnel evaluations record that raters and ratees agree about the ratees' responsibilities. They assess the ratees' performance to date, and they explain in writing how the ratees might better realize their potential in the future. The reports generated help guide an individual's career path and aid military leadership in the identification and selection of future leaders. Though seemingly sensible and well intentioned, some commonly cited flaws plague these evaluation systems. This entry discusses the personnel evaluation systems of each of the branches of the U.S. armed forces and examines the impact of these evaluations.

Army: The Army Evaluation Reporting System

The U.S. Army Human Resources Command, under the army's deputy chief of staff for personnel, or G1, oversees *the army's evaluation reporting system*. Governing documents are Army Regulation 623-3, *Personnel Evaluation: Evaluation Reporting System*, and Department of the Army Pamphlet 623-3. According to these documents, the evaluation reporting system provides a framework to assess the quality of an individual soldier. It produces a report card, if you will. This helps not only to determine the course of the said soldier's career (what assignments, trainings, and promotions he or she might receive) but also to identify future army leaders.

Air Force: The Air Force Officer Evaluation System and Enlisted Evaluation System

The Air Force Personnel Center oversees the air force's evaluation programs. Governing documents are Air Force Policy Directive 36-24, *Military Evaluations*, and Air Force Instruction 36-2406,

Officer and Enlisted Evaluation Systems. Air Force Instruction 36-2406 explains that the purposes of the Officer and Enlisted Evaluation Systems are threefold. First, they affirm that ratees know what is expected of them, assess how well they are currently meeting those expectations, and explain how they might better do so in the future. Second, the systems provide a written, long-term record of performance and an individual's potential based on that performance. Third, the evaluations help the chain of command identify and promote future leaders.

Navy: The Navy Performance Evaluation System

The Navy Personnel Command administers the navy's performance evaluation system (PES). Bureau of Naval Personnel Instruction 1610.10C, with enclosures, explains the system, which consists of Fitness Report and Counseling Records on officers, chief petty officer evaluations on chief petty officers, and Evaluation Report and Counseling Records on other enlisted personnel. The evaluations are used for many career actions, including selection for promotion, advanced training, specialization or subspecialization, and responsible duty assignments.

Marine Corps: The Marine Corps Performance Evaluation System

The deputy commandant of Manpower and Reserve Affairs administers the Marine Corps PES. Marine Corps Order P1610.7F governs the system and explains that the PES primarily supports the centralized selection, promotion, and retention of the most qualified marines. In other words, the Marine Corps sees the system as first and foremost a framework to identify future leaders. Second, in the near term, if you will, the PES aids in the assignment of personnel and supports other miscellaneous personnel management decisions as required.

Coast Guard: The Coast Guard Officer Evaluation System and Enlisted Evaluation Reporting System

The Coast Guard Pay and Personnel Center administers Coast Guard evaluations. The Guard recently cancelled its personnel manual, also known as Commandant Instruction M1000.6A, and replaced it with 12 new manuals or instructions, loosely

aligned with the existing chapters in the former personnel manual. These new manuals state that the Coast Guard's officer evaluation system provides information for important personnel management decisions such as promotions, assignments, career development, and retention; sets performance and character standards to evaluate each officer; prescribes the organizational values by which each Coast Guard officer can be described; and provides a means of feedback to determine how well an officer is measuring up to the standards.

Similarly, the enlisted evaluation reporting system sets standards by which to evaluate the performance and behavior of all enlisted members; informs enlisted members of the performance standards against which they will be measured; provides a means by which enlisted members can receive feedback on how well they are measuring up to the standards; captures a valid, reliable assessment of enlisted members' performance, so the Coast Guard may advance and assign members with a high degree of confidence; and provides critical information that may affect discharges, reenlistments, good conduct, advancement eligibility, and reductions in rate.

The Impact of the Personnel Evaluation

The importance of accurate and constructive military personnel evaluations cannot be overestimated when the reports generated from the evaluation programs have such an impact on individual servicemen's and servicewomen's livelihoods, on selecting the future leadership of the military, and arguably, by extension, on national security. Yet the systems have some obvious flaws.

While critiques of military personnel evaluation systems abound, inflated evaluations might be the most lamented problem. Such evaluations result when raters "inflate" assessments to allow ratees to remain competitive among their peers, instead of recording the constructive criticisms truly needed. Most of the regulations and governing documents discussed above warn against inflation, and academic papers and military studies on this topic abound. An inflated rating can be more than unfair; it can be positively dangerous if it earns a less than qualified individual an ill-fitting assignment or an undeserved promotion.

The inflated evaluation occurs when a rater, consciously or even subconsciously, seeks to protect

and promote the career of a presumably well-liked subordinate. But just as a rater can exploit the subjectivity inherent to the evaluation process to "help" an inferior, so, too, can he or she exploit the process to hinder a subordinate's career. The evaluation becomes a tool with which the rater can punish a subordinate and mark him or her for unjust failure. This may occur simply due to personality conflicts, or it may allow for more targeted discrimination on the basis of race or gender.

Other detractors of military personnel evaluation systems question their methodologies, effectiveness, ethicality, and so on. At the heart of most of the issues raised lies the fact that the personnel evaluation systems are unavoidably subjective. One rater's "excellent," to use a generic term, is another's "satisfactory." Critics even argue that changes made to personnel evaluation systems in an attempt to ensure fairness and objectivity have been circumvented by raters. For example, mandatory quantifications of "excellent" ratings simply mean that the rater must write an inflated explanation of the "excellent" rating in addition to checking the "excellent" box. Fortunately, the military realizes that there remains work to be done.

It should be noted that appeals processes allow personnel who feel they have been inaccurately rated to seek recourse, but those appeals can be long and arduous battles. Real reform, which is ongoing, is needed to ensure accurate and meaningful personnel evaluations.

Melissa Ziobro

See also Commissioned Officers; Leadership; Motivation; Physical Fitness; Rank; Staff Relationships

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PETRAEUS, DAVID

General David Howell Petraeus was born on November 7, 1952, in Cornwall on Hudson, New York. He graduated from the United States Military Academy at West Point in 1974 as a distinguished graduate, finishing in the top 5% of his class. Petraeus received the George C. Marshall Award for graduating first in his class at Command and General Staff College in 1983. He earned a master's degree (1985) and a PhD in international relations (1987) from Princeton University's Woodrow Wilson School of Public and International Affairs. After early assignments in mechanized units, Petraeus principally served in light infantry units. He commanded the 3rd Battalion of the 101st Airborne Division (1991–1993), served as chief of operations of the UN peacekeeping mission in Haiti (1995), and commanded the 1st Brigade of the 82nd Airborne Division (1995–1997). After promotion to brigadier general, he served as assistant division commander (operations) of the 82nd Airborne Division and chief of staff of the XVIII Airborne Corps (the corps of the U.S. Army designed for rapid deployment anywhere in the world), before deploying to Bosnia and Herzegovina in Operation Joint Force as assistant chief of staff for operations of the North Atlantic Treaty Organization Stabilization Force and deputy commander of the U.S. Joint Interagency Counter-Terrorism Task Force (2001–2002). He led the 101st Airborne Division in combat in Operation Iraqi Freedom (2003–2004) and returned to Iraq as the first three-star commander of Multi-National Security Transition Command, Iraq, which trained and equipped Iraq's security forces (2004–2005). He headed the U.S. Army Combined Arms Center at Fort Leavenworth (2005–2007), before returning to Iraq a third time to command Multi-National

Forces, Iraq (2007–2008). He led the U.S. Central Command (2008–2010) and assumed command of U.S. Forces-Afghanistan and the North Atlantic Treaty Organization International Security Assistance Force in Afghanistan in June 2010, following the relief of General Stanley McChrystal. This entry looks at the career and views of David Petraeus.

General Petraeus has made three principal contributions to military thought and art. First, he refined the precepts of counterinsurgency for application in the 21st century and successfully inculcated understanding and acceptance of counterinsurgency among U.S. conventional forces, which had shunned it in the wake of its defeat in the Vietnam War. More broadly, he embodied and championed intellectualism and innovativeness as essential qualities for military leadership. Finally, he understood how to implement and lead change in large, hierarchical organizations to make them more agile and adaptive.

Shaping Views

The most profound influence on the young officer's development was General John R. Galvin, a soldier-scholar and, later, statesman, whom he served first as aide de camp (1981–1982) when the latter commanded the 24th Infantry Division (Mechanized) and then as his special assistant when Galvin led the U.S. Southern Command and served as Supreme Allied Commander, Europe, in the 1980s. Galvin, who later became diplomatic envoy to the Balkans, engaged Petraeus in lengthy discussions about the challenges of leadership and the issues of the day and encouraged him to attend graduate school. Petraeus received his first exposure to counterinsurgency with Galvin at Southern Command, which was preoccupied with the insurgencies then roiling Latin America. He helped Galvin write an article, "Uncomfortable Wars: Toward a New Paradigm," published in *Parameters* in 1986 that argued that instead of preparing to fight in ways that fit "our plans, our assumptions, our hopes, and our preconceived ideas," the U.S. military needed to be prepared to grapple with conflicts that lay outside its comfort zone. The "uncomfortable" wars of that time were the insurgencies, postcolonial liberation struggles, and Cold War proxy contests between the United States and the Soviet Union not only in

Central and South America but also in Africa and Afghanistan.

Petraeus explored this issue and the legacy of Vietnam in his doctoral dissertation *The American Military and the Lessons of Vietnam: A Study of Military Influence and the Use of Force in the Post-Vietnam Era*, which he completed during his assignment as an assistant professor at West Point from 1985 to 1987. He interviewed a wide range of military leaders as part of his research and concluded that, just as in the aftermath of the Korean War, the post-Vietnam military leadership had become extremely cautious about involvement in conflicts abroad. This stance, which became known as the Weinberger and later the Powell Doctrine, held that the U.S. military should only intervene when vital U.S. interests were at stake, ample American public support existed, and a clear exit strategy had been developed. Petraeus sided with those who judged that the United States, as a world leader, would likely need to intervene in conflicts that posed serious if not existential threats and would be forced to make difficult choices about the degree and duration of involvement warranted.

Debates over U.S. intervention continued as the Cold War-era conflicts gave way to various humanitarian crises and ethnic turmoil in Haiti, the Balkans, and elsewhere in the 1990s. Petraeus witnessed these firsthand with assignments in multinational peacekeeping operations, and as aide to Army Chief of Staff General Carl Vuono and as executive assistant to the chairman of the Joint Chiefs of Staff General Hugh Shelton (1997–1999), he also gained additional firsthand lessons in leadership and the military's role in advising civilian decision makers. In the latter position, he observed the intersection of politics, policy, and strategy during the Desert Fox operations against Iraq, the strikes on Osama bin Laden in the wake of the East Africa embassy bombings, and the Kosovo campaign.

Counterinsurgency Field Manual Revision

During his first tour in Iraq, Petraeus waded into the intricacies of Iraq's multiethnic and multisectarian society, foreseeing that postwar strife would erupt if a stable balance of power were not struck. On his second tour, he grappled with the demands of building Iraq's police and armed forces while the insurgency gained in strength. He then moved

to Fort Leavenworth as commander of the army's Combined Arms Center, the subordinate entity of the army's Training and Doctrine Command, with orders from Army Chief of Staff General Peter Schoomaker to "shake the army up." The army had been undergoing a transformation from division-focused organization to modular brigades, but as the grim reality of a failing war effort in Iraq set in, Petraeus made his top priority the revision of the U.S. Army counterinsurgency field manual in partnership with the U.S. Marine Corps. An interim manual had been hastily issued, but no full-fledged revision of the manual had been undertaken since the Central American wars 20 years earlier.

In what would become a signature method, Petraeus convened a diverse group of top counterinsurgency experts in and out of uniform rather than rely solely on his doctrine-writing division. In deliberations resembling a free-wheeling, high-level graduate seminar, academics, diplomats, aid workers, representatives of nongovernmental organizations and human rights groups, journalists, and others with experience in recent wars gathered at Fort Leavenworth to debate intensively and critique an initial draft of the manual written by a group of hand-picked associates. Petraeus eventually assumed control of the document and produced numerous further iterations before its publication in December 2006 as U.S. Army Field Manual No. 3-24 and Marine Corps Warfighting Publication No. 3-33.5 (hereafter referred to as FM 3-24).

The central idea of the manual is that the population is the decisive terrain in counterinsurgency. This insight draws on the work of David Galula (which emphasizes the need to protect the population), historical British counterinsurgency experience, and Max Manwaring's work on the importance of legitimacy in inherently political struggles. The population is deemed to be the decisive terrain in a counterinsurgency because insurgents hide among the people and rely on them for sustenance. A successful counterinsurgency therefore depends on gaining the population's cooperation in identifying and isolating the adversary from his means of support. The population ultimately determines a campaign's success, because the people decide which side they will support and which side they view as legitimate. Protecting the population is the principal means to gain the population's support, which is not only a strategic goal but also a tactical

necessity to obtain the intelligence needed to isolate the insurgent.

The Field Manual identifies and refines several key corollaries to this central idea, including the need to secure the population by dispersing counterinsurgent troops to live among the people and protect them. This precept is sometimes misinterpreted as meaning primarily U.S. or coalition forces, but the ideal counterinsurgents are local forces of the host country if they exist in sufficient numbers and are capable and accepted by the population. In Iraq, U.S.-led coalition forces initially outnumbered and/or outperformed the host forces.

FM 3-24 also calls for a persistent effort by counterinsurgents to hold territory and build governing institutions. The forces must remain in place to secure and win over the population, obtain the necessary intelligence to isolate the insurgent cadre and fighters, and assist in the provision of basic services until the host government (which may be a substate or traditional form of governance) is able to provide the necessary security and governance. Insurgents commonly attempt to wait out the counterinsurgent.

Achieving unity of effort among civilian and military counterinsurgents is vital to the success of operations. The manual also emphasizes the need for proactive and accurate information operations (“be first with the truth”) and to foster initiative at all echelons. It posits that the side that adapts fastest wins the contest; therefore, a premium is placed on rapidly processing lessons from the field and adapting the campaign plan as necessary. Another key tactic, which Petraeus emphasized even more following his third tour in Iraq, is an effort to turn insurgents who prove to be “reconcilable,” while targeting and capturing or killing those deemed “irreconcilable.”

While these precepts are rooted in historical experience and literature, Petraeus refined them for application to complex insurgencies with transnational elements in a highly transparent and dynamic environment. He emphasized the central importance of protecting the population and pursuing political solutions while targeting adversaries precisely in intelligence-driven operations. He propagated understanding and embrace of these ideas throughout the U.S. conventional forces and the public generally by launching an extensive communications and education campaign, which led to the publication of numerous articles, a commercial edition of the manual, its review by the *New York Times*,

and the revision of curricula throughout the military school system. Petraeus also oversaw ongoing improvement of predeployment counterinsurgency training at the national training centers and more rapid means to collect, process, and disseminate lessons from the battlefield for those in the field and those preparing to deploy.

A “Strategic Counterinsurgency Command”

When General Petraeus returned to Iraq in February 2007 as commander of Multi-National Forces, Iraq, he assembled a group of multidisciplinary, multinational experts co-led by a trusted officer and a diplomat. Commanders routinely conduct such initial assessments, but his assessment was an unusual application of operational design principles in its degree of depth, rigor, and diversity. The Joint Strategic Assessment Team’s intensive 3-month assessment of the country and the war’s history and present status led to a redesigned joint campaign plan in which the embassy country team participated. The plan identified the overarching objective of reconciliation as the war’s political solution and specified a tailored mix of political, diplomatic, economic, security, and informational operations designed to address the particular conditions and causes of conflict in the varied demographic mosaic that is Iraq. The “puzzle diagram” was created as part of the commander’s briefing to depict the campaign plan’s sophisticated application of the FM 3-24 counterinsurgency principles to the specific requirements of Iraq’s war.

To implement this campaign plan, Petraeus adapted the Multi-National Forces, Iraq, headquarters into what he called a “strategic counterinsurgency command.” He revised the traditional Napoleonic staff structure to create integrated, cross-functional, civil-military “fusion cells” and nodes that focused on critical aspects of the campaign plan—for example, strategic communications, detainee operations, efforts to “turn” insurgents, and critical issues such as energy, infrastructure, and employment. The reconciliation initiative drew 100,000 former insurgents and insurgent supporters as the campaign gained steam. Violence declined dramatically in the latter half of 2007 and remained low as the multifaceted campaign continued. Core political issues between Sunni and Shia Arabs and between Arabs and Kurds remained to be resolved as U.S. forces drew down in 2010.

Later Successes

After 2 years at the helm of Central Command, due to the strength of his successes in Iraq, Petraeus was called on to take command of the International Security Assistance Force in Afghanistan in June 2010. In April 2011, President Barack Obama nominated Petraeus to become director of the Central Intelligence Agency. Retiring from the U.S. Army on August 31, 2011, Petraeus assumed the duties of the agency's director on September 6, 2011. In November 2012, Petraeus resigned abruptly and confessed that he had had an affair with his biographer, Paula Broadwell.

Petraeus gained recognition as a skillful practitioner of large-scale counterinsurgency and more generally for his political and diplomatic acumen and military skill in orchestrating multifaceted, complex campaigns. He used these skills and methods to act as a change agent within the U.S. military to spark a climate of inquiry and innovation. Petraeus has empowered the lower echelons to take the initiative and adopt practices that produce better results. He has noted that his goal is to teach subordinates *how* to think rather than *what* to think, and many of those in uniform have responded by attending graduate school, publishing probing essays, and questioning the status quo.

Linda Robinson

See also Central Intelligence Agency; Iraq War (2003); President as Commander in Chief; Rumsfeld, Donald; U.S. Central Command; War in Afghanistan

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PHILIPPINES

The archipelago, formally known as the Republic of the Philippines, is composed of 7,107 islands located in the western Pacific Ocean in Southeast Asia, between the Philippine Sea and the South

China Sea. The country's estimated population in 2010 was 99,900,177. The Filipino people are of a Malayo-Polynesian ethnic background. The islands' original inhabitants, Negritos, arrived about 30,000 years ago via land bridge and/or boats from Sumatra and Borneo. This settlement was followed by migration waves from Taiwan, Malaysia, Indonesia, and mainland China. As a result, more than 180 different languages and dialects are spoken throughout the Philippines, with Tagalog and Cebuano being the most common. Currently, Filipino (based on Tagalog) and English are the country's two official languages, and public education is offered in both. Ninety-three percent of Filipinos aged 10 and above are literate. More than 80% of Filipinos describe themselves as Catholic, a legacy of Spanish colonization, while about 5% embrace Islam. This entry discusses the government and history of the Philippines, with a focus on the Philippines's independence, its armed forces, and its relationship with the United States.

Geography and Economy

The Philippines total approximately 115,830 square miles, an area slightly larger than the state of Arizona, with 22,549 miles of coastline. The island nation is divided into three main geographical regions: (1) Luzon (which contains the capital city of Manila), (2) Visayas, and (3) Mindanao. Well over half of the terrain in the Philippines is mountains, with Mount Apo on the island of Mindanao being the country's highest peak at 9,691 feet. Water is the other main natural feature. Almost all the islands contain navigable rivers, numerous lakes, bays, harbors, and gulfs, plus mineral springs and waterfalls. The lush beauty of the Philippines is periodically marred by volcanic eruptions, earthquakes, and tsunamis. The tropical marine climate includes a northeast monsoon season that stretches from November to April and a southwest monsoon season from May to October.

The economy of the islands is rooted in natural resources and agriculture. The Philippines generate lumber products, salt, and petroleum; cultivate sugarcane, coconuts, rice, corn, bananas, cassava, pineapples, and mangoes; raise cattle and fish; and mine gold and silver. Overall, 19% of the islands is arable land. Industry, including electronics assembly, garment and footwear manufacturing, and

pharmaceuticals, also significantly contributes to the economy. Additionally, many Filipinos work overseas, sending the bulk of their income back home. The country's gross domestic product in 2008 was \$168.6 billion (\$3,400 per capita), with a 7.4% unemployment rate.

Government and Armed Forces

The government of the Republic of the Philippines has three branches that are modeled on those of the United States, its second colonizing power. The executive branch is represented by the president, who is both head of state and head of the government. The president, who is restricted to a single 6-year term under the 1987 constitution, and the vice president are elected by separate tickets based on a popular vote from an electorate of Filipinos 18 years old and above. The legislative branch consists of a bicameral Congress. The Senate has 24 seats; senators serve 6-year terms, with half of the members elected every 3 years. The House of Representatives has 250 seats, and its members have 3-year terms. The judicial branch is presided over by the Supreme Court, made up of a chief justice and 14 associate justices, who serve until the age of 70. There is also a court of appeals and a *Sandiganbayan*, a special court that handles corruption cases of government officials. To facilitate local administration, the Philippine Islands are divided into 80 provinces and 120 charter cities.

First designed in 1897, the flag of the Republic of the Philippines displays a banner of blue (peace and justice) and one of red (courage), plus a white triangle (equality). The three gold stars inside the triangle designate the major geographical divisions of the islands, and the eight rays of the sun represent the first Philippine provinces to secure independence from Spain.

The Armed Forces of the Philippines (AFP) are composed of three branches, (1) the army, (2) the navy (including the marines), and (3) the air force, and are headquartered at Camp General Emilio Aguinaldo, Quezon City, Metro Manila. As of 2011, there were 125,000 active members and 130,000 reservists. The president of the Philippines serves as commander in chief, working closely with the secretary of national defense. The AFP chief of staff is the military advisor to the secretary but ultimately takes his orders from the president and the secretary. The AFP's primary duty is to maintain domestic

peace, but since the 1970s, the military has become highly politicized, frequently attempting to influence the course of civilian government. Additionally, the AFP faces continuing challenges from separatist and other terrorist groups, especially in the southern islands.

History

In 1521, the Portuguese explorer Ferdinand Magellan, looking for a westward route to the Spice Islands of Indonesia, reached the Philippine Islands and claimed them for Spain. But Magellan grew overconfident after a warm welcome on Cebu, and he died at the hands of warriors on Mactan Island, who resisted the Spanish intrusion. It was not until Miguel Lopez de Legazpi was sent in 1565, with more than 2,000 additional Spaniards soon following, that Spain gained an actual foothold in the Philippines. Under orders from King Philip II, Legazpi divided the Philippines into *encomiendas* (large territories), which were administered by Spaniards who collected taxes and were in turn responsible for protecting the local inhabitants by providing law and order as well as health and educational programs. Conversion to Catholicism was also carried out in these *encomiendas*, often with the assistance of Spanish Jesuits.

The viceroy of Mexico initially directed Spain's colonial administration of the Philippines, aided by a specially designed government body called the Council of the Indies. The governor-general, stationed in the capital of Manila, reported to the viceroy until 1821, when Mexico achieved independence from Spain. Except for a period of about 2 years in the 1760s, when the British occupied Manila and the naval port of Cavite during the Seven Years' War, the Spanish maintained their colonial hold on the Philippines until the end of the 19th century.

By the second half of the 1800s, Philippine nationalism was gaining strength, especially among the *ilustrados* (European-educated Filipinos). Between Spain's loss of Mexico, its decision to open the Port of Manila for foreign trade, and the increasing wealth of Filipino *mestizo* (a term traditionally used in Spain and Latin America for people of mixed heritage or descent) families, Spain's colonial authority seemed particularly vulnerable by the latter part of the century. Even Filipino priests pushed for equality with their Spanish counterparts.

Led by Andres Bonifacio, in 1892, rebels on Luzon started the *Katipunan*, a secret organization dedicated to Philippine independence. The Katipunan engaged in armed resistance and assassinations, and it functioned as an alternate Philippine government. In 1896, the Spanish authorities learned of the existence of the Katipunan, and they executed the writer and artist Jose Rizal y Mercado, a popular nationalist. These two events launched the Philippine Revolution.

Origins of the Philippine Military

In 1897, Emilio Aguinaldo y Famy, part of an elite family from Cavite and a member of the Katipunan, emerged as the leader of a new revolutionary government. Aguinaldo then created the Philippine army, with General Artemio Ricarte at its head, and soon afterward, he formed the Bureau of the Navy. Continued Spanish advances on Filipino rebel forces led Aguinaldo to seek exile in Hong Kong later that year. As part of an agreement concerning his exile, Spanish authorities paid him several hundred thousand pesos, which he promptly used to buy weapons to continue the rebellion. When the United States declared war against Spain in 1898 over Cuba, Aguinaldo believed the time had at last come for Philippine independence. He returned to the islands, assuming that American troops would assist the Filipinos in achieving that goal. Though the United States and the Filipino rebels had the Spanish as a common enemy, the United States quickly made it clear that it intended to replace Spain as the colonizing power in the Philippines and refused to recognize Philippine independence.

Aguinaldo and other Filipino nationalists resented and resisted the Americans as much as they did the Spanish. Defying U.S. intentions, they organized a constitutional convention in 1899, created a government, and named Aguinaldo president of the new Philippine Republic. When the United States refused to recognize these actions, Aguinaldo declared war against the American troops on the islands. The Philippines Insurrection, as it was known in the United States, began in February 1899 and continued until July 1902, even though Aguinaldo was captured in 1901 and subsequently swore allegiance to the United States. At the height of this conflict, Filipino nationalists faced some 70,000 U.S. soldiers. When the fighting ended, about 4,200 Americans

were dead, as well as 20,000 Filipino soldiers, and no less than 100,000 civilians.

Despite the ongoing military conflict in the Philippines and divided American opinion at home about retaining control of the islands, the U.S. government began to lay the foundations of its colonial administration. President William McKinley appointed the First Philippine Commission in January 1899, tasked with investigating conditions on the islands and making recommendations to Congress about their administration. The Second Philippine Commission, headed by William Howard Taft, began its work the following year to establish the transition from military rule to civilian government. Taft served as the first American civil governor (the title was later changed to governor-general) of the Philippines from 1901 through 1903, and during that time, the commission set up a judicial system, a legal code, and a civil service. The Philippine Bill of 1902 established an elective representative government in the Philippines, modeled on the United States. From 1901 until 1935, when the Philippines gained commonwealth status, the U.S. Bureau of Insular Affairs oversaw colonial matters.

The United States established two Filipino military forces to keep the peace on the islands. Organized in 1899, the Philippine Scouts became part of the U.S. military (the Philippine Division) after World War I. Discontent over unequal pay and benefits prompted some scouts to stage an unsuccessful rebellion in 1924. The Philippine Constabulary was established in 1901 as a national militarized police force under civilian control. The Bureau of Coast Guard and Transportation was created to facilitate the movement of constabulary members and provide additional assistance patrolling the coastal areas. Beginning in 1910, the United States sponsored one Filipino soldier per year for education at West Point, and in 1919, the U.S. Naval Academy at Annapolis enrolled its first Filipino recruit.

Following decades of debates and vague promises, in the 1930s the U.S. government finally committed to a firm timetable for Philippine independence. The islands would spend 10 years as a commonwealth, with a Philippine president and legislature but with the continuing oversight of the United States, including a resident American high commissioner in Manila. When the new Commonwealth government was inaugurated in 1935, the National Defense Act created the Philippine army. President Manuel

Quezon brought in General Douglas MacArthur, retired from the U.S. military, as its field marshal. MacArthur unsuccessfully attempted to create an 11,000-member Philippine army, backed up by 400,000 reserve troops, to deter an anticipated Japanese attack. An offshore patrol, drawn from reserve forces, would constitute the marine division of the army.

After Japan occupied all of French Indochina in July 1941, the United States Army Forces Far East was created, bringing together American and Filipino troops. MacArthur was recalled to active duty in the U.S. military and named major general of this newly formed force, and the U.S. government allotted additional funds for training and weapons. The Japanese onslaught on December 8, 1941, ultimately forced the United States Army Forces Far East's retreat to the Bataan Peninsula and its subsequent surrender. About 54,000 Filipinos endured the Bataan Death March; around 10,000 died. Many of the survivors, gradually paroled by Japanese occupation forces, helped form a guerrilla movement that thwarted the occupation and facilitated MacArthur's 1944 return.

Independence

The Philippines achieved independence in 1946, but its foreign policy and military affairs remained closely tied to the United States. The constabulary, reconstituted at the end of the war, merged with the Military Police Command and was placed under the jurisdiction of the Defense Ministry until its dissolution in 1991. The Scouts disbanded, and those who wished to continue service in the U.S. military were granted U.S. citizenship and transferred to other army units, where they finished their military careers.

The close ties did not always signal a harmonious relationship. In 1946, Philippine politicians, exercising their commitment to national sovereignty, refused to allow U.S. jurisdiction over American soldiers and sailors stationed on the islands. With U.S. Cold War priorities focused on Europe and Japan, the United States relegated the Philippines to a low military priority and announced that it would significantly reduce its troops there and cease the construction of military bases. Fearing the negative effect this would have on the struggling postwar economy and concerned about possible communist

expansion in Asia, in 1947, President Manuel Roxas relented. The United States retained the right to try American military personnel accused of crimes in the Philippines and received authority over Filipinos employed at American bases.

Also that year, the Philippines entered into the Military Bases Agreement, wherein the United States leased 22 military bases on the islands for 99 years. Many Filipinos resented the strict terms of the leases, and the agreement was modified over the years, including a reduction in 1966 from 99 to 25 years. In addition to the bases, American military personnel, as part of the Joint U.S. Military Advisory Group, provided advice on tactics and operations. In 1950, the AFP was created, composed of four major branches: the army, the air force, the navy, and the constabulary (later dropped for the marines). Military appointments, promotions, and the national defense budget all required approval by the Philippines Congress. In 1951, while the Korean War was still going on, the Philippines and the United States signed the Mutual Defense Treaty.

From 1946 to 1954, the AFP combated the communist-inspired *Hukbalahap* rebellion in central Luzon. Ironically, the violence of the Hukbalahap soldiers prompted the United States to reprioritize its interest in the security and stability of the Philippines, as any communist threat anywhere had to be contained. By 1952, President Ramon Magsaysay had almost doubled the size of the Philippine army, to 56,000; he emphasized the use of mobile battalions and boosted morale by rewarding accomplishments and firing or demoting incompetents. The AFP also played a role in international military affairs. In August 1950, 7,500 troops went to Korea as the Philippine Expeditionary Forces. In 1964, 16 army officers were assigned to South Vietnam as advisors on psychological warfare and civil affairs. The Philippine Civic Action Group deployed army engineers and army medical personnel to Vietnam in 1965.

Martial Law and the End of the Cold War

In 1972, President Ferdinand Marcos, with support from the military, declared martial law in order to extend his presidency beyond its two-term limit. After his election in 1965, he rolled back the improved professionalization of the AFP, politicizing the military by making advancement contingent

on a soldier's regional background and on loyalty to him. Between 1972 and 1981, when he lifted the decree, Marcos tripled the size of the armed forces, to about 200,000. The AFP supported the Marcos regime by fighting back challenges from the New People's Army, the military branch of the Communist Party of the Philippines, and the Moro National Liberation Front.

By the 1980s, it was clear that the AFP believed it had the right to determine the legitimacy of the civilian government; in 1986, a faction of the military helped put Marcos's challenger, Corazon Aquino, in office. A series of reforms instituted since then have attempted to restore apolitical professionalism in the AFP. A new constitution drawn up in 1987 designated the president as the commander in chief of the armed forces. After an unsuccessful coup against Aquino in 1989, mutiny and coup d'état became military and civil criminal offenses. In 2003, President Gloria Macapagal Arroyo created the Office of the Presidential Adviser to Implement the Feliciano Commission Recommendations to try to further reform the military.

The end of the 1980s also saw an end to the Cold War, which renewed debates over the continued U.S. military presence on the islands. With the Military Bases Agreement due to expire in 1991, President Corazon Aquino attempted to negotiate an extension of the leases. The United States and the Philippines reached such an agreement in the Treaty of Friendship, Peace, and Cooperation, but the Philippine Senate refused to ratify it. The debate over the treaty was exacerbated by U.S. refusal to specify if it stored nuclear weapons on any of the Philippine bases. Also, the eruption of Mount Pinatubo in 1991 caused significant damage to the naval base at Subic Bay as well as Clark Air Base. Repairs and renovations would have been too costly, and the United States announced plans to dismantle them. Although Aquino worried about the economic effect of the base closings, the Philippine government was disinclined to offer any incentives for the Americans to stay. They were ordered to leave the bases by the end of 1992.

Since the 1990s, the AFP has actively participated in international and domestic efforts to fight terrorism, operations that have increased since the al Qaeda attack on the United States in 2001. From 1990 to 1991, approximately 200 AFP medical personnel assisted coalition forces to liberate Kuwait,

and in 2003, 60 medics, engineers, and other troops participated in the Iraqi invasion. The Moro Islamic Liberation Front renounced terrorism in 2003, and since 2008, it has been involved in peace talks with the Philippine government in an attempt to reach an agreement about territorial independence. Beginning in the early 1990s, the AFP has battled Abu Sayyaf, a group of some 400 Islamic separatists based in the southern Philippine Islands, who allegedly have ties to al Qaeda. Since 2003, the AFP's efforts have been supported by about 600 U.S. Special Forces, as well as U.S. satellite and drone technology. In 2006, the AFP launched a major offensive on Jolo Island against Abu Sayyaf and the Jemaah Islamiya, an Indonesia-based al Qaeda group. By 2010, the AFP had captured or killed 200 of the groups' members. A U.S.-backed air strike on Jolo Island in early 2012 claimed the lives of three top-ranking militants. AFP operations against Abu Sayyaf and the Jemaah Islamiya remain ongoing.

Continuing concerns over terrorist activity in the Philippines and worldwide has brought renewed cooperation between the Philippines and the United States. In 2011, the two countries celebrated the 60th anniversary of the Mutual Defense Treaty and engaged in the first Bilateral Strategic Dialogue in Manila. A second round of talks took place in early 2012. Because of China's growing military power and ongoing territorial disputes over the South China Sea, the Philippines agreed to more joint military exercises and training with the United States, to allow more U.S. troops to rotate through the country, and to purchase additional American military supplies.

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See also Alliances; Asia; Bases, Foreign;
Counterinsurgency; Guerrilla Warfare; Philippines
Insurrection; World War II

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PHILIPPINES INSURRECTION

The Philippines Insurrection began as a follow-up to the Spanish-American War as the Philippines had been the key Spanish colonial possession in the Pacific Ocean, an area of American interest. The American war with Spain only briefly touched the island group, first at the May 1, 1898, naval Battle of Manila Bay and then in an almost farcical ground battle for control of the city of Manila itself in August, both American victories. However, the fighting in the islands did not end there. Much like in Cuba, the Spanish-American War in the Philippines did not just involve the United States and Spain. A series of native insurgencies against Spanish rule had been active for years and constituted one of the main reasons for the war between the United States and Spain in the first place. In the case of the Philippines, an archipelago consisting of scores of islands peopled by scores of ethnic groups, the insurgency generally fell under ethnic Tagalog leadership, in particular that of Emilio Aguinaldo. Aguinaldo and his followers believed that the Spanish-American War had finally provided the opportunity for self-rule. Because of that expectation, when the William McKinley administration decided to keep the United States in the Philippines with the Treaty of Paris in late 1898, the local insurgency against the Spanish quickly turned against the Americans.

Course of the War

At the outbreak of hostilities, Aguinaldo commanded a fairly large and coherent ground force that controlled most of the islands, especially the key island of Luzon. American ground forces, number-

ing some 20,000 regulars and volunteers, occupied the city of Manila. The fighting began with shots fired on a patrol on February 4, 1899, and most of the action that followed involved a ground campaign, with American forces moving north from the city on the main insurgent army in the Manila-Lingayen Gulf corridor. The Americans, under the command of Major General Elwell Otis, launched a series of conventional assaults on dug-in insurgent positions. Initially, these assaults had a great deal of success, as tactically the Filipinos struggled to concentrate their firepower to hold even strong positions against direct American assaults. However, as the Americans left behind their resource base in Manila, their volunteer enlistments ran out, and they began to feel the effects of the tropical conditions, the offensive slowed down. When the rainy season began in the spring, the American offensive stopped altogether.

Otis came under strong criticism in the American press, and when the rainy season ended in the early fall, he ordered renewed attacks north, along with an assault from the sea at Lingayen Gulf. Caught between the American forces and suffering from internal divisions, Aguinaldo's army fell apart as a conventional force. Aguinaldo himself eluded capture, and he did not give up the fight. Instead, in December 1899, he chose to order his scattered troops to begin using guerrilla tactics to continue the fight, initiating the second, and more protracted, phase of the war. A vocal anti-imperialist movement in the United States gave hope to the insurgents that they could prolong the war, allowing the anti-imperialists to come to power and withdraw Americans from the islands. The 1900 election, pitting the avowed anti-imperialist William Jennings Bryan against McKinley, became a key point in the early part of the war. However, even Bryan's defeat in that election did not end the fight.

The second phase lasted at least until the summer of 1902 and was marked more by its variety of conditions than by any unifying theme. Aguinaldo, who had tenuous control over the whole insurgency to begin with, remained in hiding in the northeastern part of Luzon for most of the war, further fracturing the fight by geography, local population, and insurgent group dynamics and leadership. In some places, the insurgents enjoyed widespread sympathy from the population and could use mountainous or jungle terrain to great advantage. Other areas were

more geographically open or peopled by ethnic groups, such as the Macabebes, who had no use for the insurgents or the Tagalog insurgent leadership. To counter the fractured nature of the insurgency in the islands, the Americans had to respond in kind. Under the command of Major General Arthur MacArthur after May 1900, the Americans divided the Philippines into departments and districts, each with its own commander and unique distribution of units.

That is not to say that the Americans deliberately assigned leaders and forces to areas where they would be most effective, and in fact the American activities entailed a great deal of trial and error, because the Philippines Insurrection became a messy, violent affair. The insurgents adopted classic guerrilla, small-unit ambush tactics, avoiding larger engagements with the American forces. They also used violence and terror to try to cow the population of various localities into providing support for the war against the Americans. The Americans, led by MacArthur, his successor after July 1901, Major General Adna Chaffee, the administration-appointed civilian leadership in the islands under William Howard Taft, and the overall policy guidance from McKinley calling for “benevolent assimilation” of the Philippines, tried to respond with a robust modernization program. Much of the program focused on building schools and infrastructure, and the development of stronger self-governing structures at the local level. That effort had only limited success, and then only in areas where the local conditions overwhelmingly did not favor the insurgent movement. In the areas where the guerrillas proved stronger, the specific department and district commanders had to develop their own techniques for pacification, and oftentimes those techniques simply could not be very benevolent. The Philippines Insurrection thus defied any unified theory of counterinsurgency. In one district, using American troops and Filipino auxiliaries to provide population security would be vital to quelling the guerrillas; in the next, small units of highly mobile scouts, with an extensive intelligence network continually harassing guerrilla units and base areas, proved the key to breaking the resistance.

In the spring of 1901, the Americans achieved one of their greatest single military successes in the war. Brigadier General Frederick Funston, commanding the district northeast of Manila, finally gained

solid intelligence on the location of Aguinaldo in the isolated village of Palanan on the northwest coast of Luzon. Funston devised an elaborate ruse that involved friendly Macabebe scouts pretending to be reinforcements to Aguinaldo and posing a handful of American troops, including Funston himself, as prisoners of the reinforcements. The party landed on the Luzon coastline south of Palanan, went on a harrowing march to the outskirts of Aguinaldo’s base area, and managed to dupe the insurgent leader into letting them into his camp. There they took him prisoner and with uncanny timing made their way back to the coast and a waiting naval vessel for transport back to Manila. In the aftermath, Aguinaldo signed a public surrender, and although he had very little direct leadership of the guerrilla bands operating across the islands, the symbolic gesture helped spur other insurgent leaders to surrender in the months to come.

Even that positive trend did not end the Philippines Insurrection on the whole of Luzon, let alone throughout the archipelago. In September 1901, on the island of Samar, an insurgent force launched a surprise attack and massacred most of an American company in the town of Balangiga. The reprisal campaigns that followed were the most brutal of the war, as one brigade of American troops under Brigadier General Jacob Smith tore through Samar with little concern for distinguishing between hostiles and the civilian population. Brigadier General J. Franklin Bell’s campaign in the southern Luzon province of Batangas was more measured but still visited extensive destruction on the local agriculture. Bell took the further step of gathering the local population into concentration camps, where many died due to the poor living conditions. Coupled with the efforts over the previous 2 years, the harsh measures worked. The major insurgent efforts had been broken, and by July 1902, President Theodore Roosevelt declared that the insurrection had ended.

Postwar Legacy and Continued Conflict

Most accounts of the Philippines Insurrection end in 1902, but it is worth noting that the fighting in the islands did not end that year. The United States still controlled the islands with a civilian government supported by a handful of U.S. Army units and an American-led native constabulary. Most of the fighting involved low-level but persistent guerrilla

attacks by criminal bandits called *ladrones*, occasionally punctuated by larger scale uprisings, particularly in the southern islands populated by the Muslim Moro. At least two of these uprisings led to significant U.S. Army campaigns against the Moros, important both for the officers involved and for the violence they had to use in their operations. In 1906, General Leonard Wood led a campaign that culminated in the Battle of Bud Dajo on Jolo Island. Seven years later, a force led by Brigadier General John J. Pershing nearly retraced Wood's steps, concluding with the Battle of Bud Bagsak. Both battles involved significant civilian casualties, and the need for both campaigns indicated that while the Philippines Insurrection may have formally ended, the fight to pacify the islands continued. It is at least arguable that the insurrection did not really end until the violence significantly dropped off after Pershing's campaign.

Altogether, more than 100,000 Americans served in the Philippines Insurrection, with some 4,000 dying in the 1899–1900 period and a few hundred more in the years that followed. Participation and casualties on the insurgent and civilian sides remains a much more complicated issue. Initially, Aguinaldo's conventional force numbered anywhere from 12,000 to 40,000, but his numbers in the guerrilla portion of the war are even more cloudy. As in any insurgency, the boundaries between the population and the insurgents shifted all the time, so it is difficult to come to any clear numbers for insurgent forces or casualties beyond estimates in the neighborhood of 100,000. At the time of the war, the best estimates place the overall population of the Philippines between 5 and 8 million. As for the number of deaths from causes relating to the war among that population, there are still nothing like definitive numbers. Many accounts mention the number 250,000, but that figure appears to be derived from an early guess, with little empirical foundation. There is no doubt, however, that the violence, famine, and disease of the war years caused horrendous casualties among the natives of the islands.

Casualty figures constitute just one of the many historical debates over the Philippines Insurrection, most of which began during the Spanish-American War. The origins of that war created their own historical controversies, but commentators then and later pretty much agreed that the flashpoint for the conflict was Cuba. The connection between a

war over Cuba and conflict over other Spanish colonial possessions, especially those in the Pacific Ocean, was always much more difficult to explain. At the time, Americans who wanted to fight for the Philippines represented a small but powerful minority who believed that the United States needed to expand its influence to join the ranks of the great powers. For much of the previous century, while the United States had expanded across North America, the other great powers had pursued imperial agendas outside their immediate geographic vicinity, especially in Africa. With the closing of the American frontier, some Americans believed that the best opportunity for continued growth was in the Pacific Ocean. At the outbreak of war with Spain, such Americans had enough influence to see to it that the United States would fight over more than Cuba. Assistant Secretary of the Navy Theodore Roosevelt led the way, and it was largely due to his efforts that an American fleet was in position to fight at Manila Bay in May 1898. The army followed that summer, placing all-important troops on the ground in the Philippines as the United States and Spain negotiated the peace.

Antiwar Opposition and Critical Interpretations

The opposition to American occupation emerged in force during those negotiations. Most of the opponents, who quickly took on the moniker of anti-imperialists, did not have a problem with American power per se. They argued for a particular brand of American exceptionalism, that the United States should not seek greatness on the model of the European imperial powers. In their view, the continental possessions of the United States, protected by two oceans, already ensured American power. Furthermore, ruling another people would have the effect of degrading the principles for which the United States stood. Those in favor of remaining in the Philippines felt that the reality had changed, that without some sort of territorial growth the United States would stagnate while other great powers continued to progress, thus threatening American power and principles in the long term. When it came to the specific case of the Pacific and the Philippines, the expansionists saw power first in naval terms. Given the steam technology of the time, naval power and influence in the Pacific meant coaling and port

facilities. In the negotiations over acquisition of the islands, the McKinley administration at first focused on the major ports on Luzon. Very quickly, the debate shifted to the question of whether control of those ports could be maintained if the rest of Luzon were under Spanish or Filipino control. As the native insurgency had all but taken over the island from the Spanish already, Spanish control was quickly ruled out, but the solution was not as simple as leaving sovereignty in the hands of the Filipinos. Despite some initial indications that Aguinaldo would have his government, the expansionists did not believe that the Filipinos could provide stable governance for Luzon, let alone the entire archipelago. Many Americans argued that decades of Spanish misrule and revolution on the islands, coupled with clear tribal divisions among the Filipino population, meant that any native government would quickly fall apart. The resulting instability would not only threaten American ports on Luzon but would provide a power vacuum into which other powers, particularly Great Britain or Germany, could step and assert control. That reasoning led President McKinley to support the acquisition of Luzon, and the same logic applied to the further step of the acquisition of the entire island group.

In the years that followed, the difficulties of fighting the Philippines Insurrection and the slow and painful withdrawal of European powers from overseas colonies helped lead the United States to give up such imperial adventures, but that did not end the historical debates over the onset of the war. Beginning in the 1930s, but expanding much more in the 1960s, critiques from Marxist-inspired historians on the left began to question American power and exceptionalism directly. Such works argued that the United States was as subject as any other power to the rapacious materialistic demands of capitalism and that security and ideology were excuses to cover those real demands. Since the 1960s, scholars have shifted perspective, emphasizing the cultural aspects of the American acquisition of the Philippines. Two such views stand out. One makes the case for race as the driving factor: White Anglo-Saxon Protestant Americans saw the Filipinos, among others, as racially inferior and therefore incapable of self-governance. It became the duty of superior races to govern the inferior ones, a view that only gained urgency as the “superior” race saw their positions at home threatened by increased immigration from southern

and eastern Europe and Asia during the same years. The other cultural view highlights the role of gender in expansion by noting the perceived links in the turn-of-the-century era between manhood and a strenuous life, with adventure and war in far-off lands as the greatest indicator of living such a life. The Philippines provided such an opportunity at just the right time, and so American men seized the chance.

There may be no consensus on the exact origins of the war, and it is unlikely that any one of these interpretations stands on its own. Some sort of combination of the ideological, security, material, and cultural factors provides a solid foundation for grasping the complexity behind the American decision to occupy the islands. On the other side, an understanding of the decision of the insurgents to fight the Americans, and especially of the decision of other Filipinos to remain neutral or ally with the Americans, is developing but is generally overshadowed by literature that emphasizes the war as an event indicating the emergence of Filipino nationalism.

Conduct of the War

The other major debates over the Philippines Insurrection have revolved around the American conduct of the war, especially as that conduct relates to the commission of atrocities. At the time of the war, anti-imperialists seized on reports of American misconduct to question the whole endeavor and make the case for withdrawal. Throughout the fighting, especially as the guerrilla portion of the war dragged on, some American soldiers and officers committed theft, destruction of towns, the killing of civilians, the torture of prisoners, and the summary execution of captured insurgents. The accusations led to denials, investigations, courts-martial, and public hearings. At the time some reports were confirmed and more were found false, but that did not end the issue. Historical works, especially during and after the Vietnam War, depicted atrocities as common behavior among American troops in war. Activities that were considered technically legal at the time came under critique. As in their interpretations of the origins of the war, scholars who focus on culture have especially emphasized racial motivations for the atrocities, with White (and sometimes Black) American troops driven by the belief that

Asian natives were lesser humans or less than human. Other works have sought to rehabilitate the American soldier in the war, acknowledging some atrocities but trying to place the blame on either the individuals responsible or the nature of such guerrilla wars themselves.

In recent years, historical interpretations from within the contemporary military have sought to find the lessons learned from the American counterinsurgency in the war. Most have emphasized that the U.S. Army did not want to fight such wars, so it ignored the lessons, only to have to relearn them in places such as Vietnam, Iraq, and Afghanistan. More nuanced views have looked closer at the Philippines Insurrection and found that the lessons were not so simple. As purely war-winning measures, some of the harsher techniques employed by the Americans also proved to be the most effective. But the attendant controversies over such measures threatened American public will at home to keep up the fight. Current U.S. Army doctrine does not believe that such measures prove effective in the long run, in part because they undermine public support, but more because of a conviction that population security is more productive than the use of force in a counterinsurgency. To soldiers who hold such a belief, some of the very lessons to be learned from a few of the localities in the Philippines do not match their belief of what works in a contemporary counterinsurgency; therefore, such lessons only confuse matters.

The complexity of the issues involved means that the controversies over the Philippines Insurrection are ongoing, and the war remains a vital area of study in the field of military science.

Thomas Bruscino

See also Counterinsurgency; Guerrilla Warfare; Philippines; Spanish-American War (1898)

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PHOTOGRAPHY, COMBAT

Combat photography is a wartime documentation method designed to capture close and personal images of soldiers engaged in warfare. These images document battle scenes, the aftermath of combat, and the lives of soldiers in the war zone. This entry discusses the history of combat photography, examining how evolving technologies and the advent of the Internet affected the way war is documented.

Early History

The roots of combat photography trace back to the mid-1800s, when an anonymous photographer took

a series of daguerreotypes (an early form of photographs) to document the Mexican-American War.

Early on, the technological limitations of bulky, slow photographic equipment meant that photographers were unable to capture moving images and, instead, would take still images of the battlefield after fighting had ceased. Original combat photographs highlighted the bloodshed and loss of life that followed epic battles such as Gettysburg and Antietam during the American Civil War. Many viewers of these early photographs questioned their authenticity, believing the new technology to be artistic creations akin to paintings.

While photography advanced beyond the public's understanding of it, some early images from this period do appear to be staged due to either the photographer's interference or manipulation of subject matter over simple image captures. Photographers, often employed by well-known photographers like Matthew Brady, were sent off on horseback with their bulky equipment to capture images of the battlefields once the battles ended. The photographers' work produced images of war that were sometimes created by moving corpses or standing in for soldiers and officers. Intentional manipulation of the film and negatives emerged well after the war, as technologies improved near the turn of the century, aiming to erase the mechanical look of photos that baffled the public. Despite primitive manipulation on the part of the photographer, even staged photos from the Civil War battlefields capture life, death, and the landscape of the war in such a way that can only be replicated but never wholly repeated.

In the decades following the Civil War, camera technology evolved tremendously from expensive, cumbersome machines with long production times to compact digital devices capable of photographing and videotaping discretely, with instantaneous results and playback. By the late 1800s, the U.S. Army began recognizing the value of combat photography, training soldiers to use cameras, publishing an instruction manual, and opening a lab for processing and development of images. By the early 1900s, camera technology advanced to include motion picture, land, and aerial photography. However, in spite of these advancements, the equipment remained cumbersome and difficult to maneuver, in effect continuing to keep cameras off active battlefields. Even so, technological advances made images starkly realistic, able to showcase the

extremes of warfare, and as the physical limitations of equipment disappeared, combat photography became part of embedded journalism, giving civilians an honest look at soldiers' lives.

Combat photography has been present in every war since the 1840s and over time has become an integral part of telling the war story, from daily activities such as meals and roll call to heavy battles on land or sea and in the air. In spite of the significance of combat photography, no accepted legal, ethical, or widespread publication standards exist, and images can be subject to controversy specific to each war. A continually advancing form of media, combat photography is responsible for some of the most definitive investigation and reporting of wartime conditions, in addition to producing a number of iconic images.

World War I, World II, Korea, and Vietnam

While the roots of combat photography reach back to the 1800s, it was not until the First and Second World Wars that combat photographers began to document actual battles. By the time the United States entered the First World War, the military had developed what would be known as the Photographic Division, employing some 600 soldiers by 1918. However, these photographers were often stymied by their equipment and could not always capture the unfolding battles for safety reasons. In addition to safety concerns, the government began to censor combat photographs, typically highlighting soldiers marching, generals convening, ships sailing, and clean hospital scenes.

It was not until the Second World War that a number of notable combat photographs entered the public consciousness via newspapers, popular magazines, and wartime propaganda, giving citizens a look at the gritty reality of war. One recognizable example is that of the U.S. Marines raising the American flag over Iwo Jima in 1945, which has been reproduced and replicated thousands of times, even serving as inspiration for a physical memorial in Washington, D.C. Still, government censorship played a huge role in controlling the war narrative. President Franklin D. Roosevelt established the Office of Censorship to monitor any and all photographs and press coverage. As the war went on, the government began to release more combat photographs to help the public see and understand the war, even showing images of U.S. soldiers suffering.

Following the Second World War, combat photography evolved rapidly with the integration of journalists and photographers into physical combat units, creating the field of embedded journalism. During the Korean and Vietnam Wars combat photography became far more explicit, moving away from the stirring, patriotic images of previous wars to a more realistic and, oftentimes, disturbing portrayal of combat. With journalists and photographers following combat units, the images provided a first-hand account. Photographs began to appear weekly, via news organizations such as the Associated Press and publications such as *Life* magazine, of injured soldiers and civilians, burning villages, dead bodies, massacres, and the like.

On the home front, still photographs coupled with nightly news coverage caused various forms of controversy since the majority of citizens had never witnessed the carnage and suffering of war on the front page of the newspaper and were uncertain how to react. Body counts were given, commentary narrated the images, and the media became an influencing factor. Notably, the most infamous combat photographs from Vietnam included the Pulitzer Prize-winning image of General Nguyen Ngoc Loan executing Viet Cong officer and prisoner Nguyen Van Lem in the street during the 1968 Tet Offensive and 9-year-old Kim Phuc running naked down the street after being doused with napalm in 1972. As a result, combat images began to raise moral and ethical questions previously undiscussed by the media, a trend that persisted well into the 21st century.

While World War I remained hard to capture, World War II became the first to be heavily documented. The Vietnam War, and the Korean War to an extent, began to break the patterns set by the preceding wars as combat photographers took to the front lines, taking photos of the action as it unfolded, including deployment, injuries, and atrocities. Though Vietnam War photographers still relied on traditional development techniques, the images sent home were broadcast and rebroadcast across television and print media channels. Images from the Vietnam War still persist, in large part because of digitization and online archiving.

First Gulf War

After the Vietnam War, the techniques and methods of combat photography were reviewed and

updated within the field and in scholarly literature. Controversial images were examined as camera technology continued to evolve and photography became part of the push toward online documentation versus the limitations of print media. Even some 15 years after the Vietnam War ended, the images were still visible in the war's historical memory.

During the First Gulf War, sometimes referred to as the Persian Gulf War, combat photography became less of a media presence than in previous involvements. Photographers documented carbonized bodies and the widespread physical destruction of homes and structures resulting from air strikes and bombing. Combat photographs covered areas such as the Highway of Death between Kuwait and Iraq, which saw heavy battle during the final days of the war.

However, a government consensus within the administration of George H. W. Bush ruled that such images should remain out of the public eye and it moved to completely ban the publication of soldiers' coffins. This ban meant that photographers were not allowed to shoot at military funerals in Arlington National Cemetery or on military bases such as the Dover Air Force Base, which was responsible for receiving the returning coffins. As a result, much of the combat photography from the First Gulf War remained private until well after the war ended. Only after the beginning of the Second Gulf War and fighting in Afghanistan were a number of these photos released and are now accessible online and in archives.

Post-9/11 Status

In the wake of the attacks of September 11, 2001, the combat photograph was once again reconsidered as the United States reeled from the terror attacks and entered into involvements in both Afghanistan and Iraq. The country was inundated with disturbing photos of the World Trade Center and Pentagon, and there was a general sentiment that combat photography should be kept clean and focused on patriotic, inspiring images. The issue was even analyzed by the Pentagon, which studied different forms of combat photography and, ultimately, opted to lift the Gulf War-era ban on photos of soldiers' coffins in 2009.

Additionally, those photographers embedding in Afghanistan and Iraq were required to sign contracts

that ensured that each photographer would not divulge any information that would endanger a unit's position, future movements, weapons, or any additional movement. In effect, these contracts acted as restrictions on the combat photography produced and its subsequent publication.

Despite rapid advances in the technology of combat photography, the subject matter saw a slow series of evolutions. In the first few years after 9/11, a number of newspapers refused to publish disturbing images, given the atmosphere in the country, which was still healing from the attacks. Self-censorship permeated the photography world, and some newspapers even toned down coverage to avoid offending readers, omitting descriptions of battles, injuries, and soldier deaths. However, as the wars progressed, this sentiment began to fade around 2005, making images more readily available.

Within a few years of 9/11, many news outlets began reporting an increase of disturbing images, the result of continued fighting and changing technology. Notably, a number of extremely disturbing photographs that pushed the boundaries of previous controversial photographs were published, including images of prisoner abuse, the beheading of an American civilian, and the dead bodies of Uday and Quasay Hussein, sons of the ousted Iraqi leader Saddam Hussein. Similarly, other controversies arose over embedded media disclosing confidential locations and information vital to the war and leading some to question the authenticity of certain images.

The Digital Age

As digital photography became the standard of combat documentation, newer cameras allowed photographers to see their images immediately after capture. Digital photography made photo manipulation and distribution far easier, giving embedded photojournalists the ability to send photos to their editors almost instantly after upload, even from the battlefield. Coupled with the rise of the Internet, combat photography went viral and entered private homes via web searches and online news stories.

Combat photography websites and blogs began to appear where site visitors could browse images at their own discretion, following a possible disclaimer. With the advent of websites, such as YouTube and WikiLeaks, combat photography and graphic images began to permeate the Internet as soldiers

with cell phones began to assume the role of amateur combat photographers.

As a result of soldiers producing their own images, military branches moved to regulate combat photography to prevent the spread of manipulated or disturbing images of both soldiers and the enemy. The Department of Defense now offers military photography workshops to interested enlisted men and women. There is also an annual award series given out by the military in the categories of Photographer of the Year, Videographer of the Year, Portrait, Pictorial, and Combat Camera among others. At present, it seems the military has responded to the inevitable involvement of soldiers as photographers by adapting to the trend rather than denouncing it.

Modern State of Combat Photography

Due to the spread of digital and online technologies, combat photography entered into a period of flux. After 9/11, the majority of combat photographers were considered to be embedded, or traveling with military units. In addition to embedded photographers, there were a number of unembedded combat photographers who acted as rogue documenters of the war. And finally, there are the soldiers who document their missions and actions through whatever means of technology they carry on their person.

Typically, the embedded and unembedded combat photographers are professionals, who travel with long-range lens, multiple cameras, and equipment that will ensure quality photography of whatever subject matter they encounter. However, the soldier variety of combat photographer usually relies on cell phone cameras or small digital cameras that produce grainy stills and short video clips. Still, the quality of the image has proven to be less important than the subject matter when it comes to what global news organizations choose to publish. Controversial or enlightening photos are often published above the more traditionally based battle scenes because of the raw, realistic quality these images provide viewers.

Without legal regulation and with the aid of the Internet, combat photography continues to change and is currently headed toward a freer format. In place of the classic combat photography nomenclature, the style is now often referred to as war or military photography.

Kate Achille

See also Censorship; Journalists, Embedded; Media Relations, Military; Public Affairs, Military

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PHYSICAL FITNESS

Physical fitness has always been a key element in winning ground on the battlefield. As the battlefield has evolved, tactics have as well; in modern situations, soldiers carry multiple weapons and ammunition. Soldiers must maintain their physical fitness if they want to remain lethal over the duration of a patrol or battle. Soldiers must be able to move quickly over a long period of time, while carrying their ammo, weapons, and any other supplies they may need to sustain themselves. This can push an individual's physical stamina to the limits and, at the same time, requires the soldier to stay mentally alert for possible threats. Being exposed to the stress of a battlefield can create physical fatigue and mental sluggishness; hence, maintaining one's physical fitness is vital to success on the battlefield.

History and Background

Most armies throughout history have used some sort of systematic physical training to prepare their troops for battle. Although much of this training focused on specific military skills—swordsmanship, horseback riding, and so on—training for general strength and endurance was also an important part of the regime. According to Vegetius, soldiers in the Roman army were specifically trained to be able to cover long distances by foot, marching up to 20 miles in 5 hours.

For armies less professionalized than the Romans, sports and other games were an important way to measure fitness and to improve it. Among the non-Spartan Greeks, for example, athletes trained in the events of the ancient pentathlon—running, long jump, javelin throw, discus throw, and wrestling—which were thought to be directly related to battlefield performance. However, in eras where even normal civilian life was physically demanding, training for strength and endurance probably was not as important as in the modern era. Systematic physical training became increasingly important in the modern era as scientific methods of measuring fitness became available and as everyday life became increasingly sedentary. Many advances in military physical training—and even in the realm of civilian fitness—have been motivated by the need to maintain a stream of recruits fit for military duty.

In general, physical fitness in military organizations is attained through a process of selection for basic physical health and through training to a standard of fitness. Candidates for military induction are put through extensive medical examinations to ensure that they are healthy enough to endure the rigors of military service. After joining the service, they are generally put through a demanding course of physical training, including calisthenics and extensive running, to develop the key components of physical fitness to military standards. Those in combat arms units, those who perform more specialized jobs, and those who belong to more selective units (e.g., paratroopers or special operations units) typically undergo an even more exacting training and selection process.

Key Components of Physical Fitness

The American military defines physical fitness as the performance of demanding physical tasks, the maintenance of physical health, and the maintenance of personal appearance. Differences between civilian and military physical fitness standards generally reflect each group's individual goals. While civilian physical training may be focused on cosmetic goals or promoting longevity and is largely optional, physical training is mandatory for the entire military population and is fundamentally aimed at success on the battlefield. Widely recognized components of physical readiness include aerobic fitness, muscle strength, muscular endurance, flexibility, speed and agility,

and the skills necessary to complete specialized tasks such as swimming, mountaineering, or cross-country marching. Physical fitness in the military, then, is maintained through a combination of systematic training and measurement to ensure that servicewide and specialized standards are met and maintained.

Origins of American Military Physical Fitness

The U.S. military's interest in physical fitness originated with the creation of the Department of Physical Education at the United States Military Academy (USMA), West Point, New York, in 1814. Pierre Thomas, a fencing instructor, was the first full-time physical educator at a higher education institution in the United States. The creation of the Cadet Physical Fitness Test (CPFT) represents the first concerted effort to promote physical fitness among USMA cadets. Thomas had the support of Superintendent Alden Partridge, who worked to secure the USMA Board of Visitors' support for physical training. In 1826, the Board of Visitors reported that physical education was crucial for a military officer. Between the years 1815 and 1885, military physical education consisted of sword exercises, military drills, and an earlier version of football. The key goals of these three exercises were to strengthen the cadets' bodies, stimulate ambition, prevent idleness, and keep minds sharp.

Herman J. Koehler's assumption of control over the physical education program at West Point in 1885 brought about the expansion of the military cadet exercises with the inclusion of calisthenics, swimming, gymnastics, boxing, wrestling, and bayonet exercises. Following Koehler's efforts, the U.S. Army, with its entry into World War I, would adapt these training exercises as the basis of its field training manuals. CPFT training exercises remained the same until they were revised in 1923. In that year, Koehler established the first standards of evaluation for cadets. With Koehler's standards, a cadet would be measured in seven strength areas, including body measurements and the administering of a 10-minute breaststroke swim test. The use of an outdoor track was introduced in 1927 to test cadets' endurance and stamina. Between 1936 and 1943 the USMA experimented with many new versions of the physical fitness test.

World War II brought great changes to the CPFT. The year 1944 witnessed the first dismissal

of a cadet from one of the military academies due to his lack of physical ability. A grading system was introduced in 1946, which included a physical efficiency grade based on a cadet's physical ability. Following the Service Academies' admission of women in 1976, female cadets took part in the PFT, which continued to adhere to high standards. By this time, however, many doubted the physical ability of U.S. troops. Most notably, President Jimmy Carter noted that the U.S. military fitness level lagged behind that of Mexico. This brought about more drastic changes to the Army Physical Fitness Test (APFT). Secretary of Defense Harold Brown was designated to redesign a physical standards test for the military to measure each U.S. soldier's fitness level. Brown formed a committee in 1980 to create an all-U.S. military fitness test for future soldiers. Representatives from the army and the Marine Corps, civilian educators, and members of the Army Fitness School created a physical fitness test that focused on three areas of a soldier's physical fitness: (1) aerobic capacity (a 2-mile run), (2) upper-body strength (push-ups and pull-ups), and (3) abdominal strength and endurance. These new testing strategies benefited the army by increasing the efficiency by which the physical fitness of soldiers was assessed as well as by highlighting areas for improvement. These tests became standard across the military in 1981.

The USMA also adopted these new APFT standards in 1981. These tests were administered to cadets, requiring them to perform the actions in combat boots and fatigue pants. Cadets generally scored well based on the military scoring standards, with most receiving B+ grades. Continued efforts to improve soldiers' fitness, however, pushed the academy to revamp its assessment scores and require a minimum score of 201 out of 300 points to receive a passing grade, with each event worth a total of 100 points. The year 1985 brought about new testing standards for cadets, and uniforms were changed to include shirts and athletic shorts. Seeking to emphasize the importance of measuring the fitness levels of cadets, in 1987 the army changed the name of the physical fitness test from Army Physical Readiness Test to Army Physical Fitness Test. The grading scale was again revised, increasing the standard 100-point army score per event to 125 points per event. Once the change in grading scale was complete, the name was changed from APFT back to CPFT. Testing

standards have varied only slightly during the past 20 years.

Testing Fitness Standards in the Contemporary U.S. Armed Forces

The basic tests for physical fitness in the U.S. armed forces measure upper-body strength, cardiovascular strength, and core strength. In the army, navy, and air force, upper-body strength is measured by the maximum number of push-ups performed in a 2-minute period, and in the Marine Corps, it is measured by the maximum number of pull-ups. Aerobic endurance is measured through timed runs (2 miles in the army, navy, and air force and 3 miles in the Marines), and core strength is measured by the maximum number of sit-ups or crunches in a 2-minute period. Infantry units, paratroopers, and special operations forces have more stringent standards. The physical fitness test for U.S. Army Rangers, for example, also measures pull-ups, a 5-mile run, a timed 16-mile hike with a heavy load, and a relatively short swim with combat gear. U.S. Navy SEALs test swimming extensively, both for speed and for distance. In recent years, the U.S. military has begun to emphasize other physical capabilities, such as speed and agility, in an attempt to make the measurement of physical fitness more relevant to the demands of the battlefield. In 2008, the U.S. Marine Corps adopted a new combat fitness test that emphasized short-distance running, agility, and functional tests of upper-body strength; a similar test is under development for the U.S. Army.

Training Methods

The training methods employed in the armed forces are not markedly dissimilar to those employed in the civilian world. In fact, the basic principles—muscular overload, endurance, and skills training—are often very similar. However, the armed forces work under constraints of budget, time, and space. With large numbers of personnel to train, much of the military physical fitness program focuses on exercises that do not require expensive specialized equipment. Although gyms and swimming pools are provided for American military personnel to exercise in their leisure time, military fitness programs tend to emphasize push-ups, pull-ups, other callisthenic exercises, and running. These are often done in unison in a group setting, thereby offering the military

additional opportunities to enhance unit cohesion and identity. In addition, military units—especially basic training units—often emphasize runs in formation and other group activities. Finally, recruits and other military personnel are put through obstacle courses to develop complex motor skills and agility, which are useful in the unpredictable terrain of the battlefield.

The Army Physical Readiness Test

Today's U.S. Army infantry troops are more physically fit than Special Forces troops from the Vietnam era; the Army is also engaged in an ongoing effort to update the APFT to reflect the physical demands of diverse combat environments and other contemporary duties. As of late 2012, implementation of a new version of the test—to be called the Army Physical Readiness Test (APRT)—was on hold while army officials determined how best to measure soldiers' fitness and ability. There had been talk of incorporating the Army Combat Readiness Test (ACRT) into the training regimen, but at present, this has not come to fruition. The army plans to continue using the APFT pending a study of how best to measure soldiers' baseline physical readiness.

Current Issues

As epidemic levels of obesity become more common in Western countries, physical fitness standards and training are receiving increasing emphasis in the U.S. military. Weight control standards are becoming more prominent, and military organizations are providing counseling and exercise facilities in an effort to maintain standards. Women's increasing presence in the military also raises questions about the proper way to assess and promote physical fitness. At present, all military branches have separate physical standards and tests for servicemen and servicewomen, which continue to evolve in parallel. As more women enter the armed forces, however, issues of physical difference continue to be highlighted, especially with regard to women serving in combat zones. Additionally, fitness standards are continuing to evolve to reflect the functional requirements of the battlefield and to incorporate recent developments in civilian physical fitness. All of these issues suggest that military physical fitness continues to evolve in a dynamic environment as all the services strive to put

the best trained, fittest, and best equipped servicemen and servicewomen in the field.

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See also Sports; Training, Air Force Enlisted; Training, Air Force Pilots; Training, Army Enlisted; Training, Army Officers; Training, Coast Guard Enlisted; Training, Coast Guard Officers; Training, Marine Corps Enlisted; Training, Marine Corps Officers; Training, Naval Enlisted; Training, Naval Officers; U.S. Military Academy

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PIRACY, HIGH SEAS

Piracy is a global concern, particularly in the busy waterways around the Gulf of Aden near the Horn of Africa. Since 2003, pirate encounters have rapidly escalated and have been reported off the coasts of Bangladesh, Nigeria, Brazil, Peru, and Singapore, as well as other coasts around the world. In 2009, there were reports of attacks off the coast of Haiti and Columbia in which coastal tankers were hijacked. Even though piracy does not affect a large number of ships, the frequency of attacks has increased significantly. Piracy is a problem that benefits not only the criminal activities in the country where the pirates originate or work out of but other nations as well. Piracy promotes lawlessness and instability and supplies criminals as well as terrorists with the means of continuing the crimes they commit through the trading of illegally obtained materials. This entry describes the routes and type of ships targeted, the procedures of pirates, and the actions being taken to protect shipping lanes from pirates.

While piracy is not yet a direct threat to the vital national interests of the United States, criminal activities on the high seas, especially around Africa, do affect American interests in the region and the freedom of the seas, where 80% of global commerce takes place. An increasingly important component of the global economy is maritime commerce, and it is defined by large, containerized shipping, moving through mega ports, forming the major component of just-in-time international trade. Other types of ships that are usually targeted include trawler vessels, vessels with chemical products, general-cargo ships, bulk carriers, and sometimes tug boats or barges. Yachts and ferries are very rarely attacked.

An example of important trade materials that pass through mega ports via ships are the barrels of oil exported from West Africa. Ten percent of the goods crossing the high seas near African coasts are oil. West African oil will be a large part of imported oil in the United States by 2015. In all, 25% of the oil in the United States will come from West Africa, and as of 2010, countries in the region around the

Gulf of Guinea had lost approximately \$1 billion in oil annually due to piracy. In turn, this will, and has, affected the world oil market prices.

The amount of piracy taking place around the world is a major factor when shipping companies consider shipping routes, particularly around the Gulf of Aden, covering a width of 300 miles and flowing 920 miles between Somalia, Yemen, and Djibouti, overall covering 205,000 square miles. This is a key shipping route of the Suez Canal, linking the West with Asia. Using shorter alternative routes because of fear of pirates scouting in the Suez Canal decreases the time, energy, and cost of shipping. Because of this, more than 20,000 ships pass through the Gulf of Aden each year, as it takes 2,700 miles off a cargo ship's alternative voyage, which is around the tip of Africa. If a shipping company is forced to take the route around the tip of Africa due to the threat of pirates, this can add to the fuel

costs of transporting cargo. Such increase in the cost of fuel adds up to around \$3.5 million annually, and additional costs in charter expenses can be as much as \$14.6 million. This, as well as the dangerous navigation through winter waters at the tip of Africa, is another concern for shipping companies and ultimately disrupts the supply chain.

While pirate activity has been reported all over the world, many of the Suez Canal and Indian Ocean pirates operate out of the failed state of Somalia. Since March 1995, when the United Nations pulled out, the country has lacked a central government that is recognized as legitimate by the Somali people, and the lawlessness continues, with pirates playing a key role. Most of the major pirate bases of concern are in Somalia, principally in Eyl, which is in the northeastern Puntland region. There is also activity in Xarardheere, in the central part of the country. However, due to the increase in UN-authorized



Members of the visit, board, search, and seizure team and U.S. Coast Guard Maritime Safety and Security Team 91104 enter a rigid hull inflatable boat from guided-missile cruiser USS *Anzio* (CG 68) before boarding a skiff containing suspected pirates on September 1, 2009, in the Gulf of Aden. *Anzio* is the flagship of Combined Task Force 151, a multinational task force established to conduct counterpiracy operations off the coast of Somalia.

Source: U.S. Navy photo by Mass Communication Specialist 2nd Class Brian K. Fromal (released).

naval activity by the United States, Europe, and Asia in the region, which is used to help protect foreign interests, pirates have worked around these increased security measures. For instance, while international shipping companies and fleets began to move away from the coasts of Somalia in the Indian Ocean, pirates moved north to the Gulf of Aden and can be found as far south as the Mozambique Channel and the Seychelles, as well as east toward India. There are an estimated 1,000 armed pirates, comprising former militiamen and fishermen working in these waters.

The criminal activities in the Horn of Africa are of major concern in that pirates aid the lawlessness and enterprises of the criminals. In turn, this empowers extremist groups such as the Harakat al-Shabab network, which is an al Qaeda-linked Islamist militant group. Al-Shabab benefits from the pirate activities in numerous ways. Pirates are used to smuggle goods and weapons from various ports to Somalia, making it a port of entry for foreign fighters. There are documented cases where pirates transported the foreign fighters into Africa and terrorists out, including the individuals responsible for the March 2009 bombing in Yemen. In turn, pirates are allowed to operate in the areas controlled by the Islamist groups. Pirates pay their suppliers through the profits made off hijacked and pilfered ships. Additionally, not only are pirates used as a way to transport potential terrorists and criminals, but also the cargo pilfered from hijacked ships may contain weapons, drugs, or other potentially useful materials that could ultimately find their way to the terrorist organizations.

The primary goal of pirates is to make money. This is achieved through the robbing of a ship's crew and the pilfering of cargo, but a lot of the money made by pirates also comes from kidnapping crewmembers and demanding ransom from the shipping companies. The amount of ransom a pirate can get is about \$1 million to \$2 million per ship. In 2008, \$30 million was the minimum obtained from pirate activity, in addition to other crimes such as smuggling. In 2009, 214 ships were attacked by pirates and 47 seized. From those ships, 867 people were taken hostage, possibly doubling the \$30 million made in 2008. In addition to this \$30 million, it was reported that 4 mariners were killed and another 14 presumed dead or missing. Even though kidnapping and sometimes fatalities occur, it is only rarely that the crew of a hijacked ship is harmed.

Pirates usually have a network of depots established along coasts, which not only allows them to sell their goods, rearm, and resupply their ships but also allows them the opportunity to contact spies who may be working for them in the area, gathering vital information about the ships that may be passing through. Profits from hijacked cargo are dispersed to the pirate suppliers, organizers, and investors who support the pirates during their time on the sea. Profits also benefit those in their clan, which includes family and friends. The money made from pirating serves as a significant means of income for not only the criminals who supply the pirates but also the thousands of people in the country in general. In addition to the dispersal of the profits among suppliers, friends, and family, they also go toward upgrading vessels and weapons used to hijack ships, strengthening and helping pirate activity grow.

Pirates go to sea in their "mother ship," which is usually a fishing vessel that is first hijacked and then used as a scouting ship. These ships will last longer at sea than the skiffs used to find a potential mother vessel. Once a passing cargo ship has been spotted, the mother ship deploys two to four smaller high-speed vessels that flank the target. To slow or stop the ship, pirates use various means of intimidation, which include firing automatic weapons and rocket-propelled grenades. Once the target has slowed, a team of 7–10 pirates uses ladders and grappling hooks to climb aboard, taking the ship and its crew hostage. The team of pirates is usually armed, and the low number of crewmen (usually no more than a dozen) aids in the easy hijacking of a ship.

The International Maritime Bureau of the International Chamber of Commerce reports that in 2004 there were 38 recorded pirate attacks in the Strait of Malacca. In 2008, there were only two. This is an example of the public-private cooperation with the Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia and is credited with reducing sea crime in that region. Sixteen nations participate in this regional cooperation.

The United States, in partnership with other countries, takes action in protecting shipping lanes in areas of high traffic. Recently, North Atlantic Treaty Organization ships have been replaced by a European Union task force, in addition to U.S. naval forces, to create a multinational antipiracy effort known as Combined Task Force 151. Other nations

that are participating in operations include Great Britain, Greece, Italy, Germany, France, Denmark, Turkey, Russia, Pakistan, India, Saudi Arabia, China, and Malaysia, with the Republic of Korea and Japan looking to join the efforts of combating piracy.

Because of the lack of government since the 1980s, and the pirates' network of benefiting supporters and suppliers, Somalia is one of the key countries to look at for stopping pirate activity. Ending piracy in Somalia will help aid in the efforts to end it elsewhere. The increase in the frequency of attacks from Somali pirates shows the need to defeat piracy in and around Africa. A strong central government must be established. In the absence of government, the brazen acts of pirates with regard to human trafficking, drug and arms smuggling, and other criminal activities will not stop. They will continue to serve as an example to other potential pirates or terrorist groups in other countries as ways of preparation and procedure.

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See also Coast Guard, U.S.; Somalia

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PLANS, OPERATIONAL

Operational planning is a means by which commanders conceive of more desirable future conditions and devise a means to attain these conditions. The operational plan is also a tool through which the commander communicates how his or her unit will achieve this more desirable condition. Operational plans act as a guide to military action. In war, planning can also help commanders make the best use of scarce or precious resources. Failure to conduct careful planning may result in a waste of time, money, or the lives of soldiers. This entry discusses the steps

in the planning cycle, characteristics of good operational plans, and changes to planning doctrine in the U.S. Army and Marine Corps.

How and Why Operational Plans Are Created and Utilized

Operational plans may be created to address events, expected future events, or possible contingencies. Such planning may be conducted because of a current or emerging threat. For example, the Germans conducted extensive planning before launching Operation Albion, an amphibious assault on several islands in the Baltic Sea in 1917. Once the operation was under way, however, planning did not stop. The Germans adjusted their plans to meet changing conditions as the battle unfolded. In some cases, planning is conducted during times of peace to address the conditions that may emerge in the future. The planning done by U.S. forces to meet Soviet invaders in Germany's Fulda Gap during the Cold War is but one example.

Military units of all sizes conduct some form of planning before conducting any activity. At the conceptual level, the planning process of each of these units is similar, regardless of size. Each leader, commander, or staff attempts to attain the best possible understanding of the current situation. This understanding, viewed through the lens of the friendly mission, is the basis for determining possible courses of action to achieve the assigned mission in the conditions that prevail. These courses of action are examined and evaluated, and one of them is selected. This course of action is then communicated to those who must put it into action. It is worth noting that this description closely mirrors the OODA (Observe, Orient, Decide, and Act) loop, or decision-making cycle, put forward by the military theorist Colonel John Boyd, U.S. Air Force.

General Planning Cycle

The first step in planning is to determine the nature of the problem. It is critical that the problem is clearly identified. A planner's understanding of the problem plays an important role in determining the approach that will be taken in attempting to solve the problem.

The next step is to develop potential courses of action that will effectively address the problem. These courses of action need not be perfect. In fact,

attempts to devise the “perfect” solution are likely to take up a great deal of valuable time. Even in those rare instances in which time is not a factor, it is unlikely that planners will possess all the information necessary to make a “perfect” decision.

Courses of action are then tested, usually through war gaming, to determine how well they will withstand the shocks likely to be administered by the enemy or by simple chance. Potential courses of action are then compared to determine which one will best meet the requirements of the mission and the desires of the commander. Once a course of action is selected, that course of action must be communicated to subordinates so that they can put it into action.

Characteristics of Good Plans

The true value of planning is to establish an intellectual and conceptual framework within which leaders may conduct operations. Plans should be flexible enough that they will retain some value in spite of the unforeseeable actions that always occur in military activities, whether due to enemy action or the role of chance. When based on a careful appreciation of the enemy’s capabilities and probable intentions, it is likely that some aspects of the plan will still be relevant, even if the enemy acts in an unexpected manner.

The utility of any operational plan should be measured by its effectiveness during execution. One of the most common errors in planning is that plans are often viewed as a “script” for how the battle is intended to unfold. This is a gross error, and planners must curb the natural tendency to be overly prescriptive. There is often an unfortunate tendency to judge the value of a plan by the level of detail included. As a result, plans can become so complex that they are unable to cope with the multiplicity of possible events that the actions of enemy forces and friendly forces may present. Due to the complexity of war, little often goes precisely as planned.

The best plans are usually fairly simple. Even simple plans are challenging to execute due to the entropic force that the historian and theorist Carl von Clausewitz labeled “friction.” A plan that is too complex is likely to fail even before enemy action is encountered, simply due to the effects of friction. In planning, simplicity also extends to the means of communicating the plan to subordinates.

Good plans are models of clear and concise communication. The commander must clearly describe what he or she wishes the operation to achieve. If there is room for misunderstanding or misinterpretation, the commander is ultimately responsible. No more and no less information should be given than is necessary.

Plans should not include unnecessary information, such as recapitulation of doctrine or descriptions of a standard procedure, if it can be found elsewhere and is widely understood. Such unnecessary information does not aid subordinates in understanding the commander’s strategy for accomplishing the mission or the role each subordinate element is expected to play. Such frivolous additions simply obscure the message and may even have the unintended consequence of discouraging subordinates from reading the order.

In addition, to give subordinates the ability to accomplish the mission in a dynamic combat environment, the commander should brief the subordinates about their mission and not dictate the manner in which the mission should be accomplished. Planners and commanders should limit the flexibility of subordinates as little as possible. Good planning creates a framework within which subordinates are able and free to adapt as unforeseen challenges and opportunities arise.

Organization

Plans must be communicated in a logical, coherent manner to those who are responsible for their execution. The method that most modern forces use is known as the “Five Paragraph Order.” The order is preceded by a brief orientation. The orientation provides subordinates with a broader perspective regarding the prevailing conditions that warranted creation of the plan.

The first paragraph is the “situation” paragraph. This refers specifically to the enemy that the force issuing the order must face. The situation paragraph also provides an analysis of the effect that terrain will have on friendly and enemy forces. In a counterinsurgency context, the situation paragraph may also contain information regarding the local population.

The second paragraph is the “mission” paragraph. This contains a brief statement of what the unit is to accomplish. The third paragraph is the “execution” paragraph. It details how the unit will

accomplish the mission and establishes tasks for subordinate units. The next paragraph is the “administration and logistics” paragraph, which details the support that subordinate elements can expect from their higher headquarters. The last paragraph is the “command and signals” paragraph. This describes the means by which command and control will be exercised. Although most operational plans generally adhere to the foregoing organization, format is less important than content and clarity. Plans may also contain numerous annexes and appendices to clarify or provide the necessary detail.

The Role of Planning in Military Decision Making

Good plans play at least three important roles in aiding military decision making. First, good planning provides commanders and staff with an understanding of the possibilities and limitations that the situation offers to both friendly forces and the enemy. Even in the unlikely event that some occurrence renders all the planning products irrelevant, as long as the unit is operating on the same terrain, the time spent in planning will be of value. Second, even if the situation does change and parts of the plan are no longer applicable, some elements may still be useful and will provide the basis for a new plan to be crafted. Third, it is also possible that with enough time and thought, the plan will accurately envision the options open to the enemy commander. In such a case, branch plans and sequels can be created to deal with likely or possible enemy actions (branch plans are plans created to deal with possible enemy actions, while sequels are plans for actions that follow the current operation, based on the likely outcome). These branches and sequels facilitate friendly decisions and allow more rapid friendly actions.

Changes to Planning Doctrine

Both the U.S. Marine Corps and the U.S. Army have introduced changes to their planning doctrine in response to the lessons learned during the wars in Afghanistan and Iraq. Before Iraq and Afghanistan, conventional military operations dominated much of the preparation for future conflict. Planning doctrine largely reflected this mind-set. Little attention was devoted to nonmilitary factors. For instance, previous planning doctrine did not adequately address the requirement to understand the influence of the

local culture and population in military operations. The indigenous population, largely found in urban areas, was to be avoided and battle sought with potential enemies in the open. While it was realized that potential enemies would be able to influence where combat took place, efforts to revise urban warfare doctrine were largely incomplete when the campaigns in Iraq and Afghanistan commenced.

In addition, the complex nature of modern warfare “among the people” required a more holistic approach to problem solving. In many cases, enemy forces may not be the greatest obstacle to mission accomplishment facing friendly forces. Local governance, indigenous security force capacity building, and economic improvements are intractable problems with which military forces may be confronted.

Recognizing the complexity of many modern conflicts, the U.S. Army and the U.S. Marine Corps have attempted to adjust their planning processes to better meet current challenges. The result is that each service has introduced “operational design” (or just “design”) into its doctrine. Operational design is a focused attempt to understand the nature of the problem as broadly as possible. Our understanding of a problem often dictates our approach to solving the problem. An improved understanding of the nature of the problem facilitates a comprehensive solution. Given the complexity of modern problems, if design does not lead to a solution, the objective is to conduct operations that will lead to an improved situation.

Conclusion

Planning plays a critical role in the successful conduct of military operations. Planning allows commanders to conceptualize and articulate desired future conditions to their subordinates. Operational plans also provide a tool for commanders to articulate their vision to subordinates. Operational plans allow the efforts of many units to be combined and harmonized in order to achieve the established objectives. The goal of this coordination is to make the best use of scarce resources. In addition, good plans are simple and clearly communicated, and provide guidance to subordinates without being overly prescriptive.

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See also Command and Control; OODA (Observe, Orient, Decide, and Act); Staff Relationships; War in Afghanistan

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PLANS, WAR

Throughout the 20th and 21st centuries, the U.S. military's interest in planning for war has increased exponentially, as has its ability to do so, often in response to lessons learned from past military actions. From early plans aimed at fighting a single enemy determined to violate the Monroe Doctrine or threaten the Open Door, a U.S. policy that supported open trade in China and discouraged further colonization of the weakened Chinese Empire, to more recent plans to defend vital interests in far-flung regions, war planners have labored to develop proposals to defend the nation's interests. In some cases, including the Pacific War against Japan, existing plans were put into practice, while other, elaborately detailed plans, including those to wage atomic war against the Soviet Union, were not. Initially, civilian leaders often remained aloof from war planning, but by World War II, presidents and influential leaders of the civilian bureaucracies began to leave an indelible imprint on war plans and planning, contributing to victory in America's epic global struggles but leading to far less-clear cut results in more recent conflicts. This entry discusses the history of war planning by the U.S. military and provides details on the planning for the War in Afghanistan, Operation Enduring Freedom.

To World War I

At the start of the 20th century, a host of issues and ideas at last prompted the U.S. military to formalize

the process of war planning. Beginning in the 1880s, the increased professionalization of leading foreign armies, particularly those of Germany and Japan, prompted leaders such as U.S. Army general Emory Upton to call for the establishment of an army general staff to develop war plans on a systematic basis. While the army was slow to act on these recommendations, the U.S. Navy in 1884 established its own war college, the entity that eventually spearheaded that service's war planning activities. Following the Spanish-American War, both the army and the navy, as well as senior civilian leaders, recognized the need for reform and professionalization of the armed services. In 1900, President William McKinley approved the creation of the 11-member Navy General Board. In 1901, under the auspices of Secretary of War Elihu Root, the U.S. Army established the U.S. Army War College and, just 2 years later, created a U.S. Army General Staff. In short order, the secretaries of war and the navy established the Army-Navy Joint Board to, among other things, coordinate army and navy war planning.

Early-20th-century war planning, which designated potential enemies by color and/or initials, had little civilian oversight or coordination with major government departments such as the Departments of State and Treasury. War planners particularly focused on Japan (Orange), whose victory over Russia in the 1904–1905 Russo-Japanese War and clashes with Washington over discriminatory treatment of Japanese living along the Pacific coast caught the attention of the army and navy. Continued disorder in Mexico (Green) led army planners to direct their attentions to the republic's southern border, while fear over German expansion into the Western Hemisphere led naval planners to create War Plan Black.

War Plan Black, which envisioned a decisive naval battle in the Caribbean and the repulsing of a German landing either there or on the U.S. coast, ended up being not completely useful when the United States entered World War I in April 1917. The task of revising plans to defeat Germany then fell to General John J. Pershing and the staff of the nascent American Expeditionary Force beginning in May 1917. While prewar planning against Black proved of limited value, the U.S. Army did put into effect its prewar plan for war with Green in 1916, when General Pershing led an expeditionary force south into Mexico following Pancho Villa's repeated raids on U.S. territory.

The Interwar Period

As was the case after the Spanish-American War, both civilian and military leaders made important changes to improve planning for future conflicts during the interwar period. The General Board, for example, was reorganized in 1919 to include a joint planning committee. General Pershing with his wartime experience, meanwhile, led the U.S. Army General Staff to reorganize in 1921 and to include a new war plans division, tasked with developing army war plans and coordinating strategic planning with its sister service, the U.S. Navy. The navy organized its own war plans division that same year, based in part on the wartime experiences of Admiral William S. Simms, who commanded the U.S. naval forces in Europe during World War I.

During the early interwar period, planners concentrated on a host of potential threats. Simmering differences over immigration, quarrels involving the Open Door, and the seizure of Manchuria in 1931 led planners to focus their greatest attention on War Plan Orange. During the Second World War, both the army and the navy used parts of the various interwar versions of War Plan Orange, including a naval blockade of Japan and attacks on the Ryukyus.

Revolution and nationalism also influenced war planning during the 1920s and 1930s. The Bolshevik victory in Russia, the spread of the revolution into Finland, Hungary, and Germany, and the concern that revolution might spread to the United States led the Army War Plans Division to begin formulating Plan White (domestic uprising) in late 1919. Active planning to suppress a domestic insurrection continued for another two decades. The Bolshevik specter in China and the reality of Chinese nationalism and its apparent anti-foreignism also led to a new Plan Yellow in 1924, which remained in effect until the end of the 1930s and envisioned the dispatch of up to 40,000 soldiers to protect Americans in China.

World War II

The spread of war, first to Asia in 1937 and then to Europe in 1939, along with the conclusion of the Tripartite Pact (or Axis Alliance) in September 1940, led to the creation of a series of Rainbow War Plans aimed at fighting the Axis coalition. The Rainbow Plans recognized that Germany posed the greatest threat to the United States, and therefore advocated waging a defensive war in the Pacific while allocating

the majority of men and materiel to the European theater. In early 1941, war planners began to consult America's soon-to-be wartime allies, including Great Britain and Canada (the ABC 1 talks), about the various Rainbow plans, which unlike earlier planning was Cassandra-like in its accuracy. By late 1941, when the planners finalized Rainbow 5, they foresaw the conflict that America was on the eve of entering, a simultaneous war against Japan and Germany waged by an Anglo-American coalition.

With America's entry into the war, British and American leaders created a Combined Chiefs of Staff. The creation of the Combined Chiefs of Staff, which underscored the need for greater cooperation within the U.S. military, quickly led to the creation of the U.S. Joint Chiefs of Staff a month later. This machinery, argues Steven T. Ross, the preeminent historian of U.S. war planning, allowed the Allies to plan operations and air differences far more successfully than the Axis countries.

The Cold War and Atomic War

World War II, much like previous major wars, led to modifications in American war planning. The 1947 National Security Act sought, among other things, to provide greater coordination between the various branches of the armed forces through the creation of a new Department of Defense. Conflict with the Soviet Union and the use of nuclear weapons dominated the new war-planning machinery during the Cold War period. Long before the term *Cold War* became embedded in the American lexicon and the national psyche, the Joint Chiefs of Staff began to formulate plans in the event of war with Moscow. Early planning, which assumed that a conflict would begin accidentally, presumed that despite initial losses in Asia and Europe, which were every bit as catastrophic as those suffered early in World War II, the United States would win a total, as opposed to limited, war against the USSR (Union of Soviet Socialist Republics) by compensating for Western conventional inferiority with nuclear superiority. Significantly, war planners accepted that in a major conflict with the USSR the United States would strike first, using nuclear weapons, a decision formalized by President Harry S. Truman in NSC (National Security Council) 57.

With Russia's development and subsequent expansion of its atomic stockpile, the historian Lori Bogle notes, war planners conducted their trade

“with a regularity and intensity unprecedented in peacetime.” Led by planners within the Joint Chiefs and the Strategic Air Command, often with scant guidance from the newly created National Security Council, strategists planned to deter conflict through tactics such as massive retaliation, in which the United States would employ America’s massive nuclear arsenal, a policy first publicly announced by Secretary of State John Foster Dulles in 1954 and adopted by the North Atlantic Treaty Organization 2 years later. Initially, the army, navy, and air force developed separate operational plans for the use of their nuclear arsenals in the event of war against the Soviet Union. In 1960, the Defense Department, at the behest of President Dwight Eisenhower, developed a Single Integrated Operational Plan to coordinate nuclear war planning across service lines.

As Soviet and American stockpiles increased, the new theory of mutually assured destruction (MAD), which recognized the practical inability of either side to win, let alone survive an all-out nuclear exchange, came to the forefront of war planning and nuclear deterrence strategy. By the mid-1970s, however, advances in technology allowed some Pentagon war planners to chart a course embodied in President Richard Nixon’s National Security Decision Memorandum 242 and later in President Jimmy Carter’s Presidential Directive 59 (PD 59), which disavowed mutually assured destruction, in favor of a massive first strike using precision-guided nuclear weapons that would allow the United States to win a nuclear war.

Post–Cold War Planning

Reflecting the lessons learned from the Vietnam War, a new generation of post–Cold War strategists produced war plans that embraced Joint Chiefs of Staff Chairman Colin Powell’s doctrine that the United States would employ massive rather than limited military force against its enemies. For Operation Desert Shield, which protected Saudi Arabia and the Gulf states following Iraq’s August 1990 seizure of Kuwait, the United States and its coalition allies built on plans recently formulated by the Navy War College and the U.S. Central Command’s (CENTCOM) own Operation Internal Look, which called for sending 150,000 Americans to defend the Gulf. By early November, just 3 months after the fall of Kuwait, CENTCOM’s commander, General

Norman Schwarzkopf, had assembled over 200,000 Americans on the ground in or near Saudi Arabia. To dislodge the Iraqis, Schwarzkopf needed to double the American contingent, and with Powell’s enthusiastic support, Operation Desert Storm, which liberated Kuwait in February 1991, used more than 500,000 American and an additional 400,000 coalition personnel.

Success in the Persian Gulf War validated the Powell Doctrine, yet despite Powell’s ascension to secretary of state in the first George W. Bush administration, his doctrine fell out of favor. Planning for Operation Enduring Freedom, the war in Afghanistan, began at the behest of Secretary of Defense Donald Rumsfeld a day after the 9/11 attacks and aimed at the destruction of both al Qaeda and the Taliban. Relying heavily on air power, special forces, and CIA (Central Intelligence Agency) paramilitary, as well as troops from the anti-Taliban Afghan Northern Alliance, Enduring Freedom, which began on October 7, 2001, and ended the following March, used few U.S. ground troops. Despite State Department misgivings, Secretary Rumsfeld and General Tommy Franks, CENTCOM commander, opposed a large deployment of U.S. forces both during the invasion and in the aftermath of the Taliban defeat. They therefore limited the size of the U.S. presence in Afghanistan during 2002 to 8,000, which, while sufficient to topple the Taliban and weaken al Qaeda, could not adequately stabilize the country. An intractable insurgency soon developed, and this so-called light-footprint approach came under increasing fire as the war in Afghanistan dragged on into its second decade.

The light-footprint approach favored by Secretary of Defense Donald Rumsfeld’s office was clearly evident in Operation Iraqi Freedom, a war plan that discounted the Powell Doctrine as well as the views of senior officials, including Army Chief of Staff Eric Shinseki, who maintained that the U.S. troops leading the invasion would prove inadequate in the immediate postwar occupation. In 1996, war planners had produced the basic outline of what would eventually become Operation Iraqi Freedom, War Plan 1003V, which envisioned needing 1,000 aircraft and three corps to defend the Gulf allies and successfully drive to Baghdad. During the run-up to Operation Iraqi Freedom, war planners from CENTCOM and V Corps faced intense pressure from the Department of Defense to forgo a slow buildup and to attack with a

small U.S. ground force. During 2002, CENTCOM commander General Tommy Franks pared the number of troops from War Plan 1003V's 400,000–500,000 to approximately 275,000. Subsequent plans, including Running Start and Generated Start, increasingly featured fewer troops and a shorter air campaign. On the eve of the invasion, V Corps leaders determined that current war plans did not provide enough ground troops to secure captured territory. Nonetheless, the U.S.-led invasion of Iraq commenced 6 weeks later with an American force of fewer than 150,000. As in the case of Afghanistan, the forces at hand proved more than adequate to decisively defeat the enemy but were spread far too thin to stabilize the country.

Conclusions

From its inception, war planning has proved an invaluable tool in the effort to defend the United States. Although sometimes flawed and other times manipulated by those whose political or other ambitions dictate unrealistic approaches to success, war planning nonetheless has fostered security through its proactive activities as well as by promoting coordination among the various branches of the armed forces and the civilian bureaucracies.

Sidney Pash

See also Iraq War (2003); Iraq War, Planning for; Persian Gulf War; Single Integrated Operational Plan; War in Afghanistan; Weinberger-Powell Doctrine; World War I; World War II

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POLICE, MILITARY

Military police have a challenging position within the armed forces. On the one hand, they must provide law enforcement duties at army posts and air force, marine, and naval bases and stations, which, in part, resemble those performed by civilian police. These duties include combating crime by service personnel and, in some circumstances, by civilians, whether they are U.S. citizens or foreign nationals; maintaining discipline among members of the armed services; providing security for military installations; and administering military confinement facilities. This entry discusses the history, roles, and organizations of military police in the U.S. armed forces.

Wide Range of Duties

One of the major differences between civilian and military law enforcement agencies is that the military police not only enforce the law, but they also maintain the equivalents of jails and prisons. The armed services' experiences with confining prisoners can be extremely useful during expeditionary service, when there are likely to be enemy combatants or civilian internees, or both, who must be held, at least temporarily.

On the other hand, police services are much needed in combat situations and as an element in military expeditions when combat is a possibility. Police services on or near battlefields may include keeping combat troops in their places at the front when some of them may want to flee the dangers of battle. The processing and supervision of prisoners

of war and the management of prisoner-of-war and internment camps outside the battle zone are other vital contributions. Effective military police handling of prisoners has been the norm. The bizarre behavior of some prison staff at Abu Ghraib in Iraq, however, necessitated improvements in prison administration.

Controlling vehicle traffic is a major assignment for military police. Delays in the movement of personnel and supplies can have a serious impact on military operations. Traffic bottlenecks may, moreover, become targets for enemy artillery and air attacks. Expeditionary force commanders must be kept aware of such combat duties. If they think that the police act primarily in a rear area support role, commanders may fail to include sufficient numbers of police in their personnel planning.

Organizations and Training

The need for effective law enforcement organizations and suitably trained and indoctrinated personnel within the various branches of the U.S. armed forces became apparent soon after those branches were established. Yet for much of their history, the armed forces have employed makeshift approaches to law enforcement. They frequently assigned officers and enlisted personnel to police duties without doing much or any screening and without providing specialized training. When leading the Continental Army during the American Revolution, George Washington tried to form an effective, centralized military police force, but for the most part, he had to utilize short-lived units. The most extensive use of military police during



Drawing by Alfred J. Waub, July 22, 1861. Provost marshal and police of Alexandria searching and examining a prisoner of war.

Source: Morgan collection of Civil War drawings (Library of Congress).

wartime was the Provost Guard of the Confederate States Army, which, in addition to enforcing discipline within the army, extended its reach to civilians through the use of internal passports that regulated travel.

Permanent organizations devoted to law enforcement duties and schools for training police are largely a product of World War II and its aftermath. The army, for example, only established the Military Police Corps on September 26, 1941; it became a permanent part of the army on June 28, 1950. Army officers who command military police at various levels, such as a division or an army post, are designated as “provost marshal.” The army’s highest military police officer is the provost marshal general. The growing role of women in the military police has been underlined by the appointment of the first woman provost marshal general, Brigadier General Colleen L. McGuire, in 2010. Appointment of military policewomen dates to World War II.

Military police are uniformed personnel, some of whom can carry out investigations of misdemeanors, but more extensive investigations are left to other agencies such as the army’s Criminal

Investigation Command (CIC), which was called the Criminal Investigation Division (CID) for many years and is still often referred to by that designation. Military investigators generally wear civilian clothing, in part because they need to be seen as somewhat apart from the military chain of command. The army also employs some civilian investigators.

From its earliest years, the navy designated some personnel to combat crime and to assist the officers in preventing lapses in discipline aboard ship. The use of such “masters-at-arms” has developed into a structure similar to the army’s military police. The Law Enforcement/Master-at-Arms School was established in 1985 as part of the Naval Technical Training Center at Lackland Air Force Base in San Antonio, Texas. Owing to the constant movement of vessels, the navy has had to employ and continues to employ large numbers of officers, petty officers, and lower-ranking enlisted men and women as temporary law enforcement personnel as part of the “shore patrol” organizations that are established in ports.

The Naval Criminal Investigative Service (NCIS) resembles the army’s Criminal Investigation



Brigadier General Colleen L. McGuire assumed responsibility as the first woman provost marshal general of the army and also took command of the U.S. Army Criminal Investigation Command in a ceremony at Fort Belvoir (June 2010).

Source: Army News Service.

Command in its duties, but it has a quite different organization. It is headed by a civilian, and the majority of its agents and employees are civilians. The CIC remains a largely military force and is headed by an army officer. The NCIS evolved as part of the Office of Naval Intelligence (ONI), which was established in 1882. It became the Naval Investigative Service in 1966, although it remained within ONI. In 1982, NCIS achieved independence from ONI, and the first civilian director was appointed in 1992.

As in the Royal Navy, U.S. Marines assigned to larger warships were intended, in part, to constitute a deterrent to organized resistance by mutinous sailors to the authority of their officers. Larger organizations of military police within the Marine Corps only came with World War II. In 1944, the 1st Provisional Military Police Battalion was established within the Fleet Marine Force Pacific. It lasted until 1946. Military police companies were employed in Korea, and two battalions were deployed to Vietnam. Detailed training for police duties only began during the Vietnam era, when marines began to be schooled by the army. The air force then undertook marine police training during most of the 1980s, but after the Gulf War, marines returned for training to the Army Military Police School at Fort McClellan, Alabama; it was subsequently transferred to Fort Leonard Wood, Missouri.

In 1999, there was an agreement that the Marine Corps Criminal Investigation Division (CID) would be “integrated” into NCIS. The marines’ CID has been left with the responsibility for dealing with a number of offenses, but investigations of the most serious crimes are the province of NCIS, which also includes some marine CID agents. Like the marine military police, marine investigators are trained by the army.

Shortly after the U.S. Air Force won its independence from the U.S. Army in 1947, a military police force was formed, although its members continued to wear what were essentially army uniforms for some time and were not called Air Police until 1948. The Air Police School and the Air Base Defense School were instituted in 1950 and 1952, respectively. The Air Police was somewhat different from the police of the other services because of the composition of the air force. That service was, and is, largely composed of air crews and a much greater

number of support personnel. Except for the Air Police, it lacked a significant land combat contingent. Hence, the Air Police had to fill this role and often engaged in ground combat when defending air bases in Vietnam and other later wars. They also play a critical role in guarding nuclear weapons and nuclear systems. The title “Air Police” was replaced by “Security Police” in 1966, and in 1997 it was renamed the Air Force Security Forces. Small numbers of women entered the force in 1971, and in 1985, restrictions on women in combat assignments were eliminated.

The air force also established the Air Force Office of Special Investigations in 1948. Agents for this investigative arm are drawn from both the uniformed ranks and civilians. Headquartered in Quantico, Virginia, it currently has a strength of about 2,700 active-duty and civilian personnel. Along with criminal investigations, a major mission of the Office of Special Investigations is to neutralize terrorist threats to the air force.

Hiring of Civilians as Uniformed Officers

A controversial move by the armed services in recent years has been the employment of civilians as uniformed police officers for security duties in the United States. One such force is the Department of the Army Civilian Police. The Pentagon Force Protection Agency operates in the area of the nation’s capital, and it has several components, including the U.S. Pentagon Police. There are pros and cons associated with the use of civilian police. On the one hand, civilian police officers can free members of the armed forces for other duties, including deployment overseas. On the other hand, many members of the armed forces believe that military personnel should provide their own security, even within the United States. Carrying out police services at installations in the United States is likely to produce experience that can be valuable for personnel and organizations that are deployed overseas.

Handling Stress

Like their civilian counterparts, military police forces are beginning to understand the emotional demands that their duties place on policemen and policewomen. Although other military personnel generally have a respite from trauma when they are

outside combat areas, military police have a relatively constant level of stress. People in law enforcement generally suffer to a greater degree than others from problems such as family violence, divorce, and suicide. Therefore, the army's Criminal Investigation Command has introduced a course of instruction called "Critical Incident Peer Support" to foster skills for dealing with the unusual stressors in police work. One technique is an informal debriefing that includes all the personnel involved in a given episode.

Expanded Role

Modern warfare, especially in the form of insurgency and counterinsurgency, is coming increasingly to resemble civilian law enforcement operations, although calling insurgents "bandits" or "criminals" is both inaccurate and unproductive. Thus, law enforcement training and experience can help military police render increasingly valuable services on counterinsurgency battlefields. A major factor in making military operations more like police work is the tighter rules of engagement, especially with respect to the use of weapons, for combat troops. Consequently, military police are particularly suited for counterinsurgency, and they may furnish additional contributions by training both U.S. and foreign military personnel for counterinsurgency and operations short of war. They can also be of great assistance in helping train foreign police.

In recent years, owing to the nature of current military assignments and the continuing threat of terrorist attacks, the armed forces have assigned more and more personnel to police duties. The numbers of military people assigned to police duties have increased significantly for the air force and dramatically for the army and navy. The army, for example, has considerably expanded the number of police assigned to protecting military and civilian leaders of the Department of Defense. The military situation has resulted in the rapid training and appointment of "provisional military police" by transferring some members of the National Guard to the Military Police Corps. Once prepared, they could replace the permanent military police, who would be transferred to higher priority assignments, or they could themselves be ordered to battle areas.

Their diverse roles make permanent organizational structures and planning for the military police

difficult. Nevertheless, military police forces have moved forward considerably since World War II, making them far better trained and administered today than at any time in the past.

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See also Court-Martial; Museums, Military; Prisons, Military; Uniform Code of Military Justice

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POLITICAL SCIENCE AND INTERNATIONAL RELATIONS

The academic field of political science and the sub-field of international relations both emerged in the early 20th century. Scholars in the field seek to move beyond the study of individual events and develop a general conceptual framework to allow them to describe, explain, and predict actions in the

international system. Partly reflecting the impact of the two World Wars and the Cold War, the field's early work primarily focused on questions related to why countries go to war, how they reach peaceful accommodations, and why some move to form truly cooperative bilateral ties or international institutions. As the field matured and the international agenda shifted toward other issues, such as trade, development, the environment, and so on, the academic literature also expanded, but issues related to war and peace remain a high priority. This entry examines the diverse field of political science and the subfield of international relations, focusing on scholars' attempts to understand and predict a state's actions.

The field's work can be divided in a number of ways: by the method employed, by the level of analysis explored, or by schools of thought, such as realism, liberalism, Marxism, constructivism, and so on. Any typology, though, will leave out some important work and lead to disputes about which scholarship fits into each category. Because of the field's diversity and because of the huge number of changes in international actors, actions, and norms over the past century, a number of international relations hypotheses have been widely advanced and accepted, but there are few, if any, universally agreed-on rules of behavior.

Many policymakers, especially those dividing their careers between government service and academic theorizing, have been influenced by the existing academic work. This influence highlights the complicated issue of whether academic work is merely descriptive or also prescriptive. For example, if policymakers accept the descriptive idea that all states seek their national interests and will use force if necessary, they may prescribe following an aggressive policy, which in turn reinforces the descriptive idea.

Methods Employed

Before political science emerged as a distinct field, the study of international politics was dominated by historians, philosophers, and legal scholars. Political scientists sought to move beyond historians' case method to find general rules of behavior, beyond philosophers' abstractions to study the real world, and beyond legal scholars' applications of law to explore state actions that rarely were constrained

by international law. At the same time, the field inherited many assumptions, terms, and methods of study from its predecessors, so it mainly consisted of qualitative studies of states' security and diplomatic actions. Following World War II, behavioralists in political science suggested that the field needed greater methodological rigor to make it approach the scientific method of the natural sciences. These scholars brought in new ideas from economics, psychology, and statistics and took advantage of emerging computer technology to conduct more quantitative studies using large samples, game theory, and formal modeling.

In the 1980s, postpositivist theorists began to bring to the field another new set of ideas from literary criticism, feminism, philosophy, and other sources. These scholars questioned the idea that human actions can be studied in an objective and value-free way. Some also questioned the metanarrative of the field, arguing that existing understandings were not universal truths but, instead, intellectual constructs of the dominant discourse. Some also challenged the existing focus on state actors and high-level security issues by studying women, minorities, and others who saw personal security concerns and international transactions in their everyday life. Global surveys of today's international relations scholars find that a majority report that they employ qualitative methods but many report also using some quantitative analysis. In the United States, quantitative study is more prevalent than it is elsewhere. Smaller percentages of scholars, primarily in Europe and Australia, use postpositivist theory, but some of its concepts are incorporated into the rapidly emerging constructivist school of thought. Methodological disputes can be quite intense and frequently affect which journals publish certain research, which institutions employ certain scholars, and how new scholarship is treated by the academic community. These disputes are often difficult to categorize because they involve disagreements on both what to study and how to study it.

Levels of Analysis

Existing international relations scholarship also can be divided by whether its prime focus is on the system (third level), the state (second level), or the individual (first level). Most scholars agree that no one level can provide a full understanding of a state's

action, but there is disagreement over which level provides the most information. It is important that researchers and audiences consider the level of analysis because a focus on one level will affect both the methods of study and the findings, since variables on the other levels will be excluded.

System-level analysis examines events from the top down. States and other international actors are part of a collective system in which actions are guided by system characteristics and rules. The international system is characterized by anarchy, meaning that there is no central authority or world government guiding the system. Individual states seek power to advance their own interests. The system is dominated by the most powerful states. Powerful states not only win the big wars and reap the biggest benefits from trade, they also establish the norms and international laws that guide action. Systems can be described as unipolar, bipolar, or multipolar depending on whether there are one, two, or multiple great powers. There is dispute about which type of polarity produces the fewest wars but agreement that polarity highly influences the types of wars and alliance patterns. For example, the bipolar Cold War period saw more proxy wars and much tighter, long-term alliances than the multipolar period of the 19th century. System-level analysis also stresses a balance-of-power model, which predicts that states will form alliances to balance their collective power against that of an enemy alliance or a single dominant state. Using system-level analysis, the researcher does not need to examine individual state or leader characteristics because it assumes that all states, led by all leaders, will rationally respond in the same way to a given set of systemic facts.

State-level analysis argues that variables such as a state's culture, its economy, or its political structure will lead countries to behave differently even under similar systemic conditions. For example, German national character or history might explain why Germany was the center of both World Wars. Similarly, capitalist states might be driven by their economic needs to be expansionist. The question of whether democratic states are more peaceful than others has received a huge amount of attention in recent decades. Most studies have concluded that democracies in general are not more peaceful; in fact, some suggest that they are prone to fighting wars trying to spread democracy or to fighting wars as they themselves transition to democracy.

Most scholars, though, do believe that democracies are more peaceful toward other democracies, since there is no accepted existing case of two established democracies fighting a major war against each other. The explanation for the "democratic peace" has been a major source of academic work and controversy. Hypotheses include the importance of democratic checks and balances—that people will not vote for politicians who will send them to fight, respect for fellow democratically chosen leaders, the existence of shared interests among democracies, and the dominant positions of democratic England and the United States. Despite doubts over its cause and future sustainability, the phenomenon is frequently cited by academics as a major finding and by politicians as a justification for spreading democracy globally.

Studies using first-level analysis focus on the human role in international politics. Some focus on whether it is human nature to be aggressive and self-interested and, if so, whether that stems from mankind being sinners, biological impulses from the animal world, psychological pressures, demands of leadership positions, broader societal norms, and so on. Other work examines individual leaders to explore how factors such as misperceptions, religious beliefs, organizational behaviors such as groupthink, or idiosyncratic factors affect decisions and why leaders often choose war rather than cooperation.

Schools of Thought

Over the past century, realism has been the leading school of thought in international relations. Realism was developed formally in the 1930s by noted scholars such as E. H. Carr, Hans Morgenthau, and Reinhold Neibuhr, but many trace its intellectual roots back to Thucydides, Machiavelli, and Thomas Hobbes. Realists argue that states are the principal actors in the international system. International institutions and substate actors have little independent influence. All states rationally pursue their national interests, with the greatest focus on guaranteeing their security and survival. An anarchic system of competitive states is a "self-help" world where states fend for themselves, cooperation is rare, and the most powerful states dominate. A state's fate depends on its power relative to others, so it will rarely pursue collective goals and will even forgo

agreements that would increase its absolute gains if other states would gain more. States fight frequently as they pursue their interests, but even more commonly, states use open or implicit threats and intimidation. Cooperation occurs only in times of shared interest, for example, defeating a common enemy, lasts only until the problem is resolved, and is never a deep commitment, because today's alliance partner may be tomorrow's enemy. Although in the 21st century fewer academics identify themselves as realists than in the earlier periods, adherents of other perspectives still often couch their work as a critique or response to realism.

In the 1970s, Kenneth Waltz led the neorealist, or structural realist, movement, which modified some realist ideas. Whereas early realists built their models up from ideas of human nature to competitive states to how that shaped systemic action, neorealists begin their analysis with the characteristics of the system. Anarchy and state actors that are all functionally the same and thus differentiated only by their power levels are the defining traits of the system. Neorealists, thus, argue not only that state or individual characteristics may matter to a small degree if you are studying specific foreign policy decisions but also that they can be ignored in generating a parsimonious general theory of international relations. Disagreements between realists and neorealists are important, but in the end, most of their theoretical conclusions are similar. In recent years, neorealists too have subdivided into two camps. Offensive realists argue that states will always try to maximize their power and act aggressively, seeking hegemony to ensure their security. Defensive realists argue that states recognize that in some eras the offense-defense balance tilts toward defense or the costs of war escalate, so states will limit aggression and focus on defensive military strategies and weapons. These different views lead to practical disputes over issues such as how a rising China will act and how others will respond. The disagreement's implications are lessened to some extent by the concept of the "security dilemma," which suggests that one state's defensive weapons procurement may be judged by another as an offensive threat, leading to an arms race and tension that leaves both less secure than originally.

A collection of liberal concepts has challenged realism. Liberalism's intellectual roots include the ideas of John Locke, Immanuel Kant, and Woodrow

Wilson and now include many strands of overlapping thought. In general, liberals hold that human nature does not inevitably drive states to aggression and that state preferences, as well as capabilities, are crucial determinants of behavior. Therefore, variables such as a state's national culture, whether it is democratic, whether it is economically integrated with others, what ethical goals it considers, or whether its citizens view themselves as global citizens are important and can lead to greater cooperation. Many liberals also argue that states are not unified actors, so substate actors like nongovernmental organizations can both lobby governments and form their own transnational networks. Above the state level, the desire for cooperation and technological advances in communications can stimulate the formation of international institutions that can constrain state members and, at times, become independent actors in their own right. Neoliberal institutionalists, such as Robert Keohane and Robert Axelrod, put particular focus on the way institutions increase cooperation through mechanisms such as increased information sharing, punishing cheaters, and repeated interactions among states. Most liberals do expect the end of war but think that force will increasingly be used to punish international rule breakers and be employed in collective action. Much early liberal work was considered hypothetical or idealist because it focused on the possible impact of changes in states or the system that did not seem imminent. However, in the 20th century, democracy spread, economies became interdependent, cultures changed, and more international institutions emerged, so debate now focuses on whether these changes are bringing the predicted increase in cooperation.

Marxist scholars, such as Immanuel Wallerstein and Andre Gunder Frank, challenge both realism's and liberalism's focus on state conflict and cooperation by arguing that economic realities and global capitalism drive the actions of individuals, states, and international institutions. They argue that the rich countries and corporations exploit the poor. Power flows from material wealth, so the rich have so much economic, military, political, and cultural power that they routinely crush any effort at rebellion. Occasionally, the rich powers will clash among themselves for control of a particular colony, region, or resource, but this does not alter the fundamental realities of the international system.

Constructivism is a rapidly emerging challenge to existing theories. Constructivists, such as Alexander Wendt and Martha Finnemore, focus on the power of ideas in shaping reactions to material factors and behavior. Whereas realists suggest that anarchy leads inevitably to state conflict, constructivists suggest that states choose how to react to this underlying fact and so may end up in conflict or cooperation. Once states choose a pattern of action, their choices become embedded in the norms of the system. In time, observers come to view the existing system as inevitable and static, whereas it is in fact contingent and malleable. Norms can change, thus ending practices such as slavery, the acceptance of attacking civilians, and perhaps some day war itself, but these norms change not from exogenous pressures but because the actors in the system have changed their ideas and perceptions of interest.

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See also Anthropology and War

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POLITICS, MILITARY PARTICIPATION IN

The military's participation in politics encompasses diverse topics within the study of military science. With a coup d'état at one extreme and military members casting ballots in civilian elections at the other, there is theoretically broad ground to cover. This entry discusses the impact of military voters on U.S. elections and the restrictions placed on service members with regard to political participation.

In the United States, the military as an institution has remained largely neutral in national political discussions, with the exceptions being far outnumbered by the norm of partisan detachment. The military is a generally well-respected institution in American politics, and because the armed forces serve as a potent symbol of patriotism and security, active and former military members have invoked their military background during elections since the beginning of the republic. Sometimes soldiers and veterans groups have vocally supported and endorsed candidates, and occasionally, they have even run for political office. From George Washington to John McCain, candidates have used their salient military experience as a springboard to win votes. While military veterans participate as candidates and voters at higher than average rates, active-duty members do not vote as often as civilians do. Members of the armed forces are mostly citizens and eligible to vote in elections, yet there have been many hurdles facing military participation in politics.

Legally, members of the armed forces do not enjoy the same freedoms of political expression as their civilian peers. Servicemen and -women may vote, and those serving overseas may cast ballots in their home precincts from afar. Members may also donate money to political efforts within the same limits as civilians. However, other forms of political activity are currently illegal for service members. The legal structure constraining members' behavior is the Uniform Code of Military Justice, which bans members from attending political rallies in uniform, running for political office, or working for a political

campaign. While protected by the First Amendment regarding civilians, these sorts of behaviors constitute excessively public partisan activity for those under arms, and hence, public electioneering efforts are prohibited for active-duty servicemen and -women. The intent of this ban is to limit the substance or appearance of the military taking sides in domestic partisan election contests.

But even if those in uniform have fewer means of participating in politics than civilians, the “soldier vote” has been important in a handful of American presidential elections. Three examples stand out as situations when the soldier vote was salient. In each, 1864, 1944, and 2000, questions of military suffrage and for whom the service members would vote were central. In the wartime election of 1864, Republican Abraham Lincoln faced his former general when trying to win reelection. The Democrats had nominated General George McClellan, who had been general in chief of all Union forces. It may seem plausible that soldiers in the Union Army might prefer a general to a president with little military experience of his own, but Republicans in many of the Union states passed unprecedented legislation enabling military men to cast ballots in their home state. They clearly believed that those in uniform would prefer their commander in chief over McClellan, and the voting returns validated their conviction: Estimates of the “soldier vote” preferring Lincoln in 1864 exceeded 75%. While not decisive in terms of the total election results, Union soldiers spoke clearly and in large numbers with their ballots, but such participation required the passage of partisan-minded and specific legislation.

In 1944, during World War II, President Franklin D. Roosevelt ran for his fourth term. The previous congressional election in 1942 had seen the innovation of a war ballot intended to make it easy for soldiers to vote, but the reform was poorly executed, and few took advantage of it. Hence, debate ensued over how to enable soldiers to vote in time for the 1944 election. Supporters of the legislation based their support on the belief that military voters would back the Democrats in office, and opponents of the legislation countered it for the same reason. A watered-down version was ultimately passed, but states were allowed to enact their own absentee balloting procedures. It is unclear what proportion of those in uniform voted; estimates suggest somewhat less than half. It is also uncertain, because of the diffusion of military ballots to home precincts and

states, whether servicemen supported Roosevelt at a rate higher than the civilian electorate.

The 2000 presidential election also made military voting significant, but not because of the high numbers. In the election contest between George W. Bush and Al Gore, Florida became the post-election battleground for recount politics, with the number of contested ballots exceeding the margin between the candidates’ vote totals. The unclear results during the multiple recounts gave both campaigns the incentive to favor their perceived bases of support. For the Democrats, this meant ensuring that every vote in urban areas was counted, and for the Republicans, the importance of military absentee ballots was paramount.

There is scholarly evidence to suggest that this presumption of Republican attitudes within the ranks was not misplaced. In 1999, the Triangle Institute for Security Studies conducted an expansive poll of military members, hoping to quantify what some observers had identified as a growing “gap” between the culture and politics of the military and the civilian society they were serving to protect. The evidence demonstrated that those in the officer corps were more likely to be Republican than Democrats. The 2000 election presented the military vote as important not for its large size but because it highlighted a growing trend toward Republican identification in the military since the end of conscription in 1973. Among the famously late overseas absentee ballots received in Florida in 2000, Bush ballots outnumbered Gore ballots by approximately two to one.

General William T. Sherman, the Civil War general who led the 1864 March to the Sea, famously refused to vote in elections while serving his country. He has been quoted as stating that “no Army officer should form or express an opinion” on partisan politics. Yet his has historically been a minority view among members of the military hoping to cast their ballot to influence elections just as civilians do. But history suggests that the suffrage of soldiers depends on political elites with their own electoral incentives.

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See also Civil-Military Relations

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POSSE COMITATUS ACT

The Posse Comitatus Act is a federal law that restricts certain types of military involvement in domestic law enforcement. The current statute, Title 18, U.S. Code, § 1385, states,

Whoever, except in cases and under circumstances expressly authorized by the Constitution or Act of Congress, willfully uses any part of the Army or the Air Force as a posse comitatus or otherwise to execute the laws shall be fined under this title or imprisoned not more than two years, or both.

This entry discusses the origins and provisions of the Posse Comitatus Act.

The act is statutorily inapplicable to the U.S. Navy and the Marine Corps, although it has been applied by long-standing policy and regulations to those branches of service; the Coast Guard is also not technically covered by the act. The act also is not applicable to the states' National Guard and Air National Guard so long as those forces remain under the control of the respective states (i.e., as long as they have not been federalized); in the event of local or state unrest, the states' governors are free under the act to call forth these units to assist local law enforcement in maintaining public order. To utilize active-duty armed forces without violating the act, either an act of Congress or—as is generally the case in practice—a formal executive order of the president is required.

Besides the act's injunction against military incursions into domestic law enforcement, a related series of statutes—codified at Title 10, U.S. Code, §§ 331–336 (originating as the Insurrection Act of 1807) and §§ 371–382—specifies conditions under which the president can call for federal troops to halt civil disturbances, including federalization of a state's National Guard. Exceptions to the act include a statutory authorization for the military to remove persons from Native American lands and a law authorizing

the U.S. attorney general to request the secretary of defense to provide emergency military assistance if civil law enforcement is found inadequate to address threats involving the release of nuclear materials or the use of nuclear or radiological weapons.

In common law, *posse comitatus* is generally defined as being the power or force of the county, which the civil law enforcement may require as assistance to aid in keeping the peace and pursuing and arresting felons. Premised largely in response to British military violations of the colonists' civil liberties in the 1760–1775 period—during which regular troops often served as a *posse comitatus*, among other offenses—civilian control over the military was a critical feature of American democratic institutions. Among the Constitution's checks and balances in the area of civil-military relations, it is required that state militias, not regular troops, be requested by Congress “to execute the Laws of the Union, suppress Insurrections, and repel invasions” (http://www.usconstitution.net/xconst_A1Sec8.html).

The Civil War led to substantial incursions by the military into domestic freedoms, not only in the southern states under Union occupation but also in the North after President Abraham Lincoln's 1862 suspension of the writ of habeas corpus. During Reconstruction, the ex-Confederate states were divided into federal military districts to oversee the restoration of civil authority, the holding of elections and constitutional conventions, and the ratification of new federal laws and the Fourteenth Amendment. On occasions, U.S. Army units broke up the state legislatures of Louisiana and South Carolina, and federal military governors forcibly removed the governors of Virginia, Mississippi, Georgia, Louisiana, and Texas. In doing so, federal troops were functioning as a *posse comitatus*, in an 1854 U.S. attorney general's opinion. In response to fraud allegations during the 1876 presidential campaign, President Ulysses S. Grant ordered federal troops to guard polling booths and election officials across the South. In direct response to these actions, Congress passed the Posse Comitatus Act of 1878.

After the act's passage, it was largely understood that federal troops were not available to augment civil law enforcement, and prosecutions for violations of the act have been exceedingly rare. From 1877 to 1945, federal troops were summoned on approximately 125 occasions to intervene in civil disturbances. In many of these cases, however,

those troops were dispatched by presidents without any apparent state request or federal statutory justification, in contravention of the act. The use of U.S. Army troops against the 1932 “Bonus Army” protestors in Washington, D.C., by the then chief of staff General Douglas MacArthur is a notable example where the act’s restrictions were apparently ignored. From 1968 to 1972, the federal government deployed Regular Army troops on at least six different instances—including the 1972 Republican and Democratic conventions and the 1973 Nixon inauguration—without any prior requests from the state or local authorities.

In 1981, Congress passed legislation removing many barriers imposed by the act for drug interdiction missions, and the military began to provide civil law enforcement with training and surplus equipment. Regular Army troops were deployed to assist civilian law enforcement in several high-profile incidents—notably the 1992 Los Angeles “Rodney King” riots; the 1992 Ruby Ridge, Idaho, confrontation; and the 1993 Branch Davidian siege near Waco, Texas. In 1989, Joint Task Force 6 (JTF-6) was created as an adjunct to assist the DEA (Drug Enforcement Administration), the INS (Immigration and Naturalization Service), and the Customs Service and to supplement the military’s training in low-intensity conflict. JTF-6’s rules of engagement authorized military patrols to monitor the U.S.-Mexican border to interdict drug traffickers and to use deadly force only under limited circumstances. In May 1997, the shooting of a Hispanic American teenager, Esequiel Hernandez, by a JTF-6 U.S. Marine patrol led to congressional investigations and court-martial proceedings for the patrol’s members. Although the act was not legally implicated in the Hernandez case due to its statutory inapplicability to U.S. Navy and Marine Corps personnel, the incident was widely noted as highlighting the risks of using combat-trained troops as aids to civil law enforcement.

The September 11, 2001, attacks and concerns as to future terrorist attacks, the creation of NORTHCOM (the U.S. joint command created after 9/11 to safeguard North America), and the Homeland Security Act of 2002 were viewed as suggesting that the act’s days were numbered. The Bush administration’s National Strategy for Homeland Security expressed a desire for “a thorough review of the laws permitting the military to act within the United States in order to determine whether

domestic preparedness and response efforts would benefit from greater involvement of military personnel.” In the wake of the 2005 Hurricane Katrina, the National Defense Authorization Act for 2007, as enacted, included broad enabling language authorizing the president to employ military forces to

restore public order and enforce the laws of the United States when, as a result of a natural disaster, epidemic, or other serious public health emergency, terrorist attack or incident, or other condition, [the president has determined that] domestic violence has occurred to such an extent that the constituted authorities of the State or possession are incapable of maintaining public order.

This enactment, however, was fully repealed in 2008.

While the act may circumscribe the abilities of active-duty troops to participate directly in civil law enforcement, substantial authority already exists under the act for active-duty troops to be deployed as needed on the issuance of a suitable executive order. Following the act’s 1981 amendments, few legal obstacles currently restrict civilian law enforcement’s ability to call for and receive military aid, equipment, and training. Furthermore, provided that they are not directly used in law enforcement, relatively few practical legal restrictions now exist to limit active-duty troops from being used for disaster relief, homeland defense, nuclear/radiological disasters, and many other emergency response purposes.

Jack H. McCall Jr.

See also Civil Defense; Civil Disorder; Civil-Military Relations; Constitution, U.S.; Drug Interdiction; Rules of Engagement

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POSTTRAUMATIC STRESS DISORDER

Posttraumatic stress disorder (PTSD) is a psychiatric stress and anxiety condition caused by witnessing or participating in a traumatic incident. According

to the American Psychiatric Association (APA), a traumatic event creates a sense of “fear, helplessness, or horror.” However, PTSD is not necessarily an inevitable consequence of a traumatic occurrence, and research is yet to determine why some people acquire PTSD and others do not. The definition and recognition of PTSD primarily arose through the observation and recording of veterans’ post-war experiences. Often culturally associated with the Vietnam War, combat-related PTSD has been known by other names in the past, such as “soldier’s heart,” “shell-shock,” “war neurosis,” “battle fatigue,” and “combat trauma.” Throughout the 20th century, the nature and therapy of traumatic syndromes resembling PTSD endured many debates: the veracity of the disorder, the treatment methods, the best time for treatment intervention, whether or not PTSD is distinct from other anxiety and depression disorders, and the burden of compensation for military veterans. The latest research explores the elusive possibilities of predisposition and vulnerability factors, for example, gender, genetics, socioeconomic status, and childhood abuse. High rates of PTSD among veterans of the 21st-century wars in Afghanistan and Iraq called for increased attention to PTSD prevention, screening, and treatment. This entry emphasizes combat-related PTSD and examines the definition, symptoms, and diagnosis of PTSD; treatments including military frontline treatment and screening efforts; and veterans’ benefits.

Definition

The APA first officially recognized PTSD in 1980 as an emotional disorder in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)*. Mental health professionals use the manual to diagnose psychiatric conditions. The APA’s inclusion of PTSD in the *DSM-III* resulted from a growing awareness of the psychological effects of the Vietnam War. In the 1970s, for example, mental health professionals such as Robert Jay Lifton, Chaim Shatan, and Sarah Halay, along with veterans groups, such as Vietnam Veterans Working Group, urged the U.S. Congress and the APA to recognize PTSD. Their efforts resulted in the *DSM-III* definition and inclusion of the syndrome. The APA’s *DSM-IV* (1994) defines PTSD as a reaction to exposure to a psychologically traumatic occurrence wherein the individual encounters a threat to life or severe injury to himself or herself,

or others. Traumatic stress exposure may result in immediate or enduring psychiatric conditions. The immediate and short-termed combat stress reaction (CSR) manifests as psychological disturbance or collapse in the combat arena. CSR shares similar anxiety and aggression symptoms with the longer term PTSD. Beyond an immediate breakdown, the APA categorizes yet another immediate response to trauma exposure, acute stress disorder (ASD), which endures longer than the immediate CSR, 2 days or longer. Characteristics of ASD include the variable symptoms of CSR and PTSD. The symptoms must persist for 4 weeks before they can be classified as PTSD. Several categorizations of PTSD exist. Acute PTSD symptoms endure for less than 3 months, chronic PTSD continues for more than 3 months, and delayed-onset PTSD manifests symptoms after 3 months or more.

Symptoms

Indications of PTSD include reliving the event through flashbacks, nightmares, and invasive memories; avoiding situations reminiscent of the event; lack of emotions; anxiety and difficulty sleeping; impulse control; alienation and intimacy problems; and substance abuse. The first two most common symptoms—memories and avoidance—are paradoxical in that individuals experiencing PTSD can encounter a barrage of intrusive images while at the same time avoiding anything that might remind them of the traumatic events. The psychological community often refers to complications of PTSD as comorbidities—other psychiatric and substance abuse or dependence disorders. Complications of PTSD include the hazards of alcohol and drug abuse as a form of escape and thus self-medication. Suicide is also a risk factor. However, other comorbidities can include chronic pain and life adjustment impairments, such as marital, familial, social, and occupation instability. Therefore, the complications of PTSD may extend beyond the individual with PTSD, affecting family members and the larger community.

While symptoms often appear within 3 months following a traumatic event, they can occur at any time, including decades after exposure. Veterans of the Iraq and Afghanistan wars, for example, often exhibit symptoms of PTSD a year after returning from the combat zone. Delayed symptoms can occur for

numerous reasons, including the possibility of redeployment and adjustments to civilian life, which highlight the distinction between living in survival mode while in the combat zone and irritability on returning to the civilian workforce and family life. Some individuals who fall into the category of delayed-onset PTSD have simply gone undiagnosed. Still others have experienced misdiagnosis, as is often the case with the depression that frequently accompanies PTSD.

APA Criteria for Diagnosis

DSM-IV includes six criteria for a PTSD diagnosis, labeled A through F. The first, Criterion A, requires that the individual who experienced or witnessed a traumatic occurrence(s) that posed a risk of death or serious injury to self or others also felt a powerful sense of “fear, helplessness, or horror.” The following requirements constitute three sets of symptom clusters. The first symptom grouping, Criterion B, addresses the reexperiencing of the traumatic event and requires one of the following five symptoms: (1) recurring and intrusive memories; (2) thoughts, or images of the occurrence; (3) habitual distressing dreams; (4) behaving as though, or sensing, the occurrence is returning; and (5) mental suffering when reminded of the event. The second symptom cluster of seven avoidance or numbing symptoms, Criterion C, requires a minimum of three symptoms: (1) evading discussions, contemplations, and feelings about the event; (2) endeavors to elude circumstances reminiscent of the occurrence; (3) failure to remember central elements of the event; (4) a noticeable lack of concern for, or involvement in, important occasions; (5) a sense of alienation; (6) lack of intimacy; and (7) no long-term hopes or plans. The third symptom cluster, Criterion D, addresses hyperarousal and requires a minimum of two of the following five symptoms: (1) insomnia; (2) a bad temper; (3) trouble focusing; (4) excessive alertness; and (5) disproportionate “startle response.” Criterion E entails symptoms that exceed a month’s duration. The final criterion, F, necessitates symptoms that considerably disrupt the individual’s ability to function socially and occupationally. These diagnostic criteria demonstrate the complex nature and wide-ranging impact of PTSD on the individual and society. However, debates continue regarding the objectivity of the diagnosis criteria, due to the variability and subjectivity of symptoms based on self-reporting. Moreover, studies

continue to explore the possibilities that head injuries may contribute to PTSD or the misdiagnosis of PTSD because head injuries, especially multiple concussions, exhibit symptoms similar to PTSD.

Treatment

Because the stress levels accompanying traumatic events have an intensity that may alter brain chemistry, the most prevalent treatment for PTSD is an SSRI (selective serotonin reuptake inhibitor), a pharmaceutical frequently used to treat depression. Other common treatments for PTSD include various types of counseling—talk therapy or psychoanalysis; a holistic mind, body, and soul therapy; stress reduction techniques; group therapy; and cognitive-behavioral therapy (CBT)—a classification of time-limited therapies. CBT therapy accentuates self-awareness and

retraining so that learned behaviors can be unlearned. More recent treatments include rapid eye movement (REM) therapy and exposure therapy. REM therapy involves the affected individual conjuring up negative images while the therapist directs the eye movement patterns. Although researchers are still not certain how and why REM therapy works, the theory behind the therapy is that it may retrain pathways in the brain. Exposure therapy gradually exposes the individual to realistic renderings of the traumatic event. After prolonged exposure, the individual may become desensitized to the traumatic stimuli. Research exploring the use of virtual reality exposure therapy to create a more realistic depiction of the traumatic circumstances is under way. Moreover, experts in the fields of the neurosciences and pharmacology continue to seek treatment possibilities.



U.S. Air Force Senior Airman Joseph Vargas, a pharmacy technician with the 779th Medical Support Squadron, uses the Virtual Iraq program at Malcolm Grow Medical Center's Virtually Better training site at Andrews Air Force Base, Maryland. The 79th Medical Wing is one of the eight wings that use this new technology to treat patients suffering from posttraumatic stress disorder. The virtual reality-based software is designed to re-create a traumatic situation in a safe environment. Redeployed service members with posttraumatic stress disorder use this software as part of their therapy. *Source:* U.S. Air Force photo by Senior Airman Renae Kleckner (released).

Frontline Treatment

Frontline treatments for CSR endeavor to prevent longer term PTSD, to reinforce the normalcy and temporality of the condition, and to maintain frontline troop numbers. Common current techniques for the frontline treatment of CSR emerged in the aftermath of World War I. Rather than evacuating affected soldiers to the rear or to a hospital, frontline treatment aims to maintain the soldier's status and associations with his or her unit. There are three core elements in frontline treatment: (1) proximity to the traumatic event, that is, treatment should be administered in-theater if possible; (2) immediate treatment, as circumstances permit; and (3) an expectation that the soldier will quickly return to his or her unit. Treatment for CSR entails providing rest, nourishment, and clean clothing; permitting the individual to vent his or her feelings; assigning simple tasks; and reassuring the soldier that symptoms will likely improve in a matter of hours or days. Persisting symptoms require medical examinations, suicide prevention measures, and sometimes brief evacuations to medical or logistical units within close proximity to the soldier's unit. Treatment for prolonged symptoms also emphasizes rapid reintegration of the affected soldier into his or her unit.

In the wars in Iraq and Afghanistan, the U.S. military increased training for frontline officers and medics to aid in the identification of, and treatment for, CSR and PTSD. Attempts to make mental health professionals and treatment readily available on the front line resulted in the inclusion of mental health professionals in some medical units and the in-theater integration of combat stress teams, which provide spontaneous mental health tents where soldiers can relax, eat, and sleep. The U.S. military is undertaking efforts to provide telemedicine—videoconference and e-mail counseling and therapy—to improve access to mental health care for soldiers; yet these endeavors are dependent on infrastructure, funding, and technological limitations. However, military hospitals are implementing telemedicine to alleviate the increases in state-side demand for mental health treatment.

Military Screening

It is especially challenging to conduct predeployment and postdeployment screenings in the all-volunteer military. Predeployment screenings risk

false results among personnel who wish to deploy because the tendency among these soldiers is to minimize symptoms. Postdeployment screenings also frequently result in personnel dismissing and not reporting symptoms because their leave will be delayed, and perhaps exhausted, by further screening and interviews with psychologists or psychiatrists. In addition, psychiatric conditions clash with the warrior culture of the military, and some still regard them as a sign of weakness. Soldiers seeking a military career will also likely minimize their symptoms out of fear of damaging their chances of promotion. Reluctance to seek treatment, however, can lead to administrative discharges for patterns of misconduct that could be related to PTSD symptoms and can place the veterans benefits of the soldier at risk.

Stigma Reduction

Since September 11, 2001, and the wars in Afghanistan and Iraq, the American public is more accepting of PTSD as a scientifically proven medical condition and a normative response to extraordinary circumstances. Civilian acceptance of mental health issues and treatments, as evidenced by the common diagnosis and pharmaceutical treatment of depression, may also influence the acceptance of PTSD. Military predeployment and postdeployment screenings, education, training, and frontline treatment culminate in a concerted effort to reduce the stigma of PTSD in the military.

Veterans' Benefits

In 2010, the U.S. Department of Veterans Affairs (VA) retroactively eliminated the requirement to document specific events that may have caused PTSD in order for veterans to receive health care and disability benefits. The regulation aims to simplify claims to a diagnosis of PTSD and proof of service in a combat zone in a role consistent with the event(s) the veterans believe caused their condition. The VA intends the new requirements to help simplify and expedite the claims process for access to medical care and benefits. The VA also hopes that the new regulations will facilitate equal access for female veterans who, though barred from serving in combat branches according to official military policy, are often attached to combat units and have in the wars in Afghanistan and Iraq unavoidably experienced combat.

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See also Benefits, Military; Benefits, Veteran; Discharge and Separation; Medical Disability, Veteran; Psychiatry, Military

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POWELL, COLIN

Former secretary of state and retired four-star general Colin Luther Powell served in the U.S. armed forces and government over a 47-year career, from the eve of the Vietnam War to the post-9/11 invasions of Afghanistan and Iraq. Born in Harlem, New York, in 1937, Powell joined the Reserve Officers' Training Corps in 1954 at City College of New York. A Distinguished Military Graduate, he was commissioned second lieutenant in 1958 and deployed in 1959 to West Germany. Stateside from 1960 to 1962, Powell married and was then deployed to Vietnam for the first of two tours (1962–1963, 1968–1969). In 1970 and 1971, he was promoted to lieutenant colonel and earned a master's in business administration at George

Washington University. Powell made many political contacts as a White House Fellow in the Office of Management and Budget during the Nixon administration (1972–1973), but he returned to military command and quickly rose through the ranks, earning his brigadier general's star by age 41. The Reagan administration tapped the young general to serve as military assistant to the secretary of defense and later as national security advisor (1987–1989). Rising to four-star general in 1989, Powell served Presidents George H. W. Bush and Bill Clinton as chairman of the Joint Chiefs of Staff (1989–1993) and was secretary of state under President George W. Bush (2001–2005). This entry examines Powell's career and his views on war.

Vietnam and the Formation of Powell's Beliefs on War

Though clearly influenced by the work of Carl von Clausewitz, Colin Powell's thinking about war stemmed in part from his experiences in Vietnam. Deployed in 1962 as a specially trained military advisor to the South Vietnamese, Powell quickly grew frustrated with orders from Washington that failed to correspond with the realities on the ground—he later derided the search-and-sweep techniques and body counts demanded by stateside officials as “nonsense.” Powell's (1995) memoirs reveal that his return to Vietnam in 1968 added to his frustration, particularly with fellow officers willing to “quietly acquiesce in halfhearted warfare for half-baked reasons that the American people could not understand or support” (p. 149). Not coincidentally, Powell would later develop doctrinal guidelines designed to avoid involvement in wars without clearly articulated aims, American popular support, and unflinching commitment to seeing the task through.

From Officer to Washington Insider: Powell in the Reagan Administration

Powell's thinking about war and politics developed further during the early 1980s, while he was aide to Secretary of Defense Caspar Weinberger. Weinberger's vocal opposition to American military intervention in Lebanon symbolized a view both men shared: Military deployments abroad demand caution, clarity of purpose, and unequivocal political support and should occur only as a last resort, when national interests are at stake. Powell also witnessed

the bureaucratic infighting endemic to Weinberger's rivalry with Secretary of State George Shultz, and consequently he was well prepared by 1986 to step into the role of deputy to National Security Advisor Frank Carlucci and in 1987 to replace Carlucci in that post. Powell had gained a reputation for being a cautious, moderate pragmatist, and as national security advisor he helped restore credibility and professionalism to the National Security Council in the wake of the Iran-Contra scandal. Powell's moderate views influenced Reagan's decision making on U.S. relations with Nicaragua and the Soviet Union. Unlike his old mentor Caspar Weinberger, Powell advocated U.S.-Soviet dialogue and played a role in bringing an end to the Cold War by helping prepare Reagan for summit meetings with Soviet General Secretary Mikhail Gorbachev.

Chairman of the Joint Chiefs of Staff Under Bush and Clinton

As the global Cold War receded, regional conflicts took center stage in the Americas, the Middle East, and the Balkans. As chairman of the Joint Chiefs of Staff under President George H. W. Bush, Powell coordinated several large-scale military actions in response to regional instability, including the invasion of Panama and the Persian Gulf War. The Panama intervention was the largest U.S. military action of its kind since Vietnam, but even it was dwarfed by the Persian Gulf War. As Bush's principal military advisor, Powell favored using overwhelming, decisive military force—but only as a last resort. Powell counseled the president to exhaust diplomatic avenues and sanctions before authorizing the use of force against Iraq, but simultaneously he also worked with General H. Norman Schwarzkopf of Central Command to mobilize and stage some 250,000 troops to protect Saudi Arabia. Powell's insistence that war plans required clear political goals generated friction within the administration, including clashes with Secretary of Defense Dick Cheney and even the president, but in general, he skillfully managed relations among civilian and military officials and he helped build and maintain a multinational coalition supporting military action against Saddam Hussein's forces. The UN-authorized, U.S.-led coalition force ultimately numbered more than 500,000, and when called on to expel Iraqi troops from Kuwait, it succeeded

in fewer than 100 hours. Many favorably associated the battlefield victory with the stipulations of the Powell Doctrine: Military deployments abroad require clear political and military objectives, public support for the mission, and use of overwhelming force. Critics, however, argued that the war did not require such massive troop deployments and that leaner interventions would allow the United States to have a more responsive, activist foreign policy in the post-Cold War world.

The tension between the Clinton administration's liberal internationalism and Powell's more cautious "realist" approach became palpable with Yugoslavia's bloody breakup and the consequent humanitarian emergency in Bosnia. Powell argued against limited military intervention in the Balkans, in part because he saw the proposed actions as failing to meet his doctrinal criteria. According to the biographer Christopher O'Sullivan, by comparing the Bosnian situation to Lebanon in the early 1980s and by encouraging restraint rather than intervention, Powell became "the skunk at the picnic" in administration deliberations about the crisis.

Insider on the Outside, Looking In: Powell as Secretary of State

A popular public figure after the Gulf War, Powell's struggles to fit with the Clinton administration diminished neither his popularity nor his standing in the Republican Party, and in 1995, he flirted with a run for the presidency. The election of George W. Bush to that office in 2000 led to Powell's appointment as the 65th secretary of state. Powell's military credentials allowed him to straddle the line between matters of diplomacy and defense, and he was one of a minority group of traditionalists resistant to Secretary of Defense Donald Rumsfeld's "transformational" agenda. Powell's public image initially overshadowed Rumsfeld's, but the September 11, 2001, terror attacks shifted attention and influence to Rumsfeld and like-minded unilateralists, including Vice President Cheney and prominent neoconservative officials who repeatedly undercut Powell's emphasis on multilateral diplomacy and military action as a last resort.

Powell supported the 2001 invasion of Afghanistan but warned that expanding the war could damage the international coalition being built against al Qaeda. Skeptical that Iraq posed a security threat and troubled by "Axis of Evil"

finger-pointing, Powell attempted to slow the march to war with Iraq in 2002 and 2003, with little success. His skepticism extended to war planning—he believed that the transformationalists’ reliance on lean invasion forces would leave them underprepared for postconflict occupation—but his influence over Bush and Cheney was limited, and his closed-door dissents went unheeded. At the time, Powell’s expressed concerns about a potential quagmire in Iraq remained private; in public, Powell loyally defended the administration’s decision for war against Iraq, and at the United Nations in February 2003, he argued the case for war. After resigning from office in January 2005, Powell expressed regret over the speech, which later was shown to have relied on misleading intelligence reports.

Assessing Powell

Powell is a unique, pathbreaking figure. A combat veteran who became the first African American four-star general, national security advisor, chairman of the Joint Chiefs of Staff, and secretary of state, his was a consistent voice of moderation and pragmatism in the administrations of four presidents. Powell’s accomplishments and dedication to military and public service are unimpeachable, but critical evaluation of his contributions and strategic thought is possible thanks to an array of published materials, including Powell’s autobiography and articles on war and diplomacy, reputable biographies by DeYoung and O’Sullivan, and scholarly articles evaluating Powell’s influence on foreign policy decision making.

Jonathan M. DiCicco

See also Iran-Contra Scandal; Iraq War, Planning for; Lebanon, U.S. Intervention in (1982); Panama, U.S. Intervention in; Persian Gulf War; Vietnam War; Weinberger-Powell Doctrine

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PRESIDENT AS COMMANDER IN CHIEF

In the Constitutional Convention of 1787, the founders decided to move the war-making power from the executive, where it was exercised in Britain, to Congress. Their fear was that a president with war-making powers could become a dictator, like Oliver Cromwell in England. The Constitution therefore divided the powers, making the president the commander in chief of the military forces and giving Congress the power to fund the military and “declare” war. It did not say to “make” war, for that would have hamstrung presidential efforts to repel an invasion before Congress would have a chance to meet. In American history, there have been formal declarations of war only in 1812, 1846, 1898, 1917, and 1941. Since 1964, major military interventions have been explicitly approved by Congress without a declaration of war. This entry examines the approaches used and the strengths and weaknesses of U.S. presidents as commanders in chief.

Constitutional and Institutional Power

Although the Constitution empowers the president to serve as commander in chief, presidents have constitutionally and symbolically been viewed as civilians. In contrast to British monarchs, who don military uniforms, presidents since John Adams have worn exclusively civilian garb, even when reviewing troops. The Constitution is vague on the powers of the president as commander in chief and puts in few direct restrictions. It does declare that the writ of habeas corpus can only be suspended in time of war or insurrections and places limits on the reasons why the militia can be called up for active federal service.

Since the founding of the republic, there has been heightened conflict between the congressional powers to make war and the presidential powers as commander in chief. Congress, through the power of

the purse, does have the ultimate power to halt any military action by withholding funds. Moreover, the U.S. Senate must confirm the appointment of every commissioned officer, from the lowest lieutenant to a five-star general. On occasion, Congress has cut off funds for military operations, and the Senate has withheld or delayed confirmation to assert congressional authority. But the general pattern, especially in wartime, is to give the president wide latitude even in unpopular conflicts.

The Supreme Court has with few exceptions shied away from ruling on the powers conferred the president as commander in chief, especially in the area of making war. Congress, in the aftermath of the Vietnam War, passed the War Powers Act in 1973, which places strict limits on presidential war making. However, every president since then has questioned its constitutionality. Moreover, the War Powers Act has never been fully tested either politically or constitutionally.

World War II and the Cold War that followed had a profound impact on the institutional powers of the president as commander in chief. The creation of the Joint Chiefs of Staff by Franklin Roosevelt, later institutionalized by law in the National Security Act of 1947, afforded the president direct access to military commanders. The creation of the National Security Council in 1947 sought to provide better coordination between the State Department and the military in formulating foreign and defense policy. Although presidents have varied in how they use the National Security Council, this has served to buttress a growing consensus in Washington that it is imperative that the vice president be kept abreast of national security policy. The formation of the National Security Council fostered creation of the position of national security advisor and attendant staff within the executive office of the president. This advisor and staff have provided successive presidents with significant advice and ways to implement policy that is independent of the State and Defense Departments. For instance, under President Richard Nixon, Henry A. Kissinger as national security advisor opened direct negotiations with the People's Republic of China. A number of national security advisors and a significant portion of the staff have been active-duty or retired military officers.

On the most basic level, presidents today have much more contact with military officers than did their counterparts prior to World War II. Since the

1960s, a military aide carrying a "nuclear football" follows the president everywhere to provide the commander in chief with the ability to respond to a nuclear attack immediately. A range of White House functions, especially in the area of transportation and communication, are carried out by active-duty personnel. The presidential retreat, Camp David, established by President Franklin D. Roosevelt, is maintained by naval personnel.

The communication revolution, especially radio and satellite communication, has profoundly shaped the relationship of the president with military and naval commanders in the field. For instance, naval vessels at sea prior to radio had no direct communication contact with shore commanders until they docked in port or received a message from another ship. Radio communication, and later satellite communication, allows a president to track the movement of naval vessels and have real-time communication with commanders and subordinates anywhere in the world. Since 1961, the White House has maintained a secure Situation Room that both tracks worldwide political and military development and serves as a secure facility for communication in times of crisis.

Historical Precedents, 1794–1940

When farmers in western Pennsylvania protested the whiskey tax in 1794, they attacked federal officials and closed down the federal courts. President George Washington took immediate action. He called on governors to provide militia and personally led 12,000 soldiers into western Pennsylvania. The protesters dispersed, and the power and prestige of the president as commander in chief were confirmed. John Adams, however, was less successful in sustaining the president's role as commander in chief. A major war scare in 1798 between France and Britain led to a diminution in presidential power after Alexander Hamilton, who was out of office but controlled the Federalist Party, saw an opportunity to rally public opinion and overwhelm the Republicans as well as defend against a possible French invasion. Congress, controlled by Hamilton's allies, set up a new standing army, with George Washington in nominal control and Hamilton in actual control. Republicans, fearing the army would be used to invade states like Virginia, were ready to use their state militias to resist. While Adams in

effect had been stripped of his role as commander in chief, he averted a war by sending diplomats to Paris to arrange a compromise. The war scare ended, and the new army was disbanded, leaving behind deepening fears among Republicans of the dangers of a standing army.

When Jefferson became president in 1801, he distrusted both the army and the navy as threats to republican values and civilian control. He created the United States Military Academy at West Point to provide a republican officer corps to eventually replace the predominantly Federalist officer corps. Jefferson sent the navy's best frigates into dry dock and built numerous small gunboats that could defend American ports from invaders but would not be an offensive threat to any nation. Jefferson, and President James Madison, believed that in case of war the local militia by the tens of thousands would spring to arms and constitute a good enough army. During the War of 1812, however, the poorly led and undersupplied regular army was practically helpless, and the militias repeatedly refused to leave their home states. The gunboats proved worthless as the British raided the coast at will and, in 1814, burned the national capital in Washington. Madison was baffled by his duties as commander in chief and was unable to pull the nation together or develop an effective strategy. When James Monroe became president, he appointed John C. Calhoun as secretary of war, and Calhoun thoroughly modernized the department, moving it from a patronage office to an agency with the mission of developing officers, training professional soldiers, and fighting and winning wars. There was no more reliance on the militia.

Unlike Madison and Adams, James K. Polk, who also lacked formal military experience, did much to buttress the president's role as commander in chief. After securing congressional authorization for the war against Mexico in 1846, Polk demonstrated able leadership. He used his patronage powers to dispense some 350 officer's commissions in order to shore up support for the war, and he oversaw successful military campaigns led by Generals Zachary Taylor and Winfield Scott. Polk's leadership so impressed Abraham Lincoln that he turned to his example during America's next great war.

Abraham Lincoln had the most challenging job as commander in chief. As the war broke out in April 1861, he coordinated state and national forces

and delayed calling Congress. In the first year of the war, Lincoln proved highly successful at enlisting bipartisan support, a policy he underscored by searching out and making generals of leading Democrats. His main weakness was tolerating the incompetent, patronage-oriented Secretary of War Simon Cameron, until he finally brought in a highly energetic and successful Edwin Stanton in 1862. Lincoln issued the Emancipation Proclamation on January 1, 1863, on the basis of his war powers, realizing that the emancipation legislation already passed by Congress would be ineffective. The proclamation had the effect of freeing most of the slaves in the Confederacy, and day by day, Union troops marched through and slaves were liberated. When draft protestors rioted in New York City in 1863 and threatened the war effort, Lincoln sent in combat troops with artillery; they shot grape down the cobblestone streets and crushed the uprising. But when protestors halted the draft in the Pennsylvania coal-mining districts, he left them alone, realizing he needed the coal more than he needed reluctant draftees. Lincoln spent many hours in the telegraph office reading the war dispatches and was increasingly prompted to remove generals who lost battles. His sharp, analytical mind grasped the larger strategic picture, and his attention to detail gave him a quick appreciation of the strengths and weaknesses of his generals. By late 1863, he had found Ulysses Grant, who not only was the aggressive general he needed but also supported Lincoln's emancipation policies and was willing to use Blacks in the army so that they could validate their claims to full citizenship. Lincoln as commander in chief used his war powers to begin the process of Reconstruction in the conquered areas of the South, repeatedly challenging the radical Republicans in Congress, who were much less interested in the reunification of the nation. Lincoln's assassination emboldened the radicals as the people demanded vengeance.

President Andrew Johnson proved inept in his use of the army as an instrument of Reconstruction and was stripped of most of his control over the military by Congress. In the disputed presidential election of 1876, a compromise was reached by which Republican Rutherford Hayes would become president and would immediately withdraw the army troops that were propping up Republican state governments in Florida, Louisiana, and South Carolina. Although he won a disputed election, Hayes soon

proved himself a vigorous and extraordinarily controversial commander in chief when he ordered the U.S. Army to crush the Great Strike of 1877. Despite the fact that troops were serving without pay due to the failure of Congress to pass a new appropriations bill, the new president ordered the troops into action against their fellow citizens. The strikers fared no better under the first Democrat elected since the Civil War. Democrats advocating states' rights were astonished when President Grover Cleveland sent in the army in 1894 to break up the Pullman Strike, citing federal authority over mail routes. It was the last time the army would be used to break up strikes, although state National Guard units were occasionally called out to quell violence between strikers and strike breakers.

William McKinley made effective use of specialized staff services and modern communications. He opened the first war room of the White House and followed very closely the actions of his army and navy infighting over the conduct of the war against Spain in 1898. It was McKinley who made the major strategic decisions, often overruling or ignoring his senior generals. His weakness was in allowing an ineffective secretary of war to continue in office. Despite this shortcoming, McKinley made important institutional changes, foremost among them being the creation of the 11-member Navy General Board in 1900. McKinley's successor, Theodore Roosevelt, took a keen interest in military affairs, which was natural given his background as assistant secretary of the navy and leader of the Rough Riders during the Spanish-American War. Roosevelt's deep involvement in directing the nation's foreign policy also dictated an expansive use of his power as commander in chief. To safeguard the Open Door to China, the president dispatched America's "Great White Fleet" on an around-the-world tour, designed in part to deter Japanese expansion in Asia. To protect the Panama Canal, construction on which began in 1904, Roosevelt announced his corollary to the Monroe Doctrine, which warned European nations not to intervene in Latin America to restore order. Instead, that job fell to the United States, and as president, Roosevelt repeatedly dispatched U.S. forces to the Caribbean.

Woodrow Wilson, who led America during World War I, did not share Roosevelt's interest in military affairs, but he did share Roosevelt's concern for protecting American interests, which in turn

led the president to stretch his authority as commander in chief. Under Wilson, the United States occupied both Haiti and the neighboring Dominican Republic, and on two occasions, the 1914 occupation of Veracruz and the 1916 dispatch of General John J. Pershing and an American expeditionary force of 10,000 men, the president sent the U.S. military deep into Mexico.

In the run up to World War I, Wilson championed civilian control over the military and was outraged to learn that the army had made war plans should the nation enter the European conflict. Wilson denuded the Army-Navy Joint Board and fired his secretary of war, who was too active in preparing for war. Wilson's new secretary of war, Newton Baker, a pacifist, was effective in building the camps and mobilizing draftees after May 1918, but he too avoided all strategic discussions and decisions. Wilson only met with General Pershing once and, in effect, turned over all of the major military decisions to him. Meanwhile, the secretary of the navy was a politician uninterested in naval affairs, so the unusually dynamic assistant secretary of the navy, young Franklin D. Roosevelt, took charge of a highly efficient Navy Department. Roosevelt, however, seldom had an opportunity to talk to Wilson.

World War II and the Cold War

Franklin Roosevelt, thanks to his experiences in World War I, knew more about warfare than any president since his distant cousin Theodore; he was especially favorable toward the navy. Despite the nation's heavily isolationist mood in the mid-1930s, Roosevelt used relief spending to strengthen the navy yards and build warships. The navy secretly developed long-range submarines that could engage in unrestricted warfare against the Japanese merchant fleet—exactly as the Germans had done against the British in World War I. When Roosevelt learned about it in 1938, he seized upon submarines as a war-winning weapon that enabled him to threaten Japan. Within hours of Pearl Harbor, he had issued orders for unrestricted submarine warfare against Japan—exactly the same policy as that of Germany in 1917. Roosevelt was also an enthusiast for air power, pushing for an expansion of the Army Air Corps and supporting increased production infrastructure that ultimately produced more than 300,000 warplanes during the course of the

war. During the war, Roosevelt adopted McKinley's practice of having a war room—now called the map room—and consulted daily with his chief of staff, Admiral William Leahy. Roosevelt made sure he had the final say in every significant decision involving the army and air force, and relations with Britain and Russia as well. He was less successful with the navy, where Admiral Ernest King kept his secrets and his strategies to himself, even to the point of not asking for British aircraft carriers, which were needed in the battle of Midway. Over at the War Department, Secretary Henry Stimson had his own secrets and took full control of developing the atomic bomb.

Vice President Harry Truman was kept totally ignorant about the war plans until the day he became president. Even as president, he had a very weak White House staff and could not counter Leahy (who represented the Pentagon's position) or Stimson. In the emerging Cold War after 1947, including the creation of the North Atlantic Treaty Organization (NATO) in 1949, Truman largely ignored the new Defense Department and, instead, closely followed the advice proffered by the State Department, especially Dean Acheson. Thus, it was Acheson's recommendation to send American troops to defend Korea in June 1950 that Truman adopted without consulting his National Security Council, the Central Intelligence Agency (CIA), the Defense Department, or the Joint Chiefs of Staff. In the actual fighting of the war, Truman made few decisions, but his failure to get formal approval from Congress and instead rely on UN authorization proved disastrous. When the war turned badly after the Chinese invaded in late 1950, Truman's support in Congress and in public opinion disintegrated. Despite his slide in the polls and the concomitant drop in political power, Truman reinforced civilian control and the president's authority as commander in chief at a pivotal moment in the republic's history when he relieved Douglas MacArthur of his command in Korea. MacArthur's repeated public threats to expand the war and his open letter to Republican House Minority Leader Joseph Martin criticizing Truman's Eurocentric foreign policy and calling for a second front to be opened on the Chinese mainland by Nationalist Chinese leader Chiang Kai-shek doomed the general. Although the president received the backing of the Joint Chiefs of Staff as well as Secretary of State Acheson and Secretary of Defense George C. Marshall, his decision resulted

in demands from leading conservatives for his impeachment, as well as a sharp drop in his approval ratings. Although publicly unpopular at the time, the president's decision eventually won widespread acceptance and even admiration.

Truman's successor, Dwight David Eisenhower, had the experience and prestige to handle all major military decisions himself, including the threat to China to use nuclear weapons unless the country came to peace terms in Korea. Always worried about excessive government expenditures and the mounting national debt, Eisenhower dismayed his top generals by cutting back on land forces and relying more heavily on nuclear weapons. He rejected the advice of the Joint Chiefs to give military support to France, as it was losing its war in Indochina in 1954, but helped, starting in 1955, to nurture the infant, noncommunist state of South Vietnam. Saving this new state was left to his successors.

John F. Kennedy's presidency began with the ill-fated decision to try to overthrow the communist regime of Fidel Castro. In 1961, he approved the CIA plan to invade Cuba, only to be humiliated at the Bay of Pigs. The following year, Kennedy forcefully confronted the placement of nuclear missiles by the Soviet Union on Cuba soil by fully mobilizing American conventional and nuclear forces. Kennedy asserted his authority as commander in chief and overruled his military advisors, who sought a preemptive strike on Cuba. Instead, Kennedy imposed a naval blockade and pressed for a diplomatic solution that led to the removal of Soviet missiles and averted a war that could have quickly escalated into a nuclear one.

Convinced that the application of modern American technology and know-how could destroy the insurgency in South Vietnam, he sent in 16,000 military advisors along with CIA operatives. Kennedy and his brothers were enamored of the idea of special forces serving as the new warrior to confront the threat of communist insurgencies. The Green Berets would be imposed on a reluctant army that, apart from the paratroopers, opposed the concept of diverting resources to special forces and questioned their effectiveness.

Kennedy's goal was to build up the South Vietnamese so that they could win their own war. Lyndon Johnson did not want a war in Vietnam because it would seriously distract him from his primary goal of funding the Great Society at home.

But he could not pull out, because he was committed to a policy of containment, which allowed the communists to take the initiative where the Americans were weakest, as in Korea and Vietnam. Johnson feared that the alternative was the rollback strategy of Barry Goldwater, which risked nuclear war. To avoid the risk of another Douglas MacArthur, Johnson personally selected the generals and created a complex system of divided command, so that no one was really in charge except for himself and Secretary of Defense Robert McNamara. Keenly aware of Truman's mistake in 1950 in not getting congressional approval, Johnson used a thin episode at the Gulf of Tonkin in 1964 to secure near-unanimous congressional approval for whatever military actions he took. The result was an extreme micro-management that allowed Johnson and McNamara to bypass the generals. The service chiefs came close to resigning in protest, but Johnson had shrewdly picked the men least likely to do so. When the Tet Offensive destroyed public support for the war, Johnson was forced to end his reelection campaign. Almost two decades later, Congress, instituting the lessons learned from Vietnam, permanently blocked a president from emulating Johnson by passing the Goldwater-Nichols Act of 1986, which requires that all military orders go from the president to the secretary of defense and then to the Joint Chiefs of Staff, which has direct command of all operations. No end runs or tangled lines of command are allowed. The chairman of the Joint Chiefs, appointed by the president to a 2-year term with the approval of the Senate, is now the principal military advisor to the president, the National Security Council, and the secretary of defense and has to approve all military operations.

To bring a military solution to the war, Richard Nixon expanded the war to Cambodia and, in 1969, ordered the secret bombing of Cambodia without informing either Secretary of Defense Melvin Laird or Congress. In 1970, Nixon sent ground forces into Cambodia, and Congress responded by placing strict limits on the deployment of American troops to that country. Nixon also championed Vietnamization, a program that turned the fighting over to the South Vietnamese army. Finally, in 1973, Nixon signed a peace agreement with North Vietnam, recovered the captured prisoners of war, and brought the military home. Nixon made secret promises to Saigon based on his powers as commander in chief, but they

became void when he resigned in 1974. Nixon also used his powers as commander in chief to suspend the draft, moving the country to an all-volunteer force. Nixon's conduct of the war quickly produced a congressional backlash against the "Imperial Presidency," and Congress passed the War Powers Act, designed to limit the president's powers as commander in chief. There have not been direct confrontations over the War Powers Act, but every president has regarded it as unconstitutional. Thus, when Ronald Reagan used his war powers to invade Grenada in 1983, he covered his international position by gaining the approval of the Organization of Eastern Caribbean States (the regional defense organization), and he was careful to strictly abide by the terms and timetable of the War Powers Act.

Ronald Reagan's most controversial role in expanding the power of the president as commander in chief would be his conduct of relations with Iran. Despite a public pledge that the United States would not negotiate with terrorists, Reagan authorized the United States to sell arms to the Iranian regime, in part to secure the release of American hostages held in Lebanon by Iran-supported terrorists. The sale of arms to a regime that, only a few years prior, had taken over the U.S. embassy and held Americans hostage remains in hindsight perplexing. The United States had discreetly supported the Iraqi regime of Saddam Hussein in its war against Iran that began in 1980.

To carry out the Iranian policy, the administration bypassed the State and Defense Departments and relied on the national security advisor to execute the policy. Funds derived from the sale of arms to Iran were funneled to support the Contra rebels, who were seeking to overthrow the Sandinista regime in Nicaragua. These actions were undertaken to circumvent congressional restrictions placed on funding the Contras. The disclosure of the arms sales in 1986 led to a major public scandal that resulted in both congressional hearings and the establishment of independent counsel to investigate the affair. While the Iran-Contra scandal tarnished many reputations, the president remained popular, as did his vice president, who won a convincing election of his own in November 1988.

Post-Cold War to the Present

The collapse of the Berlin Wall in 1989 and the end of the Cold War led to heady talk about the end of

history and calls by President George H. W. Bush for a new world order. A peace dividend did emerge as a result of the end of the Cold War, but before the U.S. military downsized significantly, it would be deployed in 1991 in a major conflict against Iraq. In 1990, President George H. W. Bush responded to the Iraqi invasion of Kuwait by quickly deploying American troops to Saudi Arabia and gaining UN sanction to expel Iraq from Kuwait (and he asked Congress to vote approval). The euphoria generated by America's quick victory lifted the president's poll numbers but had dissipated by November 1992 to make George H. W. Bush a one-term president.

His successor, Bill Clinton, would be the first president since Franklin D. Roosevelt who had not served in the military. An opponent of the Vietnam War in his youth, Clinton faced significant opposition within both Congress and the military to his efforts to implement a campaign promise to eliminate the exclusion of gays and lesbians from the armed forces by issuing an executive order. Forced to compromise with the opposition, Clinton signed congressional legislation that established "Don't Ask, Don't Tell," which permitted both gays and lesbians to serve in the armed forces provided they remained secretive regarding their sexual orientation.

In terms of foreign policy, Clinton faced significant murmuring among senior military commanders regarding possible intervention in Yugoslavia. Clinton, responding to public unease regarding overseas military involvement in his first years in office, did prove cautious about foreign conflicts. Although the United States maintained a continuing presence in the Persian Gulf in conjunction with Great Britain in order to contain Iraq, primarily by using American air power to enforce a "no fly zone," it did not deploy American troops to participate in UN operations. Clinton withdrew American troops from Somalia after a raid to capture a Somali warlord ended disastrously, and the United States did not intervene to prevent the genocide in 1994 in Rwanda.

The Clinton administration, while reluctant to put "boots on the ground," would over the course of the presidency make greater use of American power. In 1995, American air power in conjunction with NATO would help encourage diplomatic settlement of the conflict in Bosnia. Even more decisively, the Clinton administration, together with NATO, responded with an air offensive in response to the Serbian invasion of Kosovo in 1999.

In the area of terrorism, the United States faced a series of attacks from radical Islamists during the Clinton presidency, including the bombings of the World Trade Center in 1993, the American embassies in Tanzania and Kenya in 1995, and the naval vessel *USS Cole* in 2000. More successfully, the U.S. Custom Service in 1999 managed to apprehend a group of terrorists on the Canadian border who meant to unleash a major attack in Los Angeles. In terms of domestic terrorism, a federal office building in Oklahoma City would be firebombed by Timothy McVeigh, a right-wing extremist.

The Clinton administration's response to terrorism was to seek additional funding to strengthen American intelligence and law enforcement to deal with this threat. Although Congress did provide additional funding, it often approved it grudgingly, and there was little sense of urgency in political discourse. For instance, Clinton ordered unsuccessful missile strikes to kill al Qaeda leader Osama bin Laden and other al Qaeda targets in Sudan and Afghanistan. Republican critics in Congress declared that these attacks were politically inspired to divert attention from the looming scandal involving Clinton's intimate relationship with Monica Lewinsky. For instance, Senator John D. Ashcroft of Missouri, who later served as attorney general under George W. Bush, declared that there "there is a cloud over this presidency," and Senator Dan Coats called for Clinton's resignation over this failed attempt to kill bin Laden.

George W. Bush, when running for president in 2000, criticized Clinton's foreign policy for being too ambitious and asserted that the United States must get out of the business of nation-building. Neither Bush nor his opponent, Vice President Al Gore, centered their campaigns on issues of terrorism or national security. As president, George W. Bush's public agenda in his first few months in office centered on implementing tax cuts and the question of stem cell research.

The terrorist attack against the United States by al Qaeda on September 11, 2001, had a profound effect on the United States. A small group of al Qaeda terrorists had managed to hijack four airliners and crash three of them into the twin towers of the World Trade Center and the Pentagon. The response to this attack would be a remarkable show of public support for the Bush administration and Congress, which expanded presidential powers to

combat terrorism through the USA PATRIOT Act. Moreover, Americans, joined by a number of allies, would quickly strike at Afghanistan, which had harbored al Qaeda.

The Bush administration took an expansive view of presidential authority as a result of what it termed the Global War on Terrorism. For instance, the administration unilaterally declared that the Taliban would be treated as enemy combatants and denied the rights of prisoners of war under the Geneva Conventions. To house enemy suspects and to limit the authority of the federal courts (unsuccessfully in the end), it established a prison in the American base in Guantanamo, Cuba. Bush exerted an expansive view of presidential powers in terms of the right to abrogate the Geneva Conventions and other treaties the United States had ratified. The administration insisted that the Constitution allowed the president to establish military tribunals to try terrorist suspects without congressional assent. Moreover, the administration often bypassed the Federal Intelligence Court to authorize extensive electronic surveillance of Americans. Although George W. Bush publicly claimed that the United States was not in the business of torture, water boarding and other interrogation practices were permitted, which critics insisted violated international and American law regarding the treatment of prisoners held in U.S. custody.

In 2003, the Bush administration argued that the United States must go to war with Iraq on what proved to be the erroneous assumption that it was developing weapons of mass destruction, as well as the claim that it had allied itself with al Qaeda. The Bush administration orchestrated a successful campaign to build support for military intervention that included leaking inaccurate reports of Iraqi nuclear capabilities to *New York Times* reporter Judy Miller. Critics of the policy faced retribution. For instance, when Ambassador Joseph Wilson challenged claims that Iraq was purchasing uranium in Sudan, his wife's service as a CIA agent was revealed to the media by Vice President Richard Cheney's chief of staff. George W. Bush was able to gain official congressional approval for his invasions of Afghanistan in 2001 and Iraq in 2003. In contrast, despite the best effort of Secretary of State Colin Powell, the United States could not convince skeptical allies, most notably France and Germany, to support the United States at the United Nations Security Council. Although the Bush administration

managed to assemble a coalition of the willing that included significant troop commitment from Great Britain, a number of nations that had committed troops to the Persian Gulf War and Afghanistan refused to support the war in Iraq, most notably Canada and France.

Civil-military relations deteriorated over the course of the Iraq War. Bush's domineering defense secretary, Donald Rumsfeld, trying to curtail costs, did little planning for the postwar occupation and used far too few troops, as a massive insurgency threw Iraq into chaos with the deaths of thousands of Americans and many thousands of Iraqis. Furthermore, Rumsfeld tried to dominate the Joint Chiefs, and they pushed back. Bush kept Rumsfeld too long, and only when he left was it possible to use a surge strategy, as formulated by General David Petraeus. Robert Gates, former director of the CIA, replaced Rumsfeld and did much to restore relations between the civilian and military leaders.

The enthusiasts who voted for Barack Obama in 2008 expected him to radically change American military policies just by using his powers as commander in chief. In practice, the changes were small. Obama followed the Bush timetable in shutting down the offensive operations in Iraq in 2010, while continuing a large presence with the mission of training the Iraqi forces. Obama initially retained Bush's secretary of defense, Robert Gates.

As a candidate, Obama had complained that the Bush administration overemphasized Iraq to the detriment of the more important and more legitimate conflict against the Taliban in Afghanistan. As president, he alienated his political base by escalating the war and putting Bush's surge strategist, General Petraeus, in charge of a surge in Afghanistan in 2010. Obama's announced long-term goal was to strengthen the Afghans so they could win their own war. The failure of the Obama administration to close Guantánamo or to bring criminal charges against senior officials who supposedly concocted false information to invade Iraq in 2003 disappointed and even angered sections of Obama's liberal base. Obama had greater success in changing the "Don't Ask, Don't Tell" policy and managed to gain congressional approval in late 2010 to allow gays and lesbians to serve openly in the military. In terms of style, Obama made it a point to regularly visit military bases to boost morale and hold special functions at the White House honoring American

active-duty personnel, and First Lady Michelle Obama has sought to bring attention to the needs of military families.

Although the Obama administration did remove all forces from Iraq, he has, like his predecessors, taken an expansive view of presidential powers in the area of national security.

He aggressively used drone technology to kill individuals deemed terrorists in Pakistan and Yemen. American forces, while not in combat, backstopped the NATO attacks that toppled Libyan leader Muammar Qaddafi. Perhaps the biggest success of the Obama presidency was the killing of Osama bin Laden in Pakistan in 2011. Bin Laden had eluded the United States for nearly 10 years following the attack on the World Trade Center. Obama personally ordered the attack on bin Laden despite the warning from civilian and military advisors that risks of failure were great. The killing of bin Laden did not end the threat of terrorism or al Qaeda, but it certainly represented a crucial turning point.

Conclusion

While presidential command over the nation's armed forces has remained inviolate since the birth of the republic, the degree of control that individual presidents exercise has waxed and waned. At times, this shifting measure of control is the result of personal temperament and experience, while at other moments it reflects political realities or lessons learned from past administrations.

Richard Jensen

See also Air Force One; Bosnia Intervention; Congress, U.S.; Constitution, U.S.; Global War on Terrorism; Goldwater-Nichols Department of Defense Reorganization Act; Iran-Contra Scandal; Iraq War (2003); Kosovo Intervention; Marine One; National Security Council; 9/11 (2001); 9/11 Commission; Persian Gulf War; Rumsfeld, Donald; USA PATRIOT Act; War Powers Act; White House Military Office

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PRISONERS OF WAR

Prisoners of war (POWs) are combatants or civilians captured by enemy troops during a conflict. International law sets standards for defining POWs and ensuring that those captured are treated humanely; those laws have been revised and expanded significantly during the past century, usually in response to large-scale atrocities or abuse. During wartime, it is often difficult to ascertain whether opposing forces are treating POWs humanely, so international bodies such as the Red Cross are entrusted with inspecting camps, prisons, and other facilities to confirm that international humanitarian law (IHL) is being followed. When IHL violation occurs, individuals, organizations, armies, or governments may be prosecuted in their respective national or international courts.

Laws Regarding POWs

Under customary laws of war that developed over the course of the early modern era, POWs were entitled to humane treatment by their captors. Often, sharp distinctions were made between officers and enlisted men. For instance, the Americans and the British during the American Revolution regularly paroled officers and allowed them to return to their homes if they agreed not to take up arms. Exchanges of POW officers between enemies were also common. The treatment of the enlisted ranks could be less benign; for instance, scores of common soldiers held by the British during the American Revolution faced ghastly conditions aboard prison ships anchored in New York Harbor. The distinction between officers and enlisted personnel continues to

exist in international law—enlisted personnel can be compelled to work while officers are exempted.

During the Civil War, both sides routinely paroled or exchanged captured POWs. As the war progressed, the Union Army halted prison exchanges and paroles to deprive the Confederacy of badly needed manpower. As a result, death rates soared in the prison camps in the South and North. Conditions were the worst at the Confederate camp in Andersonville, Georgia, which lacked adequate potable water or any type of shelter, and provided starvation rations. After the war, Henry Wirz, the commandant of the camp, was tried and convicted by a Union court-martial for violating the laws of war and was hanged.

During the second half the 19th century, there emerged an effort to codify and build on customary laws of war, beginning with the establishment of the International Committee of the Red Cross and the First Geneva Convention (1864).

The 1907 Hague Convention (Hague IV) set standards for determining who qualified as a protected combatant and ordered that they be treated humanely. The Convention emphasizes parity: Countries are allowed to use enemy combatants as a labor force, though they must be paid at a rate comparable with that country's own soldiers. POWs must also be provided living conditions on the level of a country's own soldiers and are entitled to their personal property, wages, and religious freedom. Also included in Hague IV are rules requiring an office of inquiry (for information on a particular prisoner) and aid worker access to the POWs. Following the conclusion of hostilities, prisoners are to be repatriated quickly.

Though the Hague Conventions established the basic standards for the treatment of enemy POWs, World War I encouraged many nations to further codify humanitarian principles in order to better protect POWs. In the wave of international law written after 1918, the Third Geneva Convention in 1929 (which would be updated in 1949) expanded on Hague IV's laws regarding POWs, particularly with regard to the individuals covered by these laws. Certain civilians were now protected, including those who accompany armies without serving as combatants, merchant marine crews, and civil aircraft crews. Torture was explicitly banned in the Convention. Most important, though, the Third Geneva Convention indicated that humane

treatment of prisoners was the responsibility of the government in power, not the individuals or individual units that are more directly in control of prisoners. It further granted these rights to prisoners of all nations, not just those whose countries of origin were parties to the convention.

The enormous scale of inhumane behavior during World War II resulted in the first major international war crimes trials, as well as further expansion of the accepted laws of war. Along with the Nuremberg Principles, which established legal precedent for international prosecution of war crimes (including inhumane treatment or murder of POWs), the post-war establishment of the United Nations created an international body that would also expand humanitarian law. The Fourth Geneva Convention in 1949 updated the rules governing POWs from the 1929 conventions.

The 1996 War Crimes Act defines a war crime as a grave breach of Geneva Convention protocol. The relationship of the Global War on Terror to international humanitarian law is more vague and controversial and is discussed later in this entry.

One of the main qualifiers for humane treatment of POWs is the notion of reciprocity. Between two enemy nations, the expectation of the opposing side's behavior dictates how POWs are treated: If an army assumes that its own men are being treated fairly by the enemy, it will usually treat that enemy's prisoners in a similar manner. A major motivating factor in committing war crimes against POWs (particularly in the 20th century) is racial or ethnic prejudice, as seen in many countries during World War II and in civil conflicts (such as the Yugoslav Wars) across the globe. The International Committee of the Red Cross continues to act as a neutral, third-party observer, monitoring activities related to POWs worldwide.

POWs in the 20th Century

The experience of POWs is difficult even under the best circumstances. Captivity that can stretch from months to years can lead to feelings of helplessness and depression. Even when a country holding POWs adheres to international humanitarian precepts codified by the Hague and Geneva Conventions, conditions, especially for enlisted personnel, can be austere, especially with regard to diet and housing. Americans held captive have, at times, managed to

escape and elude recapture, but often this option is not feasible for the vast number of prisoners held deep within enemy territory.

World Wars I and II

Americans held captive in World War I and World War II fared relatively well. In both conflicts, the German government adhered to international agreements regarding the treatment of POWs. This proved especially important in World War II since it gave American POWs regular access to Red Cross packages containing food to supplement the rations supplied by their captors and provided for regular inspections by the International Red Cross. Abuses did occur; some American Jewish POWs were persecuted, a group of soldiers captured during the Battle of the Bulge was summarily executed, and some Americans who staged an escape from Stalag Luft III were executed after their capture. At the end of the war, scores of American POWs were force-marched from prison camps in eastern Germany to avoid their liberation by the Soviet Union. Despite these incidents, only 1% died in captivity. The humane treatment of American POWs is one of the great successes of the Hague and Geneva Conventions, and it stands in sharp contrast to the genocidal policies of the German government aimed at Jews and the Roma.

Soviet troops captured by the German army suffered grievously. The German army began the war with orders to execute all political commissars on capture. Although the German army did take millions of Soviets captive, death rates in German POW camps were staggering, with more than 60% of Soviet prisoners dying by the end of the war. The Soviet Union also did not adhere to international humanitarian standards, and conditions were harsh for the German captives. The vast majority did not survive captivity, and those who did were not released until 10 years after the war.

Americans held captive by the Japanese were treated brutally, along with prisoners from other Western countries. Japan did not adhere to the Geneva Conventions, and the Americans routinely suffered from inadequate food, poor sanitary conditions, and lack of proper medical care. A group of Americans held in China were even subjected to a series of medical experiments. Torture and summary execution were routine and random, especially

for prisoners trying to escape. The forced march of American POWs captured after the fall of Bataan in 1942 led to hundreds of death from summary execution. The Japanese did permit some shipment of Red Cross packages to prisoners and limited exchange of correspondence with families at home. As a result of these conditions, nearly one quarter of the American POWs held by the Japanese perished.

The United States did not maintain any prison camps during World War I, but it established a large network in the United States during World War II, in the end holding more than 378,000 captives from Germany and a much smaller number from Japan. The United States adhered closely to international obligations regarding the humanitarian treatment of these prisoners, and as a result, most of the captives remained complacent during their captivity. Some scholars argue that the good conditions German POWs received aided the process of reconciliation after the war. In fact, a significant number of German POWs later emigrated to the United States.

Controversy remains regarding American treatment of German POWs after the war ended. With the unconditional surrender of Germany in 1945, the United States stripped German POWs of the traditional protections afforded by the Geneva Conventions and declared them Disarmed Enemy Forces. Some scholars have charged Dwight D. Eisenhower with deliberately killing German POWs, but evidence suggests that the American authorities were overwhelmed by the tasks they confronted in occupying a devastated nation and by their responsibility for millions of German POWs. Moreover, the American occupation authorities paroled scores of German POWs who were not associated with the Schutzstaffel or suspected of committing war crimes.

The American perception of World War II as the “good war” permeated popular culture when the war ended, and the enthusiastic reception given to former POWs often conflicted with the soldiers’ own coping mechanisms. Popular films about World War II POWs, such as *Stalag 17*, *Bridge on the River Kwai*, and the *Great Escape*, made former prisoners uncomfortable with their glorified depiction as heroes; such films depicted very little of the day-to-day life in internment camps accurately. Dramatic depictions of resistant, wily Americans with know-how outsmarting befuddled foreign enemies became the popular narrative, providing little support to

actual former POWs, who had no real outlet where they could discuss some of their less glamorous struggles with guilt or depression after the war. Frank, public discussion of POW suffering would not emerge until after the Vietnam War.

Following the unspeakable atrocities committed during World War II, Allied military tribunals for Germany and Japan made POW abuse a major charge leveled against accused war criminals from the two defeated powers.

The Korean War

Despite the Nuremberg and Tokyo war crimes trials and major postwar attention to the plight of abused POWs, the Korean War would prove incredibly brutal, especially for UN POWs. Korean War POWs suffered tremendous casualty rates, and many American soldiers were tortured, starved, or murdered in Chinese prison camps.

Official statistics reveal that 2,701 of the 7,140 American POWs died in captivity, though many historians believe that the number may be much higher due to atrocities committed immediately after capture. McCarthyism on the American home front, combined with the cultural notion that American POWs were Chinese collaborators (popularized by the journalist Eugene Kinkead and the 1954 Ronald Reagan film *Prisoner of War*), made repatriation difficult for the former prisoners. Popular discourse focused on brainwashed POWs; and the fact that 21 prisoners defected to China at the end of the war became a journalistic fixation. Instead of happiness and warm welcomes, many former POWs were interrogated about their political beliefs, the torture they experienced, and their sexuality immediately on boarding ships back to the United States, where they were further interrogated by military intelligence. In Lewis Carlson's *Remembered Prisoners of a Forgotten War*, interviews with Korean War POWs reveal a sense of frustration felt during their adjustment to civilian life and anger over the chilly reception and distrust they experienced on returning to America.

The question of the status of POWs complicated the ending of the Korean War. Although the Geneva Conventions called for repatriating all POWs to their country of origin, during the armistice negotiations the United States and the United Nations pushed to allow North Korean and Chinese prisoners the option of remaining in South Korea. Communist

negotiators initially rejected this demand, prolonging the war until a compromise was reached. A neutral repatriation commission was established to interview prisoners who wanted to avoid repatriation. Thousands of communist prisoners, and—to the consternation of American leaders—21 U.S. prisoners opted to remain.

In response to the alleged collaboration of American POWs in Korea, the United States issued the U.S. Military Code of Conduct. This code stressed the importance of Americans held captive avoiding collaborating with the enemy and divulging military information. Unrealistically, the code mandated that an American POW should only provide name, rank, and serial number during interrogation.

The Vietnam War

During the Vietnam War, most of the Americans captured were aviators engaging in bombing missions over North Vietnam. North Vietnam refused to adhere to the Geneva Conventions and denied prisoners' access to the International Red Cross. American POWs endured harsh treatment, including torture, and were forced to take part in propaganda broadcasts denouncing the American war effort. The United States did accord POW status to the captured North Vietnamese troops, and these prisoners generally received treatment in accordance with the Geneva Conventions. Vietcong guerrillas generally did not receive these protections and often faced abuse, especially if turned over to the South Vietnamese authorities.

The Persian Gulf War

A small number of Americans were captured during the Persian Gulf War in 1991. Although Iraq was a signatory of the Geneva Conventions, American prisoners were tortured, and two women prisoners were sexually assaulted. In contrast, the ground war against Saddam Hussein in 1990 left the U.S. and allied forces woefully unprepared for the influx of prisoners. Iraqi prisoners taken during the war were quickly released.

POWs Post-9/11

Since the start of the Global War on Terrorism, the United States has made important distinctions between lawful and unlawful combatants. As the enemy in that conflict is a nebulous entity and not a

sovereign nation, the United States has declared that captured terrorist suspects are not eligible for the same rights as traditional combatants. The public and international debate over the Guantanamo Bay prison stems from this distinction, as the detainees there are often held indefinitely with no due process. Secret Central Intelligence Agency prisons further complicate the relationship of the United States with international law.

The 2004 Abu Ghraib prisoner abuse scandal brought a number of issues regarding POWs and humane treatment to public attention. Images of prisoners held by the United States being abused by the military police in an Iraqi prison were released, eventually resulting in the disclosure of myriad government documents detailing questionable interrogation techniques and official approval. Ultimately, it became clear that although only a handful of soldiers participated in the abuse itself, the chain of command had failed to stop the torture while it was occurring. While the George W. Bush administration maintained that terror suspects were unlawful combatants, government documents revealed that Bush administration officials decided that interrogation techniques constituted torture only if they caused pain equivalent to organ failure or death. Congress passed the Detainee Treatment Act of 2005 and the Military Commissions Act of 2006, which attempted to authorize Guantanamo detentions and take away the U.S. Supreme Court's authority to review detainees' habeas corpus rights.

A number of legal cases arguing against the validity of the U.S. policy on unlawful combatants have been decided in recent years. In one of the more famous cases, *Hamdan v. Rumsfeld* (2006), the U.S. Supreme Court found that the United States had violated the Geneva Conventions at Guantanamo Bay in both its classification of individuals as unlawful combatants and in its use of military commissions instead of civilian trials. The Court held in *Hamdan* and in *Boumediene v. Bush* (2008) that, while inmates could (and should) be tried by military commissions, independent review by Article 3 judges had to be available and basic procedural safeguards had to be respected. However, the United States has exempted itself from compulsory judgment at the International Criminal Court and conducts many of these operations in secret (i.e., away from Red Cross observation), so there have been no international legal consequences for the United States, despite a

Red Cross report detailing the abuses at Abu Ghraib and international outrage over Guantanamo Bay.

Conclusion

While the 20th century saw the proliferation of international humanitarian law and new regulations regarding humane treatment of POWs, war crimes against prisoners continue to this day. However, thanks to new international bodies formed after World War II, there now exists a global legal framework for prosecuting war criminals. Due to the obvious difficulties in policing an enemy's treatment of a country's combatants, the Red Cross works to maintain proper standards of care for POWs. With the changing climate of the Global War on Terrorism, though, loopholes in international law have been exploited and are often difficult to identify or prosecute, as has been the case with many recent abuses of IHL.

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See also Abu Ghraib; Code of Conduct; Geneva Conventions; Guantanamo Bay Prison; Hague Conventions; Laws of War; Red Cross, International Committee of

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PRISONS, MILITARY

Military prisons have a grim reputation. James Jones's description in his novel *From Here to Eternity* of the life of prisoners in a U.S. Army confinement facility during World War II and Kenneth H. Brown's gritty play *The Brig* from the Vietnam era are well-known literary accounts. The reality has largely been different. Military prisons have stressed rehabilitation and, in some cases, at least, a return to military duty rather than simply the administration of punishment. The extent to which rehabilitation may lead to continued military service has varied over time, however, and is likely to vary in the future. This entry discusses the history and types of U.S. military prisons and provides details on the prison population.

Background

During large-scale conflicts, such as the World Wars, the armed forces have needed to move as many men as possible from confinement to ordinary military duty, owing to heavy casualties. Confinement has necessarily been severe enough to discourage military personnel from using imprisonment as a way to avoid the battlefield. This problem was briefly highlighted shortly after World War II when the commanding officer and some other cadre members of the 10th Reinforcement Depot in Lichfield, England, were court-martialed for allegedly abusing prisoners at the confinement facilities that were part of the depot. The punishments they received were light, and the army thus seems to have acknowledged the need for ensuring that reluctant soldiers were returned to duty.

When retaining personnel is less of a priority, the armed forces can be more selective in deciding which prisoners can return to active duty. Therefore, a relatively high percentage of former prisoners will be discharged after punishment. In recent years, despite shortfalls in recruiting, there has been less stress on keeping former prisoners in the military services than during the World Wars.

In some spheres, military prisons have been highly innovative. Vocational training for prisoners, for

example, was pioneered by military prisons before being introduced in civilian institutions. Moreover, armed forces prison staffs have maintained close relations with the American Correctional Association and have worked actively to receive certifications from that organization for themselves and their institutions. To improve their rehabilitation services, military prisons are employing various categories of specialists, including many civilian employees.

Military prisoners can win parole under specified circumstances. The army, navy, and air force have parole boards, and there is a Department of Defense Corrections Council that deals with policy issues and the oversight of the parole system. Once they leave prison, parolees are the responsibility of the nearest U.S. Probation Office. If they violate the conditions of their parole arrangements, former prisoners are subject to an extension of their paroles. Not many military parolees have to be returned to prison, however.

The nature of the crimes for which service personnel have been imprisoned has changed significantly in recent years. Until the institution of an all-volunteer force, the majority of prisoners had been convicted of or were awaiting trial for military offenses, such as desertion or disrespect to superiors. Gradually, the numbers of ordinary crimes, such as drug offenses, that were committed by service members surpassed specifically military offenses, thus making military prison populations more like those of civilian confinement facilities.

The Evolution of Military Prisons

During the first century or so of the U.S. armed forces, punishments were frequently cruel, as judged by current standards. The objective was largely to inflict unpleasant, but short-term, penalties that would permit returning offenders to duty quickly. Such penalties included flogging and branding, as well as less painful, but thoroughly humiliating, sanctions. There was no real system of imprisonment for military offenders until the Civil War, and consequently, most of them were placed in civilian confinement facilities. The huge mobilization of men between 1861 and 1865 required a more structured approach. The Union Army established several confinement facilities, such as the Old Capitol Prison in the District of Columbia and, perhaps most notably, Fort Jefferson in the Dry Tortugas, although civilian

prisons continued to be used. The use of special military prisons lapsed after the Civil War.

Only in 1875 was the first permanent military prison, which was also the first federal prison, established. This was the U.S. Disciplinary Barracks at Fort Leavenworth, Kansas, which was termed the U.S. Military Prison until 1915. Meanwhile, the Portsmouth Naval Prison was established in New Hampshire in 1908. During several relatively long periods, the Leavenworth facility was transferred to federal civilian control, but in 1940, it was given back to the army, which has retained it since then. Privatizing military confinement facilities has been proposed from time to time, but such initiatives have not moved far. One argument for keeping prisons within the armed forces is that the services' experience with the administration of confinement facilities can be highly valuable, because foreign expeditionary operations usually involve the detention of prisoners, whether they are enemy military personnel or civilians who must be interned.

Resistance and Outbreaks of Violence in Prisons

Prison mutinies have been relatively few, but they have often attracted considerable attention. They have usually taken the form of refusals to work rather than attacks on prison staff or others. Soon after World War I, for example, there were two significant work stoppages at Leavenworth. A notable riot occurred at the Fort Dix Stockade, in New Jersey, in 1954. A searching investigation found that one of the problems was the failure to separate minor and serious offenders. The latter often felt that they had little to lose in continuing the disruptive behavior that brought them into the military corrections system.

A far more serious outbreak occurred in 1968 at the U.S. Army Vietnam Installation Stockade, which was better known as the "Long Binh Jail" or "LBJ Ranch." A highly charged racial situation and massive overcrowding led to significant resistance and the destruction of a good part of the stockade. The vast majority of the prisoners were African American, suggesting the existence of institutional racism in the military justice system. As in the Fort Dix riot, insufficient separation between those accused or convicted of lesser and more serious offenses contributed to the problems at Long Binh.

Unrest occurred within confinement facilities in the United States during the Vietnam War era as well. Perhaps the best known example is a confrontation between a relatively small group of prisoners and the stockade administration at the Presidio of San Francisco, which brought highly unfavorable publicity to the military prison system. Other riots occurred at Fort Bragg, North Carolina; Fort Ord, California; and, again, at Fort Dix, New Jersey, in the late 1960s.

Characteristics of Facilities and Numbers of Prisoners

The armed services have established three levels of confinement that are generally comparable between the services and approximately comparable to those found in civilian systems. Level 1 confinement facilities are similar to civilian jails. They hold people who are awaiting trial and those sentenced to no more than 1 year of confinement. Level 2 institutions are intended for prisoners whose sentences run between 1 and 7 years. These are generally equivalent to civilian prisons. The only maximum-security prison in the military system is at Fort Leavenworth, which was designated as such in 1951.

Various terms are used to describe the levels of prisons. *Confinement facility* is used for some air force and army installations, and the word *brig* is employed by the navy and the marines. Major installations for the air force are at Kirtland and Lackland Air Force Bases in New Mexico and Texas, respectively. Similar army facilities are at Fort Lewis, Fort Knox, and Fort Sill in Washington state, Kentucky, and Oklahoma, respectively. The navy maintains the largest number of facilities owing to its widely distributed activities. Brigs are at Charleston, South Carolina; Norfolk, Virginia; and Pearl Harbor, Hawaii, as well as other locations. There are various installations with the designation *detention facilities* in the United States and overseas, including San Diego, California; Sasebo, Japan; and Naples, Italy. There are marine brigs at several bases, including Camp Pendleton, California; Quantico, Virginia; and Camp Lejeune, North Carolina. In addition to administering prisons ashore, the navy has the problem of holding some prisoners, at least for short periods of time, aboard a ship. That has meant that new large ships have had to include sections intended specifically for confinement. Older vessels

have had to make do with ad hoc adjustments for the confinement of prisoners.

Not every prisoner is held in a facility maintained by his or her branch of the armed forces. Some prisoners are transferred to nonmilitary federal prisons for family reasons, for example. Moreover, prisoners may be held temporarily in any military prison pending transfer to one of their own service's institutions.

Military confinement facilities are not all service branch specific. Leavenworth contains prisoners from all the services who are viewed as hard-core offenders. Other prisons have functions that are, at least in part, specialized. The navy, for example, conducts efforts to rehabilitate sex delinquents from all the services at its Miramar and Charleston Naval Consolidated Brigs at San Diego, California, and in South Carolina, respectively.

The air force has relatively few offenders, and its confinement program largely concentrates on retraining prisoners to accept a military environment and to return in due course to duty.

The structure and administration and the size of the military prison system have varied significantly owing to the varying numbers of men and women in the armed services. A serious problem in military corrections that is now being addressed is its dispersed nature. Confinement facilities have been the responsibility of local commanders, who may or may not have devoted much attention and resources to them. Such decentralization seems to have contributed to the retention of inadequate methods for handling prison populations.

Table 1 Numbers of Prisoners Held By Service

	1996	Average 1997–2007	2008
Total	2,747	2,283	1,651
Air Force	487	421	281
Army	1,106	863	701
Marine Corps	685	560	427
Navy	455	423	231
Coast Guard	14	16	11

Source: Adapted from Table 6.64, of "Prisoners Under Jurisdiction of U.S. Military Authorities," *Sourcebook of Criminal Justice Statistics Online*, 2008.

Centralization of policies and oversight responsibility at the service level and continued increasing cooperation between the armed services has proved beneficial. A major step was the creation of the Army Corrections Command at Arlington, Virginia, on October 1, 2007, which, as its title suggests, oversees the confinement facilities of the army. This agency is part of the Office of the Provost Marshall General of the Army. One of its continuing goals is to provide qualified personnel for confinement assignments in overseas operations.

Detailed statistics from the *Sourcebook of Criminal Justice Statistics Online* (<http://www.albany.edu/sourcebook/pdf/t6642008.pdf>) indicate that the numbers of prisoners in military confinement facilities are relatively small. Although there have been variations in the numbers of prisoners detained over approximately the past decade, the general trend has been for decreases for every service (Table 1). The wars in Afghanistan and Iraq appear to have had little effect on confinements.

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See also Court-Martial; Police, Military; Uniform Code of Military Justice

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PROFESSIONALISM

The professional military officer (PMO) represents not only a highly trained and dedicated expert in the field of military science but also a powerful symbol in U.S. culture. Throughout U.S. history, however, advocates of professionalism have often encountered resistance from civilians and politicians as well as career officers. These misgivings were rooted in distrust of standing armies, confidence in the effectiveness of the citizen soldier, assumptions regarding class status, and institutional careerism. This entry looks at the evolution of professionalism in the U.S. military.

The 19th Century

Traditionally, the United States maintained a small military and officer corps. Drawn from their experience as subjects of the British Empire, many Americans believed that professional militaries served as instruments for civilian oppression. As early as 1783, however, leaders like George Washington argued for the need of professionally trained officers and advocated the establishment of a military school. Critics feared that such an institution would create a dangerous class of martial elites that could threaten the primacy of civilian authority. Supporters argued that, as an exceptionally American institution, it would establish a proud officer corps loyal to the principles of democracy and civilian command of the military. In 1802, President Thomas Jefferson signed the law that established the United States Military Academy at West Point. In 1845, Secretary of the Navy George Bancroft established the Naval School, later the United States Naval Academy, at Annapolis, Maryland.

The several military disasters during the War of 1812 (1812–1814) underscored many of the deficiencies in professionalism, and Andrew Jackson's victory over the British at New Orleans enshrined the image of the exceptional citizen volunteer. This

experience led policymakers to rely on the rapid build-up of amateur soldiers (militia, volunteers, and conscripts) to meet wartime exigencies throughout the 19th century. The experience also established a core group of young, staunchly dedicated career officers like Edmund P. Gaines, Alexander Macomb, Winfield Scott, and others. They led modest reforms, including the adoption of a cadre plan in 1821, that maintained a disproportionately large officer corps during periods of demobilization and budget reductions. Certainly the desire to protect their careers partly motivated these officers, but in so doing, they provided the leadership that would oversee the army's constabulary mission on the frontier as well as provide a cadre of PMOs ready to command an expanded military to meet national emergencies.

U.S. military officers fulfilled this role throughout the 19th century. Seemingly, the careerism and elitism exhibited by officers in the decades following the Civil War (1861–1865) confirmed the early concerns about the dangers of creating a cadre of military elites. Garrisoned at numerous posts in the west, for example, Gilded Age officers appeared much more interested in maintaining their upper-class, Victorian lifestyles than in advancing the instruction of their profession. A few individual advocates of reform in professionalism, however, emerged during this time. William Sherman, Emory Upton, and others argued for an expansion in the Regular Army and recommended schools that could offer more specialized education beyond that received at the academies. In 1878, an effort to pass these reforms through Congress failed, stymied as much by a lack of political will as by entrenched officers defending their rank and status. In 1881, nevertheless, Sherman established the School of Application for Cavalry and Infantry at Fort Leavenworth, Kansas, yet the general admitted that during its initial years, the school served as little more than a locus of fraternal socializing for officers arriving from distant outposts. Under the leadership of commandants like Arthur L. Wagner, however, it became an early model of professional military education.

The 20th Century

Although the U.S. forces prevailed during the Spanish-American War (1898), the highly publicized logistical disasters prompted an era of reform and

reorganization. Enacted by the efforts of Secretary of War Elihu Root and inspired by the works of Emory Upton, these changes reflected a growing acceptance of the need for a more professional officer corps. In 1901, the War Department established the Army War College (AWC) and in 1902, the General Service and Staff College. The AWC emphasized historical case studies meant to hone command skills, while the program at the General Service and Staff College introduced field maneuvers to complement classroom instruction. To increase the number of college-educated officers and to draw on the broadened university curriculum, the National Defense Act of 1916 created the Reserve Officers' Training Corps. In 1941, responding to the demands of the rapid mobilization just prior to the Second World War (1941–1945), the U.S. Army created the Officer Candidate School at Fort Benning, Georgia, to quickly train civilians as combat officers.

As in the prior century, military professionalism continued to draw critics. Politicians and civilians all have their specific interests invested in the armed forces, but much of the resistance for improving professionalism during the 20th century also came from the officers themselves. During the era of the Root reforms, some argued that classroom training would create officers who would dogmatically cling to theory at the expense of pragmatic realities. In the public estimation, however, the success of U.S. arms during the Second World War heightened the reputation of the PMO, as exemplified by Dwight Eisenhower, George Patton (United States Military Academy and AWC alumni), Chester W. Nimitz (United States Naval Academy), and others. The image of the PMO reassured Americans during the anxious times of the Cold War. This image, however, suffered as U.S. military fortunes ebbed during the Vietnam War (1965–1975). The appearance of being wedded to doctrine and the use of body count quotas painted PMOs of this era as thoughtless bureaucrats who had lost their warrior edge.

This perceived inflexibility was one of the concerns of a congressional inquiry in the late 1980s. As a result of the Goldwater-Nichols Department of Defense Reorganization Act of 1986, the House Armed Services Committee, chaired by Representative Ike Skelton (D-MO), commissioned a report to address the current state of professional military education. Published in 1989, the Skelton Report called for the need to emphasize joint professional military education to train joint professional

officers who could successfully meet the demands of the late 20th century. Twenty years later, in July 2009, the House Armed Services Committee confirmed the value of joint professional military education but also found that many officers had used it more as a means to enhance rank and promotion than to cultivate strategic thinking, underscoring the enduring tension between professionalism and careerism.

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See also Army War College; Command and General Staff College; Ethics; Goldwater-Nichols Department of Defense Reorganization Act; Leadership; Marine Corps University; Military Science; National Defense University; Naval Postgraduate School; Naval War College; Noncommissioned Officer Academies; Noncommissioned Officers; Officer Candidate School; Officer Career Fields; ROTC; Training, Army Officers; Training, Naval Officers; Upton, Emory; U.S. Air Force Academy; U.S. Coast Guard Academy; U.S. Military Academy; U.S. Naval Academy

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PROPAGANDA

Propaganda is the systematic use of communication to advocate a position or gain compliance. Persuasive in intent, propaganda encompasses a wide variety of both mediated and nonmediated strategies and techniques. This entry defines propaganda and then

discusses propaganda and messaging campaigns from World War I to the present.

Derived from the New Latin phrase *propaganda fide*, meaning “propagate the faith,” the word *propaganda* was initially used in reference to religious conversion. While the word came to be used in many other contexts, it has developed a negative connotation because of its association with totalitarian states and fears of manipulative media effects. Today, propaganda campaigns are rarely referred to as “propaganda,” and more favorable or ambiguous terms, such as *strategic communication* and *psychological operations*, are often used instead.

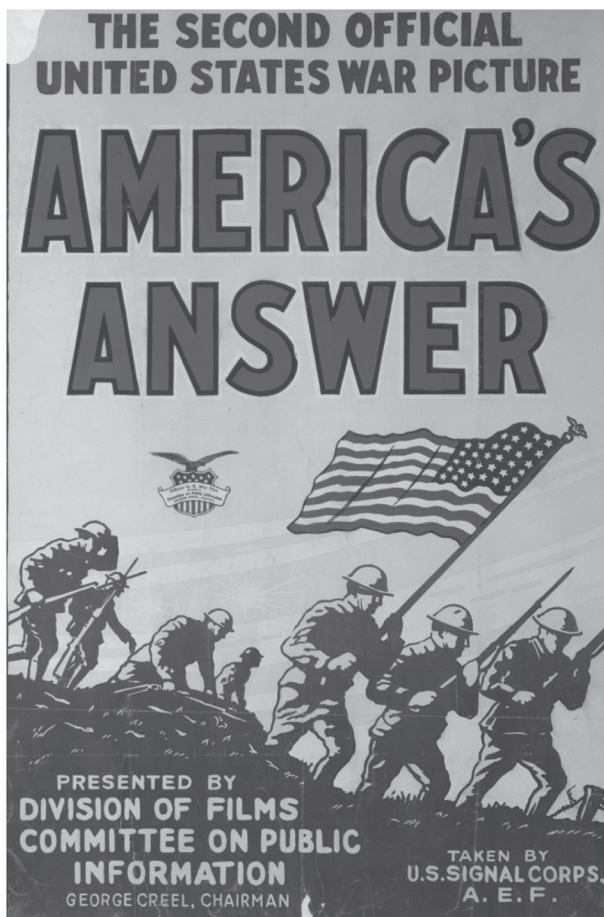
Yet, regardless of what name it is given, propagandistic communication is commonly used by both governmental and nongovernmental organizations. Like other forms of persuasive communication, propagandistic messages are intended to change the attitudes, beliefs, values, or actions of individuals.

Propagandistic messages can be identified through several characteristics: deliberateness, the presentation of only one side of an issue, the exclusion of arguments that support contrary positions, and the discouragement of evidence-based evaluation.

Propaganda can range from the truthful to the deceitful. At times, the source of propaganda is known; at other times, the source is obscured. “White” propaganda truthfully identifies its source; “gray” propaganda conceals the sponsor; “black” propaganda falsely attributes its source.

Propaganda During World Wars I and II and the Cold War

The U.S. government’s first large-scale propaganda campaign coincided with the American entry into World War I. To build popular support and boost enlistment in the armed services, President



Official U.S. war films (1918) released by the Committee on Public Information

Source: Library of Congress.

Woodrow Wilson formed the Committee on Public Information (CPI) on April 13, 1917. In operation until August 21, 1919, the CPI was responsible for creating a wide variety of propagandistic media that simultaneously extolled “traditional” American virtues and demonized Germany as an aggressor nation. Such media included a daily newspaper, the *Official Bulletin*; a wide variety of booklets, posters, and photographs; and three motion pictures, *Pershing’s Crusaders*, *America’s Answer*, and *Under Four Flags*. Additionally, the CPI launched an ambitious public speaking campaign to reach individuals on a personal level. Known as “4 Minute Men,” the 75,000 CPI speakers came from communities across the country and gave brief, 4-minute pro-war speeches at theaters, churches, fairs, and other public gatherings.

In addition to the CPI, the World War I-era government also spread propagandistic messages within the school system. Led by the Bureau of Education’s Division of Civic and Educational Cooperation, bimonthly bulletins were published and distributed to promote patriotism among students at schools across the country.

These agencies were shuttered at the end of World War I, but America’s entry into World War II again necessitated new campaigns to sell the war and promote American interests. The United States embarked on an ambitious propaganda campaign with the establishment of the Office of War Information (OWI) on June 13, 1942. A large operation, the OWI was responsible for creating and distributing pro-American propaganda for both domestic and international audiences.

Abroad, messages focused on demoralizing the enemy and promoting American military strength. At home, the OWI created radio series, such as *This Is Our Enemy*, *Uncle Sam Speaks*, *This Is War!*, and *You Can’t Do Business With Hitler*. The OWI’s newsreel service, the United News, showcased footage of military equipment, personnel, and battles. Additionally, the OWI provided newspapers and magazines with a steady stream of photographs documenting various aspects of the war effort. Among the lasting legacies of the OWI was the establishment of the Voice of America radio service in 1942, which remains an independent, international broadcast service of the U.S. government.

Toward the end of World War II, the OWI’s domestic influence was curtailed by Congress. The

OWI was terminated on September 15, 1945, and the Smith-Mundt Act of 1948 stipulated that propaganda intended for international audiences not be targeted toward the domestic population. Yet concern about Soviet propaganda soon resulted in the renewal of American efforts and the launch of the U.S. government’s first peace-time propaganda campaign.

After President Harry Truman proposed the launch of what he called a “campaign for truth” in 1950, early Cold War propaganda adopted an aggressive and sensationalistic anticommunist tone. The Psychological Strategy Board was established in 1951 to help America expand its propaganda campaigns further into countries in the Soviet Bloc, Asia, and the Middle East.

The widespread institutionalization of government propaganda demonstrated the way in which the Cold War was a battle of ideas in which public opinion was central. Phrases that referred to the ideological battle between the United States and USSR included “war of ideas,” “struggle for the minds and wills of men,” “thought war,” “ideological warfare,” “psychological warfare,” and “information warfare.”

Under President Dwight D. Eisenhower, the beginning of America’s modern propaganda efforts began to take shape. The new approach adopted after the launch of the U.S. Information Agency (USIA) on August 1, 1953, represented a more refined understanding of propaganda and an awareness that propaganda, as later suggested by Anthony Pratkanis and Elliot Aronson, is most effective as a form of “mass suggestion,” with the “ultimate goal of having the recipient of the appeal come to ‘voluntarily’ accept this position as if it were his or her own.”

In line with this recognition of the limited impact of identifiable propaganda, America shifted toward a more sophisticated public diplomacy model, which involved pairing propagandistic messages with a wide range of additional communication and informational campaigns. Such public diplomacy involved two simultaneous approaches during the Cold War: promoting cross-cultural understanding through cultural and educational exchanges and spreading anticommunist and pro-American messages directly.

The first approach—fostering cross-cultural understanding and international goodwill—included notable programs such as the Fulbright exchange program, the Peace Corps, and the People-to-People

program. All programs encouraged the spreading of a positive image of America by encouraging cross-cultural interaction.

The second approach—spreading anticommunist messages—took more predictable routes and involved a variety of activities, including the launch of two radio services. The first, Radio Free Europe, began broadcasting in 1950, with the initial transmissions reaching Bulgaria, Czechoslovakia, Hungary, Poland, and Romania. In 1953, the Russian-language Radio Liberation (renamed Radio Liberty in 1964) was launched to broadcast directly into the Soviet Union. Additionally, the USIA published numerous periodicals on a variety of subjects, including *Dialogue*, *Economic Impact*, *Problems With Communism*, *English Teaching Forum*, and *America Illustrated*, and produced a variety of feature films and documentaries designed to present America in a positive light. These, and other media that extolled the positive aspects of American democracy and capitalism and drew attention to repressive elements of the communist system, were distributed through the more than 200 posts that the USIA operated in 91 countries. In addition to creating its own media, the USIA also worked to foster ties with the motion picture industry and educational institutions and worked behind the scenes to influence the tone of news coverage by independent media outlets.

Propaganda During the Post-Cold War Era and the War on Terrorism

When the Cold War ended, the USIA embarked on a new mission of expanding free market democracies. In addition to funding the National Endowment for Democracy and the Center for International Private Enterprise, the USIA shifted its focus toward the promotion of the economically focused Clinton Doctrine, the expansion of the North Atlantic Treaty Organization, the promotion of human rights, anti-crime and antiterrorism issues, and the protection of intellectual property rights. Such objectives lacked the clear focus of the Cold War-era mission, and the USIA lost political support. Deemed obsolete, the USIA was disbanded in October 1999, and its propaganda functions were transferred to the State Department's Bureau of International Information Programs.

Years of budget cuts and diminished attention to public diplomacy became apparent in the immediate

aftermath of the terrorist attacks of September 11, 2001. Faced with an immediate challenge, the United States struggled to quickly develop a new approach to project “soft power.” The first effort involved establishing a temporary Coalition Information Center. What started as a tactical, defensive campaign to counter the anti-American rhetoric spread by the Taliban and al Qaeda eventually developed into a more strategic effort to rebrand America and “win the hearts and minds” of the Arab and Muslim publics.

Achieving this goal was the responsibility of a number of governmental entities controlled by the White House, Department of State, U.S. Agency for International Development, Broadcasting Board of Governors (BBG), and Department of Defense. Eventually, a three-pronged approach to American public diplomacy developed: (1) rapid response to developing news, (2) long-range opinion shaping, and (3) cultural exchanges.

First, regarding efforts to respond to developing news, the U.S. Advisory Commission on Public Diplomacy stated in 2005, “False information spreads quickly and needs to be countered quickly. . . . Good judgment and an understanding of the effects of misinformation on different audiences and cultures are required to counteract misinformation in a timely and effective manner.”

Operations included media outreach initiatives, e-mail news updates, mobile phone alerts, and podcasts distributed to opinion leaders, including journalists and academics. Additionally, news organizations were encouraged to embed journalists within military units, thus providing media access to military operations while also fostering close ties between journalists and military officials.

A second strategy of public diplomacy involved the long-range influencing of international public opinion. One method of accomplishing this was through the use of U.S. government-funded news and media organizations. According to a Government Accountability Office report published in 2007, the stated purpose of such media outlets, operated by the BBG, was “to promote and sustain freedom and democracy by broadcasting accurate and objective news and information about the United States and the world.” The largest efforts in this regard involved the launch of three broadcasting networks designed to target Arabs and Muslims: Radio Sawa, Radio Farda, and Al Hurra TV. Additionally, Voice

of America continues as a major broadcaster around the world, Radio/TV Marti broadcasts to Cuba, and Radio Free Asia broadcasts to China, Tibet, Burma, Vietnam, Laos, Cambodia, and North Korea.

Additionally, the American Corners program—a replacement for the American Centers program launched in Russia in 1993—was dramatically expanded by the undersecretary of state for public diplomacy in 2002. Expanding to more than 400 locations within the next decade, the American Corners program delivered information about the United States through computer displays and a variety of electronic and print media at locations including libraries and universities around the world. Furthermore, the U.S. Agency for International Development has worked to increase its involvement in stimulating economic growth, addressing health and environmental issues, and expanding access to education across the world.

The third strategy of public diplomacy involved cultural exchanges. A key element of Cold War—era public diplomacy, cultural and educational exchanges were revived as a way to encourage cross-cultural awareness of the positive aspects of the United States. Some programs involved sending Americans to foreign countries. For instance, the Speaker and Specialist Program, which sends American experts to foreign countries to build ties with international opinion leaders, was expanded. Other programs involved bringing non-American individuals to the United States for visits and training. For instance, the Edward R. Murrow Journalism Program was launched to bring foreign journalists to the United States for training at prestigious journalism schools. Recommendations have also been made to increase support for English-language and American studies programs in foreign educational institutions.

Twenty-first-century messaging campaigns are exceedingly difficult to implement. Efforts to rapidly respond to developing news stories have proven effective in some instances, but in a digital age in which news can be spread instantaneously via the Internet, it has become impossible to fully “control the news cycle.”

Additionally, long-range, opinion-shaping campaigns through the BBG’s broadcasting services have had mixed results. While providing accurate and detailed news and information through such broadcast services can bolster America’s credibility, an unsophisticated understanding of Middle Eastern

languages and culture has undermined the influence of such programs in some regions.

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See also 9/11 (2001); Psychological Warfare (PSYOP); Public Affairs, Military; Soft Power; U.S. State Department; World War I; World War II

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PSYCHIATRY, MILITARY

Since at least the American Civil War, the U.S. military has attempted to properly identify and treat psychiatric casualties of war. Using ideas pioneered by Napoleon’s chief medical officer Baron Larrey, Union general William Hammod attempted to address the problem of psychiatric casualties often diagnosed under the category of *nostalgia*, a broad term covering a wide spectrum of signs ranging from

homesickness to uncontrollable tremors. These early attempts to identify and treat psychiatric casualties were primitive and haphazard at best, though they did usher in the fundamental issues of U.S. military psychiatry. First, are psychiatric casualties legitimate? Second, if so, what is the proper medical definition of a psychiatric casualty? And based on the definition, what is the best way to either prevent or treat such victims? This entry examines the history of military psychiatry in the U.S. armed forces from World War I to today.

World War I

The early 20th century saw the confluence of two seemingly unrelated events: (1) the attempt of psychiatry to become a legitimate medical discipline and (2) the rise of modern industrialized warfare. World War I was the first true test of U.S. military psychiatry. Early in the war, British physicians had coined the term *shell shock*, an attempt to explain the severe psychiatric reactions of British soldiers to heavy-artillery shelling. This diagnosis assumed a physiological cause, the blast waves of exploding shells slamming the brain against the sides of the skull, resulting in brain injuries. Shell shock alone soon proved to be an inadequate explanation for the numbers of soldiers reporting or demonstrating psychiatric conditions. For example, not all soldiers who experienced a heavy-artillery barrage developed or complained of psychiatric illness, while at the same time a growing number of soldiers were admitted as psychiatric casualties who were not subjected to heavy-artillery bombardment.

By the time the United States entered the war in 1917, the question of definition had remained confused, and a new, more inclusive term for psychiatric casualties was being used, *war neurosis*. Despite the confusion over labeling, treatment became more organized, guided by specific principles developed by the British and adopted by the American military's senior psychiatrist, Thomas William Salmon. Salmon arranged for treatment for American psychiatric casualties to be conducted as close to the front as possible. Treatment consisted of rest, proper nutrition, and return to a regular military routine as quickly as possible. American involvement in the Great War did not last long, however, and the implementation of Salmon's system remained haphazard at best.

Following World War I, the U.S. military fell into decline, and many of the lessons learned by U.S. military psychiatry were forgotten. Much of the work that was done during the interwar years was concerned with the theories conceived by the Swiss psychiatrist Adolf Meyer, who argued that certain social and environmental factors can predispose a person to mental illness. U.S. military psychiatry thus concluded that proper preinduction screening techniques could eliminate potential psychiatric casualties. As a result, more emphasis was placed on preventing susceptible recruits from entering the military rather than on the care and treatment of psychiatric casualties. The Second World War would dramatically challenge these assumptions.

World War II

Despite rejecting almost eight times more inductees in World War II than in World War I, U.S. soldiers were discharged for psychiatric reasons at a rate 2.4% higher than in World War I. Approximately, 1.3 million members of the U.S. military suffered some kind of psychiatric casualty during World War II. What constituted a psychiatric casualty had broadened during the Second World War, but this led to even further confusion regarding an accurate clinical definition. The terms *combat exhaustion* and *combat neurosis* became popular during World War II, continuing to emphasize the physiological rather than the psychological origins of mental casualties. The most important change in U.S. military psychiatry during the war was the conclusion by some psychiatrists, like John Appel and Gilbert Beebe, that psychiatric casualties are inevitable and anyone can become a victim. In fact, according to Appel and Beebe, for most soldiers, exposure to a total of 180 combat days or more will leave them in a vegetative state. Also, the lessons from World War I were rediscovered, especially with regard to the proper care and treatment of psychiatric casualties. The procedures developed by Dr. Salmon in World War I were restored and by June 1944 were generally well established.

The Second World War produced mixed results for U.S. military psychiatry. The sheer number of psychiatric casualties brought about grudging acceptance of the need for military psychiatry within the armed forces. However, psychiatry's inability to develop a clear definition and terminology for

psychiatric casualties left some within the military questioning the scientific validity of the military psychiatric field. This ambiguity had practical economic ramifications for the military and for American society. Without a clear diagnosis, postwar questions were raised on whether the U.S. military was responsible for psychiatric health care costs after the war. Up to this time, military psychiatry had concentrated on dealing with the immediate mental effects of combat. Researchers like Samuel Futterman, however, began to note by 1951 that the number of veterans reporting to Veterans Administration hospitals with complaints of war neurosis was increasing and many of them were complaining of symptoms for the first time. It appeared that war may have longer lasting psychological impacts on veterans than expected and the potential cost for care could be enormous. Finally, one of the new preventive strategies proposed after the war was a better, more reliable rotation system to minimize the total combat time experienced by a soldier.

Cold War

The Korean War suggested that U.S. military psychiatry had finally proved its worth, as psychiatric casualties were much lower than in World War II. The system for care and treatment was well established and set up quickly despite the surprising nature of the North Korean attack. Colonel Albert Glass was the driving force behind American military psychiatry during the war. Combining a 9-month rotation with a 2-week rest during the tour seemed to mark the point at which U.S. military psychiatry could successfully manage the immediate effects of combat neurosis. Still, the question of the long-term effects of combat on the veterans remained unasked.

Between Korea and Vietnam, the work of military psychiatrists had been reduced primarily to psychiatric evaluations of soldiers prior to court-martial hearings or administrative discharge. Contemporary psychiatric theories regarding the role of childhood or the unconscious in explaining mental illness were not well received among military psychiatrists.

Successful psychiatric treatment of combat trauma continued during the Vietnam War, even improving on its success during the Korean War. In fact, the success of U.S. military psychiatry in treating immediate combat trauma may help explain why its responsibilities increased to treating alcohol

and substance abuse cases. But the most profound change within U.S. military psychiatry was the gradual shift in emphasis toward dealing with the question of the long-term psychiatric effects of war. This produced a new controversy, the broad yet ambiguous diagnosis of posttraumatic stress disorder (PTSD). Slowly, soldiers who were previously dealt with as having disciplinary problems, such as alcohol abuse, were now given medical discharges and could be compensated with a military disability payment. It was feared that this policy could lead to an erosion of the traditional military value of discipline and negatively affect troop morale and cohesion. The chaotic conclusion to the Vietnam War led many military professionals to ask fundamental questions regarding the state and future of the U.S. military, including military psychiatry.

In part to address the decline in military discipline during the latter years of Vietnam, in 1973 the U.S. military became an all-volunteer force. The idea was to create a military with more discipline and cohesion, which in turn would create more mentally sound armed forces. Meanwhile, U.S. military psychiatrists were busy treating a large number of PTSD patients from Vietnam using new tools such as group therapy and pharmaceutical drugs. In the 1980s, the National Vietnam Veterans Readjustment Study found that approximately 15% of male and 9% of female Vietnam veterans had PTSD at the time of the study. Despite these measures, many new career soldiers in the all-volunteer military feared that admission to having psychiatric trauma might jeopardize their careers.

A major factor in legitimatizing PTSD was its formal inclusion in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, third edition (DSM-III) in 1980. This provided an official definition of PTSD and also provided postwar medical benefits and is significant as a recent U.S. Department of Veterans Affairs study concluded that 830,000 Vietnam veterans now report PTSD symptoms.

Post-Cold War and the Global War on Terrorism

The next large-scale U.S. military endeavor was the Persian Gulf War in 1991. With only 148 combat deaths, combat trauma was minimal compared with other conflicts, and victory was clear. But this war was also not without controversy. Gulf war

syndrome, a varied set of signs and symptoms, including fatigue, headaches, and some neurological problems, baffled physicians as to its origin. Eventually, evidence suggested that soldiers were exposed to fallout from the destruction of Iraqi chemical weapons facilities. Military psychiatrists were wary of attributing the soldiers' complaints to PTSD but rather urged commanders to accept these complaints as legitimate physiological injuries.

Also during the war, the greater acceptance of military psychiatry was demonstrated by the existence of mental health specialists, trained by military psychiatrists, in combat units, who conducted after-action analysis to determine stress reactions among soldiers. These teams also helped recognize high-stress situations and then helped track those soldiers who experienced high stress to minimize the likelihood of PTSD. Even with greater awareness of PTSD and the short duration of the fighting, research suggested that PTSD rates ranged between 9% and 24% for Persian Gulf veterans.

By the end of the 20th century, U.S. military psychiatry had come a long way. Its procedures and organization to recognize and treat the psychiatric effects of combat trauma had advanced significantly. PTSD, however, remained controversial, and its ever-broadening definition still remained vague. In addition, the ability to determine disability rates for PTSD seemed arbitrary to some, and statistics regarding PTSD were suspect. With such a broad definition, critics suggested, almost anyone alive could be diagnosed with PTSD. Statistics in the military could be quite skewed as a number of veterans still remained wary of reporting psychiatric problems for fear of negatively affecting their career.

The attacks of September 11, 2001, launched the U.S. military into a new war on terrorism. In October 2001, the United States began Operation Enduring Freedom against Afghanistan with the intention of capturing Osama bin Laden, disrupting terrorist-training facilities, and eventually toppling the Taliban government. Two years later, in March 2003, the United States invaded Iraq in Operation Iraqi Freedom, a more controversial war ostensibly waged to eliminate the threat of weapons of mass destruction believed to be held by Saddam Hussein. Initially, for both conflicts, it was believed that the local support and the use of overwhelming air and artillery power would produce a quick victory, thus producing little or no mental stress on the

troops involved. However, neither war played out as expected, and new issues for military psychiatry have appeared.

Sources of combat stress in Afghanistan and Iraq have some similarities to those in past wars, like alien environments and fear of being wounded or killed. But there are some new factors that have plagued U.S. military psychiatry. One of the most prominent is a direct result of an all-volunteer military. With troop levels at approximately 2,800,000 and roughly divided between the regular military and reserves, the U.S. armed forces have found themselves stretched thin to provide troops to two different theaters. This has led to the largest use of reserve forces since World War II and a number of troops serving in multiple rotations. Less trained troops are being placed in high-stress combat situations, and multiple tours have been very stressful on families. Even among single active-duty personnel, many veterans report that being at home is not relaxing, as they count the days to their return.

Advances in medicine have proved to be a double-edged sword. Wounds that previously would have been fatal are now being treated successfully, but at a cost. Traumatic brain injury is a new phenomenon coming out of the wars in Afghanistan and Iraq and has a striking resemblance to shell shock. A 2008 RAND study quoted by Secretary of Defense Robert Gates suggested that approximately 600,000 Afghanistan/Iraq War veterans could suffer some level of traumatic brain injury during their service. Military psychiatrists are seeing the psychiatric consequences of significant injuries to the brain along with multiple traumatic injuries, such as amputations and severe scarring. Many of these injuries are occurring in a low-intensity environment, sustained in brief surprise firefights or through improvised explosive devices. This lack of proper front lines and combat zones can increase anxiety and the sense that nowhere is it safe.

The accurate counting of PTSD victims remains problematic. A number of studies indicate that veterans of the wars in Afghanistan and Iraq complain of psychiatric issues but are afraid to seek out treatment or support for fear that it will harm their career in the military. One RAND study in 2008 reported that 20% of returning American veterans were diagnosed with PTSD or severe depression while only 10% received treatment. Another factor that can confuse accurate reporting of PTSD is the

high number of suicides among current veterans. In a 2008 interview, Thomas Insel, director of the National Institute of Mental Health, predicted that due to poor funding for mental health programs for veterans, it is possible that suicides among returning veterans would soon surpass combat deaths. In such cases, should suicide victims be counted as psychiatric casualties of war?

The fear of speaking out about psychiatric military trauma is further exacerbated by the fairly new presence of women on the battlefield. Female veterans are wary of reporting PTSD, especially if it has to do with being raped while in the military. The role of women in the military is a new issue for military psychiatry, and much of the work on this topic is still too early to draw definitive conclusions, but interesting questions are beginning to emerge. So far, female veterans are reporting slightly higher rates of PTSD than their male counterparts, but it is more significant that their symptoms are more pronounced than those of the men. A possible reason for this is that women hesitate to report incidents for fear of some kind of retribution; thus, by the time they receive medical treatment, their symptoms are acute. Another explanation comes from a 2005 Department of Veterans Affairs study that concluded that a much greater proportion of women than men enter the military having already experienced a severe psychiatric trauma, such as rape or abuse. People entering the military who have already suffered such trauma are more likely to leave the combat theater with PTSD.

An equally important predictor for PTSD, based on the 1999 Rachel MacNair study, is the experience of killing. Those veterans who have killed or believed that they have killed have significantly higher rates of PTSD. This combination of having already experienced a significant psychiatric trauma prior to military service and then killing someone or witnessing the death of a fellow soldier can dramatically increase the risk for PTSD. So far, this seems to hold true for both men and women.

The war on terrorism continues to show the relevance of military psychiatry for the U.S. armed forces. As of 2010, the number of returning veterans of the wars in Afghanistan and Iraq suffering from PTSD is approximately 20%. VA resources are stretched trying to provide mental health care, and local ability to manage these soldiers is even less. Economically, the greater survivability of war

veterans means that more veterans are living longer with PTSD, and with this comes the subsequent financial cost to the nation. Multiple tours and the presence of women in combat zones are just two of the new issues faced by military psychiatry. And for many in the military psychiatric field, the most enduring problem to overcome is the stigma attached to psychiatric casualties.

Paul Wanke

See also Medicine, Military; Medicine, Veterans; Surgeon General, Air Force; Surgeon General, Army; Surgeon General, Navy

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PSYCHOLOGICAL WARFARE (PSYOP)

The terms psychological warfare (PSYWAR) and psychological operations (PSYOP) are often used interchangeably. Both are of recent origin. They signify an activity, though, that is hardly new. The effort to influence the perception of others by employing nonlethal means of persuasive communication is as old as human conflict. Americans adopted the term *PSYWAR* during World War II to distinguish their operations from those of their enemies that they characterized as deceitful propaganda. The Cold War, an ideological contest waged

principally by the Soviet Union and the United States following the Second World War's conclusion, convinced Americans of the need for another change. They sought a more inclusive term to characterize the expanding array of psychological activities that America undertook to check communist expansion.

Consequently, the United States created the Psychological Operations Coordinating Committee in 1951. This interagency group worked to incorporate psychological considerations systematically into the formulation of national policy. PSYOP came of age under the tutelage of American officials who sought to gain an advantage in the global contest with communists for hearts and minds. They utilized PSYOP, with varying degrees of success, both to inform and to execute national policy throughout the Cold War. American officials defined PSYOP broadly, encompassing the nation's whole means of communicating its aims persuasively.

Such a general articulation of PSYOP by policymakers generated confusion about the distinction between PSYOP and information operations (IO). "Information" is a label that American officials first utilized during the First World War to characterize their effort to disseminate the war aims of the United States, both at home and overseas. The use of this term continued during the Second World War and persisted throughout the Cold War. This invited critics of persuasive communication to label American PSYOP as propaganda, associating the term with the same nefarious means that the United States accused its adversaries of practicing.

Efforts made by policymakers to articulate the difference between PSYOP and IO neither silenced skeptics nor brought clarity for military commanders who tended to conflate the two activities. Confusion persisted even as a consensus emerged about the need to secure the cognitive terrain in the Global War on Terrorism that ensued from al Qaeda's attack on the United States on September 11, 2001. From 2005 to 2009, Pentagon spending on PSYOP/IO activities rose from \$9 million to \$580 million a year, before dropping to \$202 million in 2011, the year when America's conflict in Iraq concluded. Finally, in June 2010, Secretary of Defense Robert M. Gates, with the support of Special Operations commander Admiral Eric Olson, called for replacing the term *PSYOP* with military information support operations (MISO).

Consequently, the 4th PSYOP Group, located at Fort Bragg, North Carolina, became the 4th Military

Information Support Group, and a new unit, the 8th Military Information Support Group became active in August 2011. The 8th Group, composed of 1,070 soldiers, assumed responsibility for the 1st, 5th, and 9th MIS battalions, while the 4th Group retained the 6th, 7th, and 8th battalions, with a total of about 800 soldiers. This development reflected a similar one in England, where, between 2000 and 2005, the 15th (UK) PSYOP Group became known as the 15th (UK) Information Support Group. The change back acknowledged a renewed emphasis on tactical PSYOP support for combat operations in Iraq and Afghanistan. Moreover, it constituted an effort to clarify a mission that is historically misunderstood.

This entry considers recent applications of PSYOP, after first discussing the historical precedents that inform the efforts of contemporary government organizations.

Winning Hearts and Minds

The limitations of waging a military war of attrition against a guerrilla force became apparent to American officials in the wake of the Tet Offensive in Vietnam (1968). The general uprising staged by the communists throughout Vietnam, including in many areas previously deemed by U.S. forces as secure, failed to bring about a communist victory. It compelled American officials, however, to reconsider their wartime strategy. Through the office of Civilian Operations and Revolutionary Development Support, U.S. Military Assistance Command Vietnam instituted a program of pacification that emphasized winning hearts and minds over accumulating body counts. It sought not only to induce enemy defections but also to build Vietnamese allegiance for America's noncommunist ally centered in Saigon, the Republic of Vietnam.

Civilian Operations and Revolutionary Development Support advised officials to consider closely the psychological dimension in all aspects of the ongoing war to garner widespread Vietnamese support. This effort extended beyond Vietnam. The Joint United States Public Affairs Office, an organization housed in the U.S. Information Agency (USIA), worked to gain favorable coverage by international media for American initiatives in Vietnam. The ultimate impact on the war made by America's program to win hearts and minds remains debatable. Still, at the time of its operation, Americans

identified the initiative as revolutionary. It broadly conceptualized PSYOP as the whole process of U.S. communications. This included PSYWAR aimed at combatants, nation-building activities geared to win the allegiance of civilians, and public relations directed at outside audiences.

Since the Beginning

The turn toward PSYOP constituted a new direction for Americans in Vietnam, but strategists had long before discerned the importance of winning hearts and minds during wartime. From Sun Tzu's treatise *The Art of War*, which dates back to the 6th century BCE, to the 19th-century observations of Carl von Clausewitz in *On War*, military thinkers considered perception management as essential to achieving victory. They stressed that assaulting the enemy's mental equilibrium should be afforded the same priority as its physical annihilation. Throughout history, ample evidence exists to suggest that military leaders

orchestrated their campaigns mindful of psychology. Some, such as Alexander the Great (356–323 BCE), sought to win hearts and minds. Others, like Genghis Khan (1162–1227), strove to terrorize them. In both cases, though, psychological appeals hastened victory by avoiding violent confrontation.

While Americans set out to revolutionize the practice of PSYOP in Vietnam, many historical precedents existed, including that of their national forebears. During America's War of Independence in the 18th century, the colonial military paled in comparison with the might projected by the British. Out of necessity, from the onset of hostilities, the Americans proved adept at shaping perception to achieve an advantage. They repeatedly succeeded in portraying the British as brutal oppressors who repeatedly orchestrated massacres at places such as Boston (1770) and Paoli (1777). Meanwhile, pamphleteers worked assiduously to maintain support at home for the rebellion, disseminating appeals such as *Common Sense* (1776) by Thomas Paine.



Photograph showing a group of officers at Fairfax courthouse, including Major Ludlow, Lieutenant Rosencranz, Count Zeppelin, Lieutenant Colonel Dickinson, and Ulric Dahlgren, studying *The Art of War* in 1863.

Source: Photo by Alexander Gardner. Library of Congress.

World War I

Over the next century and a half, the mechanization of war and mass communication blurred the line between civilians and soldiers. The psychological dimension of war demanded from its participants an unprecedented level of attention. The First World War (1914–1918) made this apparent. The conflict exacted tens of millions of casualties from around the globe. Miles of trenches dug by armies in Europe and fortified with barbed wire proved nearly impregnable. Offensive operations initiated in 1916 by the Central Powers (Germany, Austria-Hungary, and the Ottoman Empire) at Verdun and by the Allies (England, France, and Russia) at the Somme exhausted hundreds of thousands of lives for little gain. The war became a contest of wills. Newly created agencies, such as the Press and Information Bureau in France and the Ministry of Information in England, worked to boost morale at home and undermine it elsewhere.

The United States added exponentially to this effort when it joined the war on the side of the Allies in 1917. Unprepared for such a military commitment and forced to transform their nation's mind-set of neutrality, American officials diligently worked to create an apparatus devoted to transforming the psychological landscape to their favor. A small group of U.S. Army officers in the Military Intelligence Section, War Department General Staff displayed an interest in psychological exploitation. Concomitantly, President Woodrow Wilson created the Committee on Public Information (CPI) to propagate American war aims at home and abroad. The CPI, though directed by the newspaperman and Wilson supporter George Creel and staffed with writers and journalists, refused to become directly involved with combat propaganda.

Frustrated with the CPI, New York labor reporter Heber Blankenhorn took his idea of targeting the morale of enemy soldiers to Major Charles H. Mason, chief of the M.I.2, Foreign Intelligence Branch, Military Intelligence Service. Blankenhorn convinced Mason and Colonel Ralph Van Deman, Military Information Support chief, to create a propaganda department under his command as a directly commissioned U.S. Army captain. Initially designated as Psychological Subsection within the M.I.2 section of the expanded and renamed Military Intelligence Branch, the army reassigned

Blankenhorn's outfit as the Propaganda Section D of the Press and Censorship Branch (G-2-D) under Major Alexander L. James Jr., G-2, American Expeditionary Forces/General Headquarters in the fall of 1918.

Blankenhorn's Section D operated under tight orders that limited its mission to demoralizing the enemy through direct tactical appeals. Between August and November 1918, G-2-D crafted 21 tactical leaflets and produced more than 5 million of them. They targeted German machine gunners, aiming to weaken their will in the critical last 30 minutes of an Allied charge. G-2-D relied on prisoners of war to gain insight into the enemy's mind-set and utilized themes designed to appeal to a soldier's weariness with war. The American effort made quite an impression on its enemies. After the war, German Field Marshals Erich von Ludendorff and Paul von Hindenburg acknowledged the efficacy of Blankenhorn's outfit. So too did a young corporal named Adolf Hitler. Hitler drew on these lessons after the war with other like-minded individuals, such as Joseph Goebbels. Together, they crafted psychological appeals that helped enable their Nazi party to seize control of Germany and incite another world war.

World War II

The threat posed by Nazi Germany resuscitated America's interest in what officials now deemed psychological warfare. By the eve of World War II, the institutional memory of both G-2-D and CPI had largely disappeared from army commands, staff schools, manuals, and doctrine. In 1940, President Franklin D. Roosevelt dispatched William J. "Wild Bill" Donovan to survey the situation in Europe. A World War I veteran, Donovan returned to the United States impressed by Nazi Germany's techniques for disseminating psychological appeals and by the British efforts to offset them. Donovan urged Roosevelt to make a similar effort central to any future American involvement in the hostilities. Roosevelt responded by appointing Donovan to direct the newly created Office of the Coordinator of Information (COI).

Donovan constructed the COI to engage in a broad range of PSYWAR that included white propaganda (materials such as leaflets, attributable to the United States), black propaganda (rumor campaigns

and other clandestine activities), sabotage, and the synthesis of strategic information. From the onset, Donovan worked to establish a close relationship between the COI and America's military by imbuing the organization with a fiercely aggressive mentality. He successfully lobbied Roosevelt to demolish the COI and reconstitute it into two separate parts: the Office of Wartime Information and the Office of Strategic Services (OSS). This action occurred as it became evident that the notion of PSYWAR advanced by Donovan contrasted sharply with the informative, CPI-like approach called for by the writers and journalists who staffed the COI's Foreign Information Service. Roosevelt acted in July 1942, putting Donovan's OSS under the jurisdiction of the newly formed Joint Chiefs of Staff (JCS).

The JCS hardly greeted Donovan's unconventional organization into the fold with open arms. Its members hesitated to issue the OSS an official charter. They finally provided it with one in December 23, 1942 (JCS 155/4/D). The agency fared little better in the field, where U.S. Army General Dwight David Eisenhower, commander of Allied Force Headquarters in the Mediterranean, sought to exert control over PSYOP by creating the Allied Force Headquarters in early 1943. Brigadier General Robert A. McClure, Psychological Warfare Branch commander, reportedly viewed PSYWAR with a great deal of skepticism and restricted OSS activities to the tactical battlefield.

Through the course of the war, the OSS overcame much of the reservation that greeted it. Donovan's agency received increasingly free rein to engage in black operations, conducting clandestine radio, leaflet, rumor, poison-pen letter, and black mail campaigns to bring about subversion of morale behind enemy lines. Eisenhower constituted the most important convert.

Post-World War II

After his election to the presidency in 1950, Eisenhower worked to build on the Psychological Operation Coordinating Committee, established by his predecessor Harry S. Truman. In 1953, with the aid of C. D. Jackson, former head of the Psychological Warfare Division in Europe, and OSS veterans such as Abbott Washburn, Eisenhower made PSYOP central to America's Cold War strategy. He created the USIA as an independent foreign

affairs agency within the executive branch. The agency's first director, Theodore C. Streibert, had helped found the Mutual Broadcasting System before serving as a public affairs consultant to James B. Conant, High Commissioner in West Germany. This agency's subsequent directors shared Streibert's background in media and included the World War II correspondent Edward R. Murrow, appointed USIA director in 1961 by President John F. Kennedy.

Following America's involvement in Vietnam and congressional scrutiny of the role USIA played in directing PSYOP, the agency focused on furthering America's Cold War aims through public diplomacy. PSYOP in war, stability, and humanitarian operations increasingly came under the purview of the Pentagon, specifically the U.S. Army Special Operations Command. Joint Publication 3-53 broadly outlines the mission of PSYOP to include serving supporting commanders through advice about the targeted population and influencing foreign populations by conveying the Joint Force Commander's intent. It further charges PSYOP with countering adversary propaganda while correctly portraying America's intent and actions. Finally, PSYOP is tasked with relaying public information in support of humanitarian activities.

Since the 1980s, PSYOP served to support numerous stability operations, including Urgent Fury (Grenada, 1983), Just Cause (Panama, 1989), Provide Comfort (Iraq/Turkey, 1991–1994), Restore Hope (Somalia, 1992–1993), Uphold/Restore Democracy (Haiti, 1993–1994), Joint Guard (Bosnia-Herzegovina, 1995–1998), Assured Response (Liberia, 1996), and Noble Anvil and Allied Force (Kosovo, 1999). Activities included radio broadcasts and leaflet drops, with face-to-face communication identified as achieving the greatest success. The lessons learned in each case suggested the importance of every soldier knowing PSYOP themes and messages. Achieving this task in Haiti indicated that the impact of simple greetings and gestures by American forces contributed greatly to transforming the views that Haitians held regarding American troops and their motives.

A common problem for PSYOP conducted in stability operations concerns the insufficient number of well-trained specialists who possess language and regional expertise capability. This issue became particularly evident in Somalia, where early versions of printed leaflets contained misspelled words, words

that did not exist in the Somali language, and, in one instance, an inadvertent substitution of the word *slave* for *world* in referencing the relief force. PSYOP officials contend that such miscues are directly attributable to their perennial lack of resources—a consequence, they contend, of the widely varying appreciation of the importance of PSYOP activities that exists among individual commanders.

Global War on Terrorism

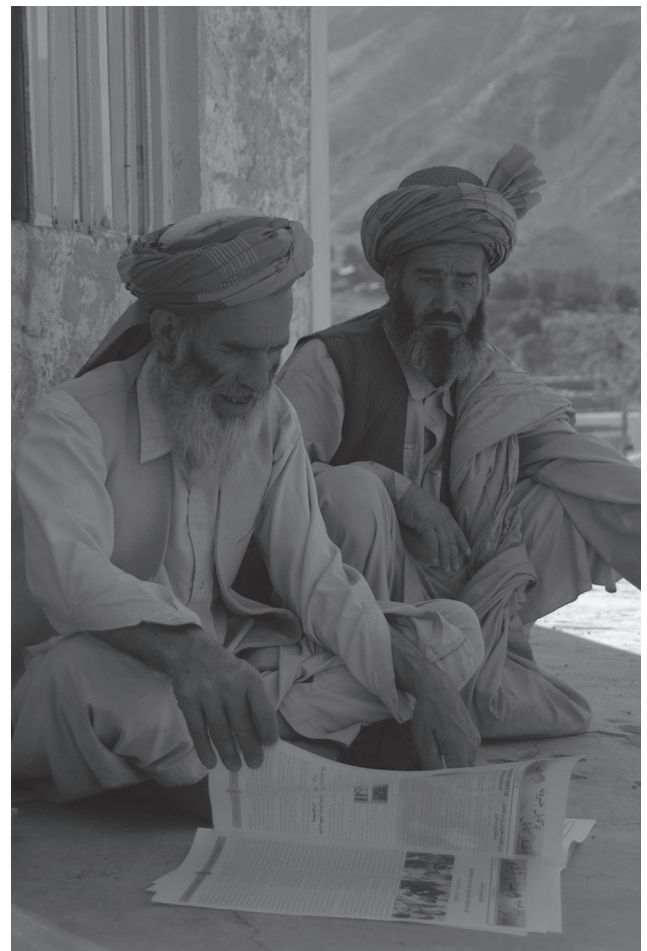
PSYOP involvement in Operation Enduring Freedom resulted immediately after the terrorist attacks of September 11, 2001. The following day, Tactical PSYOP Detachment 940 began target audience analysis of Afghanistan, including the Afghan population, al Qaeda, and the Taliban. A Joint Psychological Operations Task Force (JPOTF) became active on October 4, 2001, at Fort Bragg, North Carolina. It came under operational control of U.S. Central Command, which it supported in carrying out short-term strike operations, long-term counterterrorism operations, and engagement activities. Within a month of its creation, JPOTF totaled 95 personnel, with 74 located at JPOTF Main at Fort Bragg. EC-130 Commando Solo aircraft transmitted radio broadcasts to Afghanistan, beginning on October 5, 2001, 2 days prior to the start of major combat operations. JPOTF delivered more than 7,500 small, battery-powered transistor radios by airdrop and by tactical PSYOP teams operating with Special Forces detachments.

Initially, PSYOP labeled al Qaeda as foreign interlopers and sought to drive a wedge between it and the Taliban. Following national policy, PSYOP strategy changed to appeal to the Afghan people to support neither the Taliban nor al Qaeda, branding both as terrorist entities that wrought misery in Afghanistan. PSYOP sought to explain to Afghans the purpose of the presence of coalition forces and pledged not to provoke a conflict with Islam or to occupy Afghanistan. It emphasized the coalition's interest in departing from Afghanistan once rendering it safe from terrorism.

By the end of 2001, the North Atlantic Treaty Organization received authorization from the United Nations Security Council through Resolution 1386 to create the International Security Assistance Force (ISAF) to secure Afghanistan. Consequently, a number of nations have contributed PSYOP support to

the Combined Joint Psychological Operations Task Force at ISAF. These include Belgium, Italy, Canada, Great Britain, and Germany. They have engaged in a variety of efforts. These include the British 15th (UK) PSYOP Group producing the newspaper *ISAF News* and its orchestrating the “Game of Unity,” a soccer match that represented the first major athletic event to transpire in Afghanistan since the Taliban's collapse. Meanwhile, German PSYOP promoted a “peace kite” so that Afghans might once again enjoy a popular activity banned under Taliban rule.

In the buildup to Operation Iraqi Freedom (OIF), which commenced combat operations in Iraq on March 21, 2003, American forces drew on



Village elders read the *ISAF News*, a newspaper handed out by the Psychological Operations of Combined/Joint Task Force-76 during a medical civic action project in the village of Dur Baba, Afghanistan, October 17, 2006.

Source: U.S. Army photo by Corporal Bertha Flores (released).

the extensive experience gained from Operations Southern Watch, Northern Watch, and Desert Fox. In late 2002, U.S. Central Command ordered the JPOTF commander at the Psychological Operations Support Element located in Tampa, Florida, to begin prehostility PSYOP against Iraq. The total number of PSYOP personnel committed to the JPOTF in support of OIF fluctuated between 600 and 700, with a handful forward-deployed with the JPOTF commander who relocated to Qatar in February 2003. Through radio broadcasts and leaflet dissemination, PSYOP messages sought to undermine the confidence of the Iraqi military and security forces, degrade the dictator Saddam Hussein's confidence in retaining control of Iraq, and deter the use of weapons of mass destruction.

With the onset of combat, in contrast to the focus on civilians demonstrated in Operation Enduring Freedom, leaflets dropped during OIF targeted military forces. Reflecting the coalition's concern with conventional units rather than irregular forces, PSYOP called for the Iraqis to surrender, desert, or capitulate. Commando Solo and SOMS-B broadcasts emphasized Saddam Hussein's illegitimacy and incompetence for the Iraqi public at large. Tactical PSYOP teams (TPTs) attached to ground forces provided PSYOP support directly to maneuver units and special operations detachments. PSYOP teams were deployed in the southern region with the army's 3rd Infantry Division, the 1st Marine Division, and the 10th Special Forces Group. In western Iraq, TPTs supported the 5th Special Forces Group in securing the town of Ar Rutbah and PSYOP units in the north attached to the Joint Special Operations Task Force-North. The TPTs served to protect civilians and as combat multipliers. TPT 1141, for example, supported Task Force Tarawa by ensuring a safe passage for civilians, obtaining vital intelligence, and coaxing an Iraqi paramilitary force hiding in a hospital to surrender to the 1st Marine Expeditionary Force.

The ability of PSYOP to support major combat operations is evident from OIF. PSYOP received credit for causing Iraqi soldiers to desert, deterring the use of weapons of mass destruction, and preventing oil fields from being destroyed. OIF products made direct and simple appeals that, combined with the immense coercive force employed, produced immediate, observable, and favorable behavioral responses. In ensuing stability operations, the record of success is mixed. Toppling a regime is inherently

less complicated than building a new nation. In Iraq, following the conclusion of combat operations in the summer of 2003, the Combined Joint Task Force Seven and the JPOTF received an expanded mission that included facilitating civil order and defeating the resistance mounted by insurgents against the new Iraqi government.

Given the resources devoted to PSYOP, accomplishing such assigned objectives is problematic. Once combat operations conclude, the credibility of PSYOP is newly challenged by emergent voices that compete for public influence. Moreover, while the threat of conventional force remains, it is wielded more subtly, rendering the need for PSYOP products that are increasingly sophisticated, timely, and tailored to local audiences. The effectiveness of PSYOP further becomes tied irrevocably to the way in which the general population perceives the behavior of the remaining security forces. In Iraq, for example, commanders reported that popular sentiment derived directly from the personal relationships between coalition soldiers and Iraqi citizens.

To ensure that PSYOP transcends its successes on the battlefield to win hearts and minds and to secure the peace, the effort required is holistic and proactive. The process requires time, and it is dependent on commanders on the ground who work to incorporate and support the critical and ongoing target audience analysis that amply supported PSYOP provides.

Robert J. Kodosky

See also Asymmetric Warfare; Counterinsurgency; Guerrilla Warfare; Propaganda; Public Affairs, Military; Soft Power; Special Operations, Strategy; Warfare, Unconventional

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PUBLIC AFFAIRS, MILITARY

The relationship between the U.S. military and the press has a long history; however, only in the 20th century did the branches of service codify the role of public affairs officers. Prior to the 20th century, public affairs were the concern of the commander. A commander decided when and how to interact with the press. There was no staff officer permanently assigned to this role. This entry discusses the history and the role of public affairs officers in the U.S. military.

From Journalists to War Correspondents

For much of the 18th and 19th centuries, journalists traveled with military units or by themselves to the battlefield so they could provide reports back to their paper. Initially, commanders had little control over what journalists reported to their news organization. This changed during the Civil War, when General Joseph Hooker demanded that the journalists covering his units use a byline to identify themselves. Previously, reporters did not have to identify themselves in their stories; this made it difficult for a commander to know which reporter was responsible for reporting certain events. Making reporters identify themselves in their stories ensured that individual reporters took responsibility for the information they provided to the public. During this time, there were no official public affairs officers who worked with journalists to ensure that their stories were truthful and did not compromise the mission. The relationship between the media and the mili-

tary at this time was an ad hoc system of temporary agreements, with no official policy concerning the interactions between the two parties.

The prominence of Civil War journalists led to the rise of professional war correspondents. These journalists followed units throughout the campaigns and provided consistent coverage of their movements and actions. The rise of war correspondents led to the need for military officials to create more stringent controls over them. It also sparked the realization that the military needed to work with journalists more formally in order to ensure that they did not compromise mission secrecy or provide vital information to the enemy.

World War I provided the first instance of an official relationship between the media and the military. General John J. Pershing ordered that all journalists covering the conflict obtain accreditation from the American Expeditionary Force. This process required a journalist to pay a \$1,000 bond in addition to agreeing that the American Expeditionary Force intelligence section had the authority to screen and censor his or her report. Initially, the American Expeditionary Force press corps had 31 journalists; however, by the end of the war, that number increased to 411. All of the censorship operations fell under Major Fredrick Palmer, who was previously a military correspondent.

Military Public Affairs Becomes Official

During World War II, President Franklin Roosevelt did not institute the draconian policies of President Woodrow Wilson. However, he did establish official offices that controlled the flow of information and how the press accessed soldiers and the battlefield, such as the Office of War Information. World War II also saw the birth of the first official public affairs officers in the military. In 1940, Chief of Staff of the Army General George Marshall and Secretary of War Henry Stimson created the Bureau of Public Relations. This office held weekly press conferences. After the conflict, the War Department had a chief of information, Lieutenant General Joe Collins, appointed by the chief of staff of the army, General Dwight Eisenhower, in 1945.

With the formation of an official public affairs corps in the military, it was important to define the role of public affairs officers. The main contention was whether their purpose was to disseminate

information to journalists or whether they needed to cooperate with officials in the psychological warfare arena to ensure that their messages supported each other. The 1948 Information and Educational Exchange Act, also known as the Smith-Mundt Act, prohibited government officials from distributing American propaganda to a domestic audience. This act prevented the coordination of public affairs with other information operations of the military. It provided a clear distinction between public affairs officers and psychological warfare officers, and this distinction continues today.

The Korean and Vietnam Wars proved a difficult task for public affairs officers. These conflicts did not have the public support that World War II enjoyed. Public affairs officers faced the difficult task of explaining these conflicts and their importance to an increasingly skeptical American public. Daily press briefings during the Vietnam War allowed public affairs officers the chance to communicate directly with the press corps. However, the information in these daily briefings sometimes conflicted with the events in the field. This led to a lack of credibility and a suspicion among the press corps, and many Americans, of military public affairs. The difficulty of communicating military information while not compromising the mission instilled an organizational reluctance in the military to cooperate with the media. The relationship between the military and the media, especially after Vietnam, was adversarial.

Operation Urgent Fury, which took place in 1983, provided the impetus for change in military public affairs. The press did not have any journalists covering the conflict in the field because the military did not alert them to its operations and would not credential any journalists to report from Grenada for 2 days. Members of the press corps lobbied the government to change the military's stance after the conflict and make its public affairs more cooperative. In 1985, Secretary of Defense Caspar Weinberger and the Joint Chiefs of Staff created a press pool for military public affairs. This pool would be deployed with American troops to areas of conflict and would cover the action. Although the pool of reporters had to abide by the rules established by the commander, they were on the battlefield and could report as much as they needed without compromising the mission.

During Operation Desert Storm, journalists covered units by becoming a part of the units they

covered. These embedded journalists traveled with their units and reported back to their organization to provide a unique perspective on the conflict. This conflict also saw the rise of satellite coverage of the war. Journalists could communicate with their affiliate in real time and discuss what was happening where they were. This real-time information brought the war close to home for many Americans.

The post-Cold War public affairs environment required adaptations to a new media environment as well as to new technology. Public affairs officers worked closely with journalists to ensure that they had access to the information they required but did not report specifics that would compromise the mission. Public affairs officers also had to work within a military organization that was suspicious of journalists' bias concerning military operations.

Public Affairs After 9/11

After September 11, 2001, the Global War on Terrorism began. This conflict required military public affairs to once again change to face the ever-evolving media environment. American citizens expected constant coverage of ongoing military operations from news outlets; military public affairs officers provided news outlets with access to and information about the conflict. As news organizations increased the ability of citizens to see events transpire on the battlefield in near time, public affairs officers had to improve their ability to provide context to the images broadcast from the battlefield.

In the opening stages of the Global War on Terrorism, Assistant Secretary of Defense Victoria Clark told reporters that the attacks on September 11 changed the paradigm of public affairs in the military. Clark said that her office intended to disseminate as much information as possible as quickly as possible. To this end, the department activated the press pool for Operation Enduring Freedom.

For Operation Iraqi Freedom, the Department of Defense determined that the press pool was not an adequate solution to the information operation needs of the mission. In addition to the press pool, journalists would embed with units. This would allow journalists to cover the events more efficiently. It would also give commanders some control over how journalists experienced the battlefield. However, this control did not extend to censorship.

In contrast to previous conflicts, journalists did not have to submit their stories to the military chain of command for approval. This was one of the first conflicts where the military allowed journalists such broad access to the battlefield and unrestricted reporting of the events that journalists witnessed. Public affairs officials worked with journalists to coordinate their access to the battlefield. They also worked to disseminate information to journalists who operated from the press pool.

One event in Operation Iraqi Freedom showed the importance of public affairs officers in military operations. In 2004, several photos showed American soldiers abusing detainees at Abu Ghraib prison in Iraq. Public affairs officers quickly worked to explain the limited scope of those involved in the abuse and to ensure that the public did not think that this was part of a larger program of mistreatment of detainees.

During the Global War on Terrorism, media outlets discussed civilian deaths from military operations more frequently than in previous conflicts. This required public affairs officers in the military to be proactive and explain the steps that the U.S. military took to mitigate such occurrences. It also required public affairs officials to quickly explain and defend the necessity of military operations as well as to tell the public frankly that eliminating all civilian deaths in military operations was impossible.

The Evolution of Public Affairs

Public affairs in the U.S. military was transformed in the 20th century from an ad hoc organization created during wartime or contingency operations to coordinate with journalists into a permanent part of the military staff structure. The ability of military commands to coordinate with journalists protected the ability of journalists to both cover military operations safely and ensure that the secrecy of missions remained intact. This ensured that the American public maintained some working knowledge of its military even during contentious conflicts such as the Vietnam War.

As technology improved and journalists gained the ability to immediately communicate with their news organizations, public affairs officials became more important. Military public affairs officials had to learn to operate in the 24-hour news cycle of cable television and provide timely comments about

and reactions to the events that transpired. These officials had to ensure that their commands communicated the specifics of events in order to provide journalists with the military point of view for their stories.

As warfare increasingly intruded into Americans' living rooms through television, public affairs officials had to explain some of the contentious aspects of military operations that had previously remained out of public sight. With conflicts such as Vietnam, Somalia, and the Global War on Terrorism, the impact of warfare on civilians became more apparent. Public affairs officials worked to provide a context for such events. They did this to provide an explanation for the savagery of combat and to ensure that audiences understood the importance of such military operations.

During the Global War on Terrorism, embedded journalists represented the next evolution of public affairs in the U.S. military. These journalists did not have their stories vetted and did not have to rely on a military official for information concerning operations; they witnessed the war and reported what they saw. However, public affairs officials worked to credential and place the embedded journalists; they also worked with commanders to ensure efficient cooperation with journalists. From the informal arrangements that characterized public affairs in the 19th century to the embedded journalists of the 21st century, public affairs in the American military grew from an occasional concern of the commander to one of the most important aspects of maintaining support for military operations.

Gates Brown

See also Censorship; Media Relations, Military; Propaganda

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PUBLIC OPINION ON WAR AND THE MILITARY

The nature and impact of public opinion on foreign and defense policy are among the key issues in debates between realists and liberals. Realists insist that a volatile public opinion, often grounded in ignorance about international realities, provides a poor basis on which to conduct foreign affairs. In his *Essays in the Public Philosophy*, Walter Lippmann, one of the founding fathers of public opinion research, wrote, "Mass opinion has acquired mounting power in this country. It has shown itself to be a dangerous master of decision when the issues are life and death" (p. 20). Few liberals would assert that public opinion should determine foreign policy, but they argue that in the long run, foreign policy cannot and should not consistently run counter to deeply held public preferences.

Presidents and other policymakers have varied rather widely in their views about the legitimacy and utility of public opinion and polling as factors in foreign policy making. Franklin D. Roosevelt and Harry Truman, Democratic presidents of approximately the same generation, held diametrically opposing views. Roosevelt, who had witnessed how the upstart pollster George Gallup had correctly predicted his landslide victory over Alf Landon in 1936, was fascinated by the "new science." During World War II, he secretly hired researcher Hadley Cantril to gauge whether, for example, the public would accept postwar responsibilities, including United Nations membership. In contrast, Truman ridiculed pollsters, perhaps in part because they had uniformly predicted that Thomas Dewey would defeat him in the 1948 election. George W. Bush publicly shared Truman's contempt for pollsters, but he privately relied on several polling firms to help put a "spin" on his policies.

All presidents recognize and act on Teddy Roosevelt's description of the White House as a "bully pulpit" from which to generate public support for his policies. On issues of war, presidents can generally count on "rally round the flag" support—at least during its early stages. A country

that was deeply divided on December 6, 1941, was united by the Pearl Harbor attack the next morning. The declaration of war against Japan was passed unanimously in the Senate and with a single dissenting vote in the House. The decisions to resist North Korean invasion in 1950 and to intervene in Vietnam in 1964 initially received public support, but the mounting casualties and the inability to gain decisive victories ultimately eroded it. Critics called Korea "Harry Truman's War," and the stalemated fighting contributed to Dwight Eisenhower's landslide presidential election in 1952. The Korean War ended with an armistice in 1953 and, most importantly, with the preservation of South Korea's independence. The disastrous Vietnam War divided the country more deeply than any conflict since the Civil War and contributed to growing partisan and ideological cleavages on foreign policy.

The Persian Gulf War, precipitated by Iraq's invasion of Kuwait in August 1990, brought a quick military victory for an impressive international coalition led by the United States and resulted in the expulsion of the Iraqi invaders, with casualties well below some prewar estimates. The initial deployment of forces to protect Saudi Arabia gained wide support, but the decision to invade Iraq was more controversial. The congressional vote on the issue in early 1991 was the closest since the War of 1812. The elder President George Bush's approval ratings after the victory reached an all-time high, but for mostly domestic political reasons he lost his bid for reelection in 1992.

This entry discusses U.S. public opinion of the military and of the wars in Afghanistan and Iraq and looks at the issues of balance and coverage in the media.

The Afghanistan War

The terrorist attacks of September 11, 2001, provided the societal and institutional context for the decisions to invade Afghanistan in 2001 and Iraq 17 months later. The former was a "war of necessity" as there was little doubt about al Qaeda's responsibility for the terrorist attacks, and the Taliban regime, which had provided a haven for that organization, ignored ultimatums to surrender its leaders. As revealed in Table 1, the Afghanistan operations by Central Intelligence Agency and Special Forces units gained exceptionally high public support, reaching 93% shortly after the U.S. forces overthrew the Taliban regime. However, like the British in the 19th

century, the Soviets in the 1980s learned that control of Kabul does not ensure control of the entire country. Nevertheless, Defense Secretary Donald Rumsfeld and most of his colleagues were determined not to get involved in “nation-building” in Afghanistan, and most of the key U.S. personnel were withdrawn to prepare for the forthcoming Iraq campaign.

Public support for the Afghanistan operation remained quite strong through 2009. However, the rising American casualties, the withdrawal of forces by some North Atlantic Treaty Organization allies, and the increasing evidence of vast corruption in the Hamid Karzai regime contributed to the growing disquiet about the war. President Barack Obama’s deployment of 21,000 and 30,000 additional troops in 2009 to cope with the deteriorating military situation received public approval, but sustaining that support will no doubt be heavily influenced by casualty levels and military progress against the Taliban forces.

The Iraq War

The Reagan and Bush administrations had strongly backed Iraq during its long war against Iran, but after the Gulf War, Saddam Hussein was the enemy whom almost all Americans would love to hate. Surveys going back to 1992 found that the majority favored the use of force to remove Saddam from power, but there was little enthusiasm for doing so unilaterally. In response to a Pew poll just days before the 2003 invasion, those in favor of removing Saddam outnumbered opponents by a margin of 59% to 30%, but only 38% wanted to do so “even if allies won’t join.” Sixty percent of respondents to a CBS/*New York Times* survey expressed the view that the United States should “take into account the views of allies before taking action,” whereas only 36% said that this country should do “what it thinks is right no matter what allies think.”

Table 1 Assessments of the Afghanistan War: Was Sending Military Forces to Afghanistan a Mistake? (2001–2010)

Thinking now about the U.S. military action in Afghanistan that began in October 2001, do you think the United States made a mistake in sending military forces to Afghanistan, or not?

	Mistake (%)	Not a Mistake (%)
November 8–11, 2001	9	89
January 7–9, 2002	6	93
July 19–21, 2004	25	72
August 3–5, 2007	25	70
July 25–27, 2008	28	68
August 21–23, 2008	34	63
January 20 to February 1, 2009	30	66
March 14–15, 2009	42	52
July 10–12, 2009	36	61
August 31 to September 2, 2009	37	61
November 20–22, 2009	36	60
July 8–11, 2010	38	58
July 27 to August 1, 2010	43	52
November 19–21, 2010	39	58

Source: Created with data from Gallup Organization surveys.

The successful invasion of Iraq with relatively low casualties received widespread approval. By a wide margin—75% to 23%—those participating in a Gallup survey days after the fall of Baghdad stated that the invasion was “not a mistake.” Table 2—a small sample of the record-setting number of surveys on the war—shows that public support declined steadily starting in 2004. By then, it had become increasingly clear that the reasons for the invasion—Iraq’s alleged possession of weapons of mass destruction (WMDs) and ties to al Qaeda—were fictitious. American inspection teams led by David Kay and Charles Duelfer issued lengthy reports stating that there were no WMDs and no active programs to develop them. Allegations of links between Iraq and the September 11 attackers also proved to be false.

Events on the ground contributed to declining public support for the war. Repeated prewar assertions by administration officials that U.S. forces would be greeted as liberators by most Iraqis; that Shiites, Sunnis, and Kurds would cooperate to create a stable post-Saddam regime in Baghdad; and that Iraqi oil revenues would pay for most if not all of the costs of the war proved to be wishful thinking. The administration had received numerous prewar warnings from intelligence agencies, Secretary of State Colin Powell, Army Chief of Staff Eric Shinseki, and top officials who had conducted the 1991 Gulf War—including Secretary of State James Baker and National Security Advisor Brent Scowcroft—about the dangers the United States would face in post-Saddam Iraq, but those prescient warnings were disregarded, and some of the skeptics were publicly ridiculed (General Shinseki) or fired (Scowcroft, Treasury Secretary Paul O’Neill).

The removal of Defense Secretary Donald Rumsfeld following the 2006 midterm elections, the surge of U.S. forces in 2007, and the counter-insurgency strategy developed by General David Petraeus resulted in improved security and declining American casualties. Multiple surveys revealed that the American public was paying attention, as increasing numbers responded that the situation in Iraq was “going well”; before an uptick of violence in mid-2009, nearly 70% of those taking part in several polls responded favorably. Yet, as shown in Table 2, there was no significant decrease in those describing the invasion as a “mistake.” Is this an example of public irrationality, or does it reflect a

sober understanding of the war’s immense costs and an appreciation of the continuing uncertainties about Iraq’s future? Perhaps a simple analogy is relevant. A smoker who has undergone successful surgery and chemotherapy for lung cancer may respond that his medical situation is “going well” and yet regret his decision to start smoking as a “mistake” and “the wrong thing to do.”

The overall figures in Table 2 fail to highlight an important feature of the public opinion on the Iraq War. When respondents were identified by party, the data revealed partisan differences of unprecedented proportions. President Obama’s appointments of leading Republicans as secretary of defense, national security advisor, secretary of the army, and ambassador to China did little to bridge the partisan gap. The small sample of questions in Table 3 also highlights an “iron law” of public opinion research—the importance of question wording. Because the questions listed in Table 3 asked respondents to consider the *costs* of the war, overall support was lower than in Table 2.

The Media

The media serve as the sole source of information on foreign affairs for most Americans, and the media,

Table 2 Assessments of the Iraq War: Was Sending Troops to Iraq a Mistake? (2003–2010)

In view of the developments since we first sent our troops to Iraq, do you think the United States made a mistake in sending troops to Iraq, or not? (average responses for each year)

<i>Year (No. of Surveys)</i>	<i>% Mistake</i>	<i>% Not a Mistake</i>
2003 (4)	32	67
2004 (17)	46	52
2005 (16)	51	47
2006 (15)	54	43
2007 (15)	57	40
2008 (9)	59	39
2009 (3)	56	41
2010 (1)	54	44

Source: Created with data from Gallup Organization surveys.

Table 3 Partisanship and Assessments of the Iraq War (2004–2010)

Do you think the results of the war in Iraq were worth the loss of American life and other costs of attacking Iraq, or not? (percentage of those who answered, Yes, it was worth it)

	<i>All</i>	<i>Republicans</i>	<i>Democrats</i>	<i>Independents</i>
July 2004	34	69	13	26
October 2005	32	62	8	30
November 2005	31	65	11	29
August 2010	20	36	11	18

Source: CBS/*New York Times* surveys.

in turn, are heavily dependent on government officials for information. A significant issue in democratic governance is the proper balance between the media (the right of citizens to be informed about the policies that are being conducted in their name) and the government (the need for public officials to deliberate some issues, especially on matters of national security, away from constant public scrutiny). Stated differently, should the media serve as “the Fourth Estate,” ever vigilant to possible abuses of power by public officials, or should they faithfully report—and support—administration decisions and policies?

Many presidents and top-ranking officials complain that they have been the victims of unfair media attacks. Yet on issues of military interventions and war, the media have generally “indexed the news”—reporting within the narrow confines of administration deliberations—unless events on the ground generate more critical debates. The Iraq War fits this pattern. During the run-up to the war, even national newspapers with well-earned reputations for investigative reporting, such as the *New York Times* and *Washington Post*, filled their front pages with stories about administration claims concerning Iraq’s WMDs, with little if any coverage of experts who had doubts about the intelligence sources, including the informant “Curveball” and Ahmed Chalabi (an ambitious Iraqi exile of highly dubious reputation), behind those claims. Only much later, when rosy prewar scenarios of a low-cost invasion leading to replacement of the Saddam Hussein regime by a stable, democratic Iraq turned out to be more fantasy than fact, did some of the media coverage of the war take a more realistic turn. This led many officials, including President George W. Bush, Vice

President Dick Cheney, and Defense Department officials Donald Rumsfeld and Paul Wolfowitz, to depict themselves and their policies as the victims of unfailingly unfair and biased media. They conveniently overlooked the unstinting support of media giants such as the *Wall Street Journal*, the Fox News empire, and Rush Limbaugh.

Shortly after 9/11, the Bush administration recruited many retired military officers to support its policies as “experts” on television. The officers were meticulously coached, handsomely rewarded, given extensive opportunities to pursue lucrative private business interests with Pentagon officials, and warned not to disclose their participation in the program, not even to the networks on which they appeared. The program was discontinued after its disclosure in a Pulitzer Prize-winning series of articles by David Barstow, but it seems unlikely that we have seen the last of covert efforts to “manufacture consent” for controversial policies.

Confidence in the Military

Americans have generally held the military in high regard. Since 1973, the Gallup Organization has conducted annual surveys about confidence in major institutions. When the “a great deal” and “quite a lot” responses are combined, favorable assessments of the military have never fallen below 50%. Even during the years following the disastrous Vietnam War, the military ranked second only to “churches and organized religion,” and since 1989, it has ranked first, with favorable ratings ranging from 60% in 1997 to a high of 85% in the immediate aftermath of the 1991 Persian Gulf War. The rating also exceeded 80% in 2002, following the invasion

of Afghanistan, and after the Bush-al-Maliki agreement of 2008 on U.S. troop withdrawals from Iraq.

Whatever the ultimate outcomes in Afghanistan and Iraq, public confidence in the military is likely to remain high, but there may be cautionary warnings in assessments of “churches and organized religion.” Their rankings have fallen sharply, probably as a result of dubious behavior by some church leaders—for example, Pat Robertson and Jerry Falwell described the 9/11 terrorist attacks as God’s just punishment for America’s sins. The cover-up by top-ranking officers of U.S. Army ranger Pat Tillman’s death by friendly fire in Afghanistan, the subject of a well-received documentary movie, *The Pat Tillman Story*, is the kind of conduct that could damage public confidence. Increasing politicization of the military and participation by retired officers in covert propaganda efforts on behalf of administration policies could also reduce confidence in the military as an institution.

Conclusion

What have the Afghanistan and Iraq Wars taught us about public opinion? Despite evidence that the American public is poorly informed about international affairs, the evidence largely sustains the view that, in the aggregate, public opinion generally reflects a sensible rather than randomly volatile assessment of events. Indeed, it suggests that many Americans paid more attention to developments in Iraq than to the administration’s aggressive overt and covert public relations campaigns. Their reactions thus seem to support the “low-information-rationality” thesis propounded by the political scientist Samuel Popkin rather than Walter Lippmann’s depiction of the public as dangerously out of kilter with reality.

That said, this would not seem to be the time for complacency. At what point does “low information rationality” morph into “no information irrationality”? Declining media coverage of international affairs in favor of local news and entertainment, vast cutbacks in news personnel as many newspapers face bankruptcy, and the elimination of geography in many school curricula should be a cause for concern. If democratic theory posits that a well-informed public has a legitimate role in policy making, the media and education systems would seem to have their work cut out for them.

Ole R. Holsti

See also Congress, U.S.; Iraq War (2003); President as Commander in Chief; War in Afghanistan; World War II

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QUADRENNIAL DEFENSE REVIEW

After the collapse of the Soviet Union, numerous studies were undertaken to reshape U.S. defense strategy in a post–Cold War international security environment. Driven by criticism that these studies were merely budget reviews, the U.S. Congress mandated a comprehensive examination of America’s defense needs in the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 1997. Linking each review to the beginning of each newly elected presidential administration, the Quadrennial Defense Review (QDR) would be a secretary of defense–led and chairman of the Joint Chiefs of Staff–reviewed comprehensive examination of U.S. defense strategy, force structure, force modernization, infrastructure, and budget plan. This review would provide direction for the Department of Defense with a common assessment of the security environment, explore approaches to near- and long-term challenges, establish strategic resource priorities, and provide a foundation for strategic planning. While the timing of the QDR would potentially place the review in the midst of a change in presidential administration, the analysis would enable the new administrations the ability to affect the defense budget early in a president’s term. This entry examines the background and content of the QDRs from 1997 to 2010.

Quadrennial Defense Review, 1997

After the November 1996 presidential election, the Department of Defense initiated the first defense

strategy review as mandated by the NDAA for FY 1997. While there was no change in presidential administration, the senior leadership of the department was not appointed until 4 months into the review. However, with participation by the military services, the Joint Staff, and the combatant commands, the Office of the Secretary of Defense published the first QDR in May 1997.

The first QDR entailed a 6-month analysis of threats, risks, and opportunities for U.S. national security and linked outcomes to defense strategy, force structure, infrastructure, modernization, and human capital. Fundamental to this review was the forecast that the United States would remain the sole superpower through 2015, operating in an international security environment lacking a global peer competitor to challenge the U.S. military, marred by regional conflicts, failed and failing states, internal conflict, humanitarian crises, and transnational threats. Therefore, the U.S. military was projected to need forces capable of executing full-spectrum operations from deterrence and small-scale contingency operations to fighting major theater wars.

In light of this security environment, the Department of Defense prepared defense strategy along three lines of effort: (1) shaping, (2) responding, and (3) preparing. The QDR called for shaping strategies to promote regional stability, prevent or reduce conflict, and deter aggression and coercion. The focus of these shaping strategies was the strengthening of core coalitions and alliances to improve the security and stability of friends and allies. The QDR recognized in its second line of effort that the U.S. military needed the ability to

quickly respond to crises to protect its interests. Third, while not faced with a global peer competitor, the U.S. military needed to prepare for unpredictable future security challenges and hedge against potential military rivals.

To implement a strategy of shape, respond, and prepare, the QDR proposed cuts in personnel strength and weapons programs to support near-term shaping and responding requirements and a long-term modernization plan that was intended to reverse a procurement lag that followed the end of the Cold War. As part of the reduction in personnel strength, the QDR proposed an end-strength reduction in the active military of 60,000, reserve forces of 55,000, and civilians by 80,000. Individual service force structure and modernization recommendations included the U.S. Army retaining 10 active divisions, reducing 15,000 active personnel, reducing 45,000 reserve personnel, and accelerating its "Force XXI" modernization plan; the U.S. Navy retaining 12 carrier battle groups and 12 amphibious ready groups, reducing the surface fleet from 128 to 116, reducing the submarine fleet from 73 to 50, reducing 18,000 active personnel, reducing 4,100 reserve personnel, and purchasing 480 joint strike fighters; the U.S. Air Force transitioning one fighter wing from the active force to the reserves, reducing the continental air defense, reducing 27,000 active personnel, and reducing its procurement of F-22 fighters from 438 to 339; the Marine Corps retaining three Marine Expeditionary Force capabilities and accelerating procurement of MV-22 tilt-wing aircraft; and the Department of Defense requesting two rounds of Base Realignment and Closure to consolidate base infrastructure.

Quadrennial Defense Review, 2001

The NDAA for FY 2000 would amend the U.S. Code to require the QDR on a permanent basis. It further amended the National Security Act of 1947 to mandate the formalization of a national security strategy no later than 150 days after the inauguration of a new president and linked the QDR analysis to the president's national security strategy. Affirming the requirements of the NDAA for FY 1997, the QDR would define force structure, force modernization plans, infrastructure, and a budget plan to achieve a low-to-moderate level of risk in implementing a national defense strategy for the next 20 years.

In June 2001, Secretary of Defense Donald Rumsfeld issued guidance to the development of the QDR 2001. Following the inauguration of the new presidential administration, the Department of Defense moved to transform U.S. military capabilities for the 21st century to hedge against uncertain emerging threats, maintain stability in critical regions, and preserve U.S. global leadership. Issuing guidance in a period of relative stability and U.S. military preeminence, the administration believed that the military was shaped to confront the security challenges of the past and sought to transform the military by pursuing new technologies, concepts, and structure to stay ahead of potential competitors. Its defense vision outlined assurance, dissuasion, deterrence, and defeat as its core defense policy goals. Through demonstration of purpose, resolve, and capability, the United States would assure its allies and dissuade potential adversaries from developing threatening ambitions. This transformed force would deter threats and counter coercion or decisively defeat an adversary if deterrence failed.

The bulk of the QDR analysis would be complete prior to the transformative events of September 11, 2001, when terrorists attacked the U.S. homeland. With last-minute revisions in response to the terror attacks, the QDR postulated a security environment where the U.S. would be challenged by asymmetric approaches to warfare with a range of capabilities. Based on this predominately asymmetric threat, the QDR shifted defense planning from a threat-based model focused on specific adversaries to a capabilities-based model focused on how an adversary might fight. This capabilities-based model of defense planning rested on four pillars of transformation: (1) strengthening joint operations, (2) experimenting with new operational concepts and capabilities, (3) exploiting intelligence advantages, and (4) increasing science and technology innovations in defense procurement.

To implement a strategy of transformation, the QDR proposed to retain the 2001 force structure as the baseline to develop a force for the future. The 2001 force structure was judged as presenting moderate operational risk within the expected security environment. Concurrently, the Department of Defense would reorient its overseas basing posture to face global threats in areas outside of the Cold War posture in western Europe and northeastern Asia. The army would accelerate the deployment of

interim brigade combat teams and explore enhancing ground force capabilities in the Arabian Gulf to strengthen the U.S. deterrence posture and improve strategic responsiveness. The navy would increase aircraft carrier battle group presence and explore options for home porting surface combatants in the Western Pacific. The air force was directed to develop plans to increase contingency basing in the Pacific and Indian Oceans and the Arabian Gulf while ensuring sufficient logistical infrastructure to support operations in the Arabian Gulf and the Western Pacific. The Marine Corps would develop new concepts for maritime pre-positioning, high-speed sealift, and amphibious operations while shifting their afloat pre-positioned equipment from the Mediterranean Sea to the Indian Ocean and Arabian Gulf. Finally, the Department of Defense would recommend realignment of special operations forces and maintenance of critical power projection platforms in western Europe and northeast Asia.

Quadrennial Defense Review, 2006

The QDR process was amended again in the NDAA for FY 2003 to mandate the report's submission to Congress in the year after the review is conducted but prior to the submission of the president's budget proposal. With concurrent operations in Iraq and Afghanistan, QDR 2006 would be the first wartime defense strategy review. Recognizing the irregular nature of the ongoing operations, the QDR postulated that the United States entered a period of a "long war" on terrorism requiring the U.S. military to adopt unconventional approaches to warfighting. Linking the review to the National Security Strategy of 2005, the administration urged continuing the transformation of the Defense Department while focusing on the challenges of homeland defense, the Global war on Terrorism, and stability and reconstruction operations.

QDR 2006 described a security environment characterized by four categories of challenges: (1) conventional, (2) irregular, (3) catastrophic, and (4) disruptive. Faced with these challenges, the Department of Defense would focus its resources along four priorities: (1) defeating terrorist networks, (2) defending the homeland, (3) shaping the choices of countries at strategic crossroads, and (4) preventing hostile states and nonstate actors from acquiring or using weapons of mass destruction. Expanding

the landscape of past QDRs, the review concluded that the U.S. military needed to operate globally via specifically identified regions. Furthermore, the military required the capability to operate in long duration counterinsurgency and counterterrorism operations. Therefore, QDR 2006 did not recommend cuts to the force structure but an increase in unconventional capabilities in special operations, psychological warfare, and civil affairs units. To further these capabilities, the QDR recommended building futuristic weapons, increasing the irregular-warfare capabilities of general purpose forces, increasing long-range strike and surveillance capabilities, improving nuclear detection and defenses against advanced biological threats, and focusing on language training in the armed forces. Investing in future capabilities, the QDR retained the army's Future Combat System program, accelerated procurement of navy littoral combat ships—the DD(X) destroyer and attack submarines, and extended the air force's F-22 fighter program. QDR 2006 cited a need to transform business practices to be more flexible with regard to budget, finance, acquisition, and personnel. Finally, the QDR emphasized the Defense Department's need to improve business processes, reduce redundancies, and work more efficiently with state and local agencies.

Quadrennial Defense Review, 2010

The fourth QDR would be the second wartime review of its kind and sixth examination of U.S. defense policy since the end of the Cold War. Exacerbating the challenges of a nation nearly a decade at war, the QDR was conducted as national political leaders struggled to respond to a global financial crisis. QDR 2010 would alter the scope of analysis of previous reviews to include successfully concluding ongoing operations in Iraq and Afghanistan. The focus on both present and future conflicts required the Defense Department to balance priorities between irregular warfare capabilities required of Iraq and Afghanistan and maintaining advantages in conventional warfare.

Consistent with assessments of the security environment of past QDRs, the 2010 review concluded that present and future adversaries would continue to leverage asymmetric approaches to counter the U.S. military's significant technological advantages. Characterizing a complex and uncertain security

environment, the QDR recognized the growing influence of globalization within the international system. Challenges within this system included increasing demands on scarce resources, rapid urbanization, climate change, disease, and demographic tensions with the ongoing challenges of non-state actors as well as the proliferation of weapons of mass destruction.

To counter the challenges of the security environment, defense priorities were established as follows: prevail in today's wars, prevent and deter conflict, prepare to defeat adversaries and succeed in a wide range of contingencies, and preserve and enhance the all-volunteer force. While most of these priorities remained constant over a decade of these reviews, prevailing in current conflicts at the expense of investing in future capabilities and preserving and enhancing the all-volunteer force marked a significant departure from the future force focus of previous QDRs. Reflecting on this significant shift in priorities Secretary of Defense Robert Gates noted at the press briefing releasing the 2010 QDR report that success in future conflicts would depend on the Department of Defense's ability to succeed in the Iraq and Afghanistan wars.

Reflecting on the demands of ongoing operations, QDR 2010 force structure guidance did not include increases in overall end strength but altered the shape and specialization of the force based on the evolving requirements of the current conflicts. It also concluded that as immediate wartime requirements evolve so might the force structure. In the interim, the Defense Department would preserve the force by transitioning to sustainable rotation rates of deployed forces to ongoing operations. While modernization programs were de-emphasized in QDR

2010, individual service force structure and modernization recommendations included endorsing the army's full-spectrum operational concept to prepare for simultaneous offensive, defensive, and stability operations in either conventional or irregular campaigns, the conversion of a heavy brigade combat team to a Stryker configuration, and the addition of two combat aviation brigades; requiring the navy to continue to be a robust forward presence and power projection capability with the ability to defeat rising adversaries' anti-access and area-denial capabilities; requiring the air force to become more survivable, flexible, and versatile to outmatch fifth-generation fighters and anti-access capabilities; enhancing the capacity of special operations forces through the growth of enablers and support assets in general purpose forces; and expanding the capabilities of U.S. cyberspace forces through the fielding of electronic attack capabilities, resilient networks, and enhanced cyber defenses.

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See also Air Force, Department of; Army, Department of; Defense, Department of; Navy, Department of; Plans, War

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RADAR

Radar is an acronym derived from the term *radio detection and ranging*. A radar system detects objects using electromagnetic waves transmitted from a directional antenna. Objects, called targets, in the path of the radar wave reflect a portion of the electromagnetic energy back to the radar system's receiving antenna. Data are extracted from the reflected energy to determine target characteristics like bearing, range, altitude, and speed. This entry describes radar systems and their uses in the military.

A basic radar system is composed of a transmitter, a receiver, a directional antenna, a signal processing section, and a user interface for display and control. Most modern radars use the same antenna to perform both transmit and receive functions and require a switch called a *duplexer* to manage the connection between the transmitter-antenna and the antenna-receiver and to protect the receiver from the powerful transmitted signal.

Radar signals reflect best from electrically conductive materials, making radar well suited to detect large metallic objects like aircraft and ships; however, other factors affect radar system design. For example, detection ranges are proportional to strength of the transmitted signal, the size of the receiving antenna, and the radar cross section of the target.

Additionally, the ability of radar to resolve a target of a given size depends on the wavelength of the transmitted signal. Also, some tasks tolerate slow scan cycles, while others require continuous updates without information gaps. Since no single system can

satisfy all requirements, these factors have resulted in many specialized radars.

Contemporary militaries use radar for a variety of functions such as aircraft and ship detection and control; aircraft flight-control systems; maritime navigation and piloting; aircraft, ground, and maritime fire control; weapon guidance and fuzing; aircraft altimeters; area imaging; and meteorological surveillance and measurement.

Pre-1945

Many researchers prior to World War II worked independently on radar technologies. As early as 1886, Heinrich Hertz showed that solid objects could reflect radio waves, and about two decades later, the German scientist Christian Hülsmeyer demonstrated a device capable of detecting a ship shrouded in fog. In 1922, the U.S. Navy researchers Dr. Albert H. Taylor and radio engineer Leo C. Young found that ships passing along the Potomac River between their receiver and transmitter reflected radio waves.

In the 1930s, the need to address a growing threat of attack from the air forced an increased pace in radar research, and while investigating the possibility of building an electromagnetic "death ray," British scientists discovered that they could detect aircraft reliably. Their prototype served as the basis for the Chain Home radar network that defended Great Britain during the Battle of Britain. By the beginning of World War II, radar technology was widely available to many of the warring nations.

Widely used on land and at sea to detect aircraft and ships, advances soon made radars sensitive

enough to detect small targets like periscopes and light enough for installation in aircraft. Some were even small enough for installation in artillery shells (e.g., proximity fuzes). Specialized radars were built for navigation, for precision bombing, and for fire control systems. Simultaneously, scientists developed electronic countermeasures to protect against radar detection.

Cold War and Post-Cold War

In the period after the Second World War, radar technology found many new applications. Large-scale integrated surveillance systems, such as the North American Distant Early Warning System, were built to protect against nuclear-armed bomber attacks, but new opportunities and threats emerged at all levels of warfare to drive radar development.

The evolution of jet aircraft and cruise missiles demanded radar-guided fire control systems for defensive gun and missile installations. As cruise

missile speeds increased, fully autonomous radar-directed defensive fire control systems for last-ditch protection were developed. Radars also changed the face of air warfare as they were fitted into fighter and attack aircraft and into the missiles they carried into dogfights.

By the end of the Cold War period, crowded tactical environments with many small, fast-moving targets fostered the development of electronically scanned phased array radar systems able to automatically search at ranges of hundreds of miles while tracking hundreds of targets. Also during this period, engineers began to explore the use of advanced phased array radars teamed with sophisticated radar-guided missiles to deal with ballistic missiles.

Operations and Planning

Radar is such an integral part of military operations that no phase of planning and execution is untouched. Stealth aircraft are employed specifically for their



A map of North America near the Arctic Circle showing 30 radar sites spread out along the Distant Early Warning Line. Running from Alaska, across northern Canada to Greenland, the line is approximately 3,600 miles long.

Source: Technical Sergeant Donald L. Wetterman.

antiradar qualities to strike an enemy's command and control infrastructure that often depends heavily on radar use. Satellite-mounted radars survey the battle space to give the commander the intelligence plan and execute the battle plan. Airborne early warning and control aircraft coordinate air operations and help maintain air dominance. Defensive radar systems linked by automated reporting systems provide the force with a comprehensive real-time tactical picture.

Future Developments

Recent radar improvements have been the result of increased computer processing power and innovative signal modifications. For example, the same electromagnetic wave that locates an object can be exploited against the user. To minimize this vulnerability, new radars have been designed that employ special low probability of intercept radar waveforms to make them difficult to detect and track.

Other applications of interest to military users include penetrating radars. The coal mining industry uses ultra-wideband radar for underground navigation. Military uses include detection of land mines and other buried ordnance. Ultra-wideband radar pulses also pass through walls and allow soldiers to see inside structures with high spatial resolution to identify dangerous situations.

Synthetic aperture radar (SAR) systems overcome the limitations of antenna size by using the flight path of an aircraft or satellite to simulate a very large antenna. SAR generates very high-resolution imagery by processing the many radar returns along the radar's trajectory into a single radar image. Military applications for SAR include reconnaissance operations that require high-resolution images covering large areas. Inverse SAR uses the same principle to provide detailed images of a target by processing the changes in the radar return due to the target's own motion.

Among the most technically advanced radar systems is cognitive radar. Cognitive radar uses powerful expert computing systems driven by adaptive algorithms that constantly monitor and build a picture of the operating environment. Based on this environmental database and the system's adaptive qualities, the radar's performance is adjusted to optimal performance from moment to moment. Cognitive radar systems offer better response in cluttered environments, whether due to human-made (e.g., chaff, jamming) or natural causes.

Larry A. Grant

See also Airborne Warning and Control System (AWACS) Aircraft; North American Aerospace Defense Command (NORAD); Targeting Systems; Technology; Warfare, Electronic

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RAND CORPORATION

The RAND Corporation is a nonprofit policy research institution established immediately after World War II. The abbreviation "RAND" stands for "research and development," and as originally conceived, the RAND Corporation provided problem solving and analysis for the U.S. armed forces. The organization has since expanded to service other governments, foundations, nongovernmental organizations, and commercial enterprises on a variety of non-military-related issues. Its history, however, is deeply connected to the development of U.S. defense policy during the Cold War, particularly as it relates to America's nuclear strategy. This entry examines the history and research areas of the RAND Corporation.

As World War II drew to a close, leading officials from the U.S. government and military recognized the contributions that scientists and engineers had made to the war effort, particularly in the development of new military technologies like radar and the atomic bomb. Members of the Truman administration and Pentagon officials argued that the United States needed to maintain and even strengthen the nation's military readiness through the application of science and could not afford to de-escalate following the war. To that end, on October 1, 1945, General H. H. "Hap" Arnold, commanding general of the Army Air Forces, joined with other representatives from the Pentagon and the aviation industry to form Project RAND as a special division of the Douglas Aircraft Company. Project RAND began operations in December 1945 and was placed under the supervision of Major General Curtis LeMay, the Deputy Chief of Air Staff for Research and Development.

The first ever RAND report, titled “Preliminary Design of an Experimental World-Circling Spaceship,” was published on May 2, 1946. The report examined the feasibility of putting human-made satellites in orbit around the earth. The following year, RAND moved from its location at the Douglas Aircraft Plant into new offices in downtown Santa Monica, California. In 1948, RAND separated from the Douglas Aircraft Company and became an independent corporation. Its Articles of Incorporation formally established RAND’s broad goals: “*To further and promote scientific, educational, and charitable purposes, all for the public welfare and security of the United States of America.*” By this time, the staff at RAND had grown to more than 200 researchers in a variety of fields, including mathematics, engineering, economics, psychology, physics, chemistry, and aerodynamics. From the beginning, RAND was conceived as an interdisciplinary research institute, where scientists and experts from divergent areas of study could collaborate on problems of national defense and military technology.

While RAND’s numerous studies had a tangible impact on the day-to-day operations of America’s Cold War defense policy, the methodology and institutional culture of RAND had perhaps an even greater effect on the military establishment. RAND engineers introduced the concept of *systems analysis*, the idea that military strategists should take into consideration not only what happens on the battlefield but also the entire complex set of activities surrounding a particular operation. Indeed, the idea that warfare could be planned for in a methodical, scientific way was a novel and initially controversial idea introduced by the RAND Corporation. RAND researchers believed that the advent of atomic weapons meant that future conflicts could not be field-tested but only simulated. These simulations could only be designed by experts like themselves, who would take into consideration the multitude of factors affecting military operations and view the entire conflict as a whole. The traditional experience of military veterans would simply not suffice in this new world of thermonuclear warfare. This attitude led to conflict between RAND analysts and senior military personnel in the 1950s and 1960s, but the systems analysis approach of the RAND Corporation ultimately prevailed. The height of RAND’s influence over the military came during the Kennedy administration, when Secretary of Defense Robert McNamara instituted a

wholesale restructuring of the defense establishment and promoted systems analysis as the preeminent methodology for American defense planning.

RAND’s researchers were greatly influenced in their systems analysis approach by the celebrated mathematician John Von Neumann, who pioneered the study of game theory in the 1930s and 1940s. Von Neumann served as a consultant to RAND during the 1950s, and RAND researchers applied his theories regarding human decision making to predict the potential outcomes of real-world nuclear conflicts. The application of Von Neumann’s theories eventually led to the creation of political war games—elaborate role-playing scenarios that were designed to help military strategists gain experience “fighting” a nuclear conflict. The RAND mathematics department devised a computer simulation of a Cold War game in 1954, and other, increasingly more elaborate, war games soon followed. Simulating nuclear war through the type of games first developed by RAND became an integral part of the U.S. military’s response to the defense problems raised by nuclear weapons.

The numerous experiments, war games, and simulations carried out by RAND researchers in the 1950s and 1960s led directly to one of the most crucial strategies of the Cold War. An influential military strategist, Herman Kahn, worked for the RAND Corporation and published his most famous work, *On Thermonuclear War*, in 1960. In the book, Kahn argued that a nuclear war was not only feasible but also winnable, provided the United States was truly willing to accept the consequences of a nuclear conflict. Kahn asserted that unless the Soviet Union was convinced that the United States was capable of launching a second strike that would devastate the USSR, the policy of deterrence would never succeed. Kahn’s ideas resulted in the doctrine of mutually assured destruction, which remained the dominant U.S. nuclear defense policy into the 1980s. Kahn, mutually assured destruction, and the RAND Corporation were famously satirized in Stanley Kubrick’s 1964 film *Dr. Strangelove: Or How I Learned to Stop Worrying and Love the Bomb*.

In the 1970s, RAND began to shift its research focus more toward nonmilitary policy analysis as other organizations and businesses began to recognize and subsidize the type of research RAND offered. Today, its research areas span the full range of public policy, from the arts to education, to health care, to transportation, and to infrastructure.

However, according to RAND's 2005 annual report, around one half of RAND's research remains devoted to national security issues.

Megan Barnhart Sethi

See also Air Force, Department of; Deterrence; Operations Research; Strategy, Nuclear

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RANGERS

The Rangers of the U.S. Army are an elite infantry force trained to conduct specialized operations to reinforce the policies of the United States. The Rangers have earned a reputation over time as one of the world's premier fighting forces, their extensive and diverse history dating them back to colonial America. Their fighting spirit and training doctrine are rooted in that history, resulting in the proud and selective force that operates on the modern battlefield. This entry discusses the history of the Rangers and the training and operations of Rangers in the present-day U.S. Army.

Origins of the Rangers

In early America, citizens relied on locally recruited militias for security when lacking the means to organize and equip a formal military. When Native American attacks threatened local populations, the militia attempted to repel the invaders. However, Native Americans implemented unconventional styles of fighting, setting ambushes, plotting raids,

and using their knowledge of the land to move in close to a village and attack without giving the inhabitants prior knowledge of their presence. Militias could not organize fast enough to counter these strikes, so, out of necessity, bands of men were organized to patrol or "range" outside of villages as a first-line defense against attack.

The reconnaissance-based origin of these Rangers carried into the French and Indian War, where, led by Major Robert Rogers, Rangers fought the French army. Rogers's Rangers, as they were called, relied heavily on tactics learned over time from experiences with Native Americans—establishing tight security, utilizing cover and concealment, and effectively communicating plans and contingency plans to maintain flexibility against cunning enemies.



Frontiersmen under Moses Hazen were among American forces that advanced toward Montreal but were thwarted by the British in 1775 during the first year of the American Revolution. Hazen was a veteran of Rogers's Rangers.

Source: : U.S. Army Center of Military History poster series.

During the American Revolution, General George Washington called for “companies of expert rifleman” to be organized into Ranger units. These Rangers differed from the earlier ones, used much less as a patrolling force than as a conventional infantry unit. In the American Civil War, members of John Singleton Mosby’s Confederate cavalry were designated Rangers. Mosby’s Rangers conducted raids that harassed Union forces and captured Union officers and soldiers beginning in 1863. After the Civil War, however, Rangers fell away from the American military scene and did not reemerge for over 75 years.

Birth of the Rangers Battalions

The Rangers known in today’s army were established in 1942, with the formation of the 1st Ranger Battalion. The Rangers’ first commander, William O. Darby, followed orders for his Rangers to first be trained and then to gain experience in combat before being sent to train new soldiers. Eventually, it was determined that the need for a specialized infantry force offset the need for experienced cadre. The diversity of combat scenarios on the battlefields of western Europe, Africa, the Mediterranean, and the South Pacific led several military leaders to support the formation of such units to be trained to handle unique missions falling outside the skill set of conventional units. Thus, the Rangers existed for the first time in their present-day capacity. Several more battalions were created, serving a small part in the Dieppe raid, in North Africa and Italy during the Anzio campaign, as well as at Normandy, scaling the heights at Pointe du Hoc on D-Day.

During the postwar years, the Rangers started to take on even more of their modern-day image. The Korean War brought the first use of the term *Airborne Ranger*, and infantry divisions absorbed the Ranger outfits. Airborne Rangers fought through Vietnam, often in Long Range Reconnaissance Patrol companies, patrolling behind enemy lines and aiding with target acquisition. Rangers existed with the airborne designation from then on, the title symbolizing the Rangers’ transformation into the land, air, and sea organization they are today.

The Vietnam War served the Rangers as a platform to exhibit their necessity in the army. After Vietnam, the Rangers served in various operations

in Iran, Grenada, Panama, Somalia, and Iraq. Between these operations, the Rangers conducted raids, complex attacks, prisoner extractions, hostage rescues, and high-value target strikes, intertwined with countless combat patrols. While an organized Ranger training program existed as far back as the Korean War, the increasingly surgical applications of Rangers made the development of an independent Ranger training facility necessary.

The U.S. Army Ranger Training Brigade was officially established in its current form on November 1, 1987, at Fort Benning, Georgia. The brigade was intended to run the Ranger School, a three-phase course covering 61 days. The course puts emphasis on small-unit leadership and tactics, all under high levels of physical and mental stress to bring students into the most realistic combat setting possible. The Ranger School is considered one of the most demanding military courses in the world. On graduation from the course, students earn the coveted Ranger Tab to wear on their left shoulder.

The Rangers draw much of their training doctrine from their history as an elite fighting force. The tan beret of the 75th Ranger Regiment, the Ranger scroll unit patch, and the motto “Rangers Lead the Way” all have roots in the history of Rogers’s Rangers and the Rangers of D-Day and Vietnam. Their training exemplifies their history as well, with constant reminders of men like William O. Darby in the Ranger obstacle course known as the “Darby Queen.” Constant reminders of their history, and the embodiment of that history in their training and daily lives, keep Rangers aware of and proud of their exclusivity within the U.S. military.

The Future of the Rangers

In the Global War on Terrorism, Rangers continue their work on the fluid modern battlefield in Afghanistan. The Rangers see regular use as a kinetic strike force for securing prisoners and high-value targets, as well as raiding insurgent safe houses in search of insurgents and weapons caches. The counterinsurgency strategy implemented in Iraq and Afghanistan has, however, put the Rangers in much the same role as their conventional infantry brethren. Conducting area security, patrolling, and building rapport with indigenous populations has become routine for all American forces in both theaters,



U.S. Army Rangers parachute from an Air Force C-17 Globemaster III aircraft on August 3, 2009, during a mass tactical jump over Fryar Drop Zone on Fort Benning, Georgia. The jump is the opening exercise of Ranger Rendezvous 2009, a week-long event that provides an opportunity for members of the 75th Ranger Regiment to showcase their tactics and abilities to family members and Ranger veterans.

Source: Department of Defense photo by Senior Airman Jason Epley, U.S. Air Force (released).

decreasing the role of direct action warfare only to circumstances that require it for the immediate security of American forces. While the counterinsurgency strategy frequently requires the use of Rangers in this capacity, they are nonetheless indispensable for use as a special operations entity.

The face of battle in the 21st century has increased the need for small, versatile units capable of rapid deployment. The Global War on Terrorism does not always call on the Rangers to act in the role to which they devote most of their training, but their existence in that role is ultimately essential. The military arm of the United States is powerful, but that strength often makes it sluggish when needing to deploy. Having soldiers like the Rangers, trained in special operations with the capability of mobilizing and entering the battlefield quickly, ensures

readiness for whatever mission the United States is charged with carrying out.

Kyle P. Bracken

See also American Revolution; Colonial Wars (1607–1774); Global War on Terrorism; Special Forces, Army; U.S. Special Operations Command; Vietnam War; World War II

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RANK

Rank (also known in the U.S. Navy and Coast Guard as *rate*) is the hierarchical concept of authority and seniority in the U.S. military and serves as a baseline for salary rates. It is divided into three categories: (1) enlisted personnel, (2) warrant officers, and (3) commissioned officers. Within each category, more groupings can be made to further indicate function and position. Moving up in rank is known as promotion, while moving down is being demoted, but as a general rule, the level of one's rank in each category indicates the amount of time a person has served in the military. A symbol, known as insignia, indicates the particular rank of an individual. Enlisted personnel typically wear their insignia as patches on their shoulders or upper sleeves, while officers usually wear small metallic pins on their lapels or epaulets. Different color schemes are used depending on the occasion; for example, subdued insignia are usually worn with combat-oriented uniforms, while highly visible insignia are used with formal attire. This entry describes the rank insignia and rank classifications of the U.S. armed forces.

Rank Insignia

The military's current rank system is based on the U.S. Army's incorporation of the chevron in recognition of old European traditions and customs. For enlisted personnel, their ranks are similar in structure and use one or more chevrons, or a variation of the chevron, for their insignia. The exception is the army rank of specialist, which uses only the field of a rotated chevron filled with an image of an eagle similar to the one that appears on the Great Seal. The navy and Coast Guard, which use a combination of diagonal stripes and chevrons to indicate rank, use virtually identical insignias. The U.S. Air Force's insignia are called stripes and are rounded variations of the chevron.

Both warrant officers and commissioned officers use polished or nonreflective metal pins to indicate rank. The warrant officer ranks are indicated by one or more small squares on a rectangular field and offset in color. Commissioned officers use different

symbols from those of warrant officers: gold and silver bars, gold and silver oak leaves, silver eagles, or silver stars. All the branches utilize the same commissioned officer insignia for uniformity and quick identification.

Rank Classifications

Enlisted

The lowest ranks are the enlisted personnel and comprise the majority of the manpower in all the services. The nine separate enlisted ranks are divided into two categories, junior enlisted and noncommissioned officers (NCOs), and have their own titles and insignias. Generally, the junior enlisted are those individuals who have spent the least amount of time in military service, have few duties and responsibilities, and have little authority. Their primary task is to become proficient at their job while successfully acclimating to life in the military. Above them are NCOs. These men and women fill the first- and second-level leadership positions for the junior enlisted personnel beneath them and form the backbone of the military. The highest ranking NCOs, in addition to filling the upper levels of supervisory positions, also serve as advisors and mediators to the unit's commanding officers regarding enlisted issues. Enlisted personnel are addressed by their respective rank and are never saluted.

Warrant Officers

For all of the branches except the air force, the middle ranks consist of warrant officers. They receive their title from having a warrant from their respective branch's secretary initially inducting them into service, although a commission signed by the president is given on promotion to higher ranks. The rank of warrant officer is characterized by those officers who choose to specialize in a specific career or skill while electing to forgo opportunities of commanding large units. Warrant officers are divided into five distinct ranks and each has its own title and insignia. Saluting warrant officers is required, and the manner of address is either according to their gender (Sir, Ma'am, Mrs., Mr., or Ms.) or "Chief."

Commissioned Officers

The uppermost ranks consist of commissioned officers and form the leadership component of

each service. In most cases, officers earn a commission from the president through one of three ways: Reserve Officers' Training Corps, Officer Training School or Officer Candidate School, or by graduating from one of the services academies. Regardless of how the commission is earned, all officers are saluted and addressed by their appropriate rank. In addition to performing their career-specific duties, they also hold supervisory positions over all the enlisted forces. Among the three classifications of the nine officer ranks, company grade officers fill the lowest ranks and serve as the first level of decision making and authority for enlisted personnel. Overseeing them are field grade officers charged with higher levels of decision making as well as many command responsibilities. The upper echelon officers are called general officers and are responsible for strategic decision making. The highest rank usually possible to achieve is either general or admiral. A higher rank of general of the army or admiral of the navy, for example, officially exists but is only used when the nation is at war. Due to a congressional decree, the highest ranking military person ever is George Washington, followed by John J. "Black Jack" Pershing.

Victor J. Graffeo

See also Commissioned Officers; Noncommissioned Officers

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RAPE

By definition, rape is nonconsensual sexual assault, typically involving sexual intercourse. Rape is one part of the U.S. Department of Defense's formal definition, included in the 2009–2010 report, of sexual assault that reads as follows:

The term sexual violence, hereby referred to as "sexual assault," is defined as intentional sexual

contact, characterized by use of force, threats, intimidation, abuse of authority, or when the victim does not or cannot consent. The crime of sexual assault includes rape, forcible sodomy, and other unwanted sexual contact that is aggravated, abusive, or wrongful sexual contact, or attempts to commit these acts.

Military rape and sexual abuse can occur in several different settings. Often, rape and sexual abuse can occur between soldiers in the same branch of service either during education and training for combat or out in the field. Additionally, there is also the possibility of the rape initiated by individuals on different sides of a battle, wherein the conquering side rapes the victims of the losing side. The vast majority of military rape victims are women, though there has been a significant increase in male rape throughout the 20th century and into the present day. Though a largely unreported crime, victims of rape have made public feelings of fear, terror, humiliation, and violation of personal space.

Throughout history a rape narrative has formed, largely associated with war crimes and military tactics for thousands of years. Only in the past century has rape become recognized as systemic of warfare, a crime against humanity and classified as punishable. Under the Fourth Geneva Convention in 1949, wartime rape and other sex crimes became explicitly prohibited. This provision was upheld and reinforced by the amendment protocol additions adopted in 1977.

The Department of Veterans Affairs refers to the aftereffects of rape as military sexual trauma (MST), an all-encompassing term that refers to rape, sexual assault, or repeated sexual harassment that took place during the time of service. This broad term aims to include pressured sexual activities, a lack of consent, force, threats, offensive remarks, unwanted touching or grabbing, and unwelcome advances. Since the beginning of the Iraq War, the military has also come to recognize the presence of "command rape," where a victim is promised protection in exchange for being open to sexual relations with a commanding officer.

The increased presence of rape in the military entered mainstream public knowledge in the United States slowly over the course of the 20th century. Always controversial, the topic has been sporadically discussed in media coverage, reports from

the Pentagon, documentary film, popular cultural portrayal, and legal proceedings. In the early 2000s, the U.S. military made further policy strides against sexual trauma instituting an official office to handle reported sexual assault and rape cases. This entry examines the statistics on rape, actions taken by the Department of Defense to address the problem of rape, legal ramifications, and portrayal of war rape and military sexual assault in the popular culture.

Official Stance

During the administration of George W. Bush, the U.S. military began to recognize the growing issue of sexual assault internally and began taking small actions to control the problem. In late 2005, the U.S. Department of Defense officially created the Sexual Assault Prevention and Response Office (SAPRO). The office employs some 1,200 sexual assault response coordinators, chaplains, lawyers, and law enforcement officials to handle the reported crimes. Additionally, the military has trained more than 1 million uniformed personnel and established sexual assault programs at all major bases and installations.

With the creation of SAPRO, the Department of Defense took the designated stance that sex crimes will not be tolerated within the armed forces in any capacity. The formal mission of SAPRO aims to prevent, treat, and enforce accountability of rape and other sexual assaults. Apart from SAPRO, there are organizations like the Military Rape Crisis Center, staffed largely by veterans and survivors of sexual trauma, that work to meet the needs of MST survivors while conducting research on the problem. Currently, Military Rape Crisis Centers are located in Massachusetts, the District of Columbia, and on the U.S. Air Force Ramstein Air Base in Germany.

Basic Statistics

The majority of statistical research on military rape comes directly from the Pentagon, responsible for researching an annual report that details sexual harassment, assault, and trauma primarily within branches of the armed forces (except the U.S. Coast Guard, which is under the Department of Homeland Security). In addition to the research of the Department of Defense and the Pentagon, the U.S. military service academies also publish annual school year reports that detail sexual assaults and rapes involving those in training. These statistics

are required by Congress and cover more than 1.4 million uniformed personnel.

In 2009, the Department of Defense found 3,230 reported cases of sexual assault across all branches of the military, an 11% increase over the previous year. In 2011, the number of reported cases was slightly less than in 2009, at 3,192; however, a Pentagon report released on May 7, 2013, indicated that in 2012 there were 3,374 sexual assault reports. The rate of unwanted sexual contact, including the crimes of rape, sexual assault, forcible sodomy, and abusive and aggravated sexual contact, has increased among active-duty women while remaining the same among active-duty men and among both men and women in the Reserves.

Since 2004, rape and sexual assaults in the military have more than doubled, and at the same time, the Pentagon estimated that about 80% to 90% of rapes and sexual assaults go unreported. The 2013 Pentagon report estimated that 26,000 people in the military were sexually assaulted in the 2012 fiscal year, up from 19,000 in the same period a year before. Thus, sexual assault continues to be significantly underreported. However, the proportion of restricted reports (ones that remain confidential) that converted to unrestricted reports increased from 14% in 2011 to 17% in 2012; the Pentagon saw that as an indicator of increased victim confidence in the military's response to sexual assault.

Historically, statistical evidence on rape and sexual assault in the military was incredibly limited. Almost no records were kept on the matter until the second half of the 20th century. Even into the early 2000s, only scattered records existed detailing individual cases of sexual trauma until Congress passed the order for official military reports in 2002. As of 2010, a lawsuit by the American Civil Liberties Union charged that the Pentagon and the U.S. Department of Defense were refusing to publish the complete findings of the annual reports, instead officially releasing only select statistics to the public.

In Academies

The problem of rape often surfaces within the U.S. military service academies, where cadets undergo rigorous education and training in preparation for combat and career service. The annual public school year reports showed a steady decline in academy rapes up until 2009 when there was a 64% increase

in reported sexual assaults among cadets and midshipmen. The academies only report on sexual assaults owing to the Department of Defense's broad definition. Additionally, the report only includes three of the five military academies: West Point (Army), Annapolis (Navy), and the U.S. Air Force Academy in Colorado.

Despite this substantial increase in assaults within the academies, the Department of Defense concluded that these encounters are rare. The reported academy assaults accounted for less than 10% of the total reports in 2009. In academy environments, less than 13% of women and 2% of men reported unwanted sexual contact.

In Combat

Despite being illegal under the Geneva Conventions, rape and sexual assault still occur in battle settings, both soldier-on-soldier and soldier-on-victim. In this instance, soldier-on-victim rape happens more frequently, a tactic of intimidation and asserting power. Given the cross-country lines and implication of war crimes, reports on soldier-on-victim rape are scarce and unreliable.

In terms of soldier-on-soldier, statistical data on combat setting rape are harder to separate from the general statistics contained in the released reports, factoring in a wider range of victims, locations, and reporting techniques. However, it is clear that the battleground in Iraq and Afghanistan is where the aforementioned "command rape" first appeared, highlighting the presence of soldier-on-soldier sexual assault even in the field. Since the onset of these wars, reported rape cases in both combat zones increased approximately 20% from 2007 to 2008. Additionally, there is a higher instance of gang rape in combat settings, with almost 14% of reported cases involving multiple persons and the victim.

Legal Ramifications

The legal prosecution of rape is one of the most controversial issues within the military and American public. The most common charge against the military remains that limited prosecution follows reported cases. A large factor in the prosecution of rape comes from the reporting techniques. The military unofficially employs a lengthy survey to determine accuracy and truthfulness, collects physical evidence when possible, and documents a full

report. Nearly one third of victims choose not to complete the reporting process, thereby closing the case immediately.

The 2007 Pentagon report showed that more than 50% of fully reported rape investigations resulted in no action. Officially, only about 8% of reported cases led to prosecution. In the event action was taken, only one third of the investigations resulted in courts-martial. The other two thirds of action was nonjudicial, recommending the accused be sent to counseling, transferred to another unit, or discharged. Some 80% of those convicted were ultimately honorably discharged.

When the reported rape results in a court-martial, military sentencing for sexual assaults is often much less severe than state laws. According to the Associated Press in 2009, West Point cadet Kyle Newman faced two separate rape charges, one within the academy and one in neighboring Highland Falls. Newman was found guilty in May 2010, and sentenced to 3.5 years confinement and dismissal from the army. New York State law stipulates that each rape charge carries 12.5 to 25 years in prison.

Public Portrayal

Despite a historical presence, the rape and sexual assault narrative has seen limited public portrayal since the advent of film and television in the early 20th century. There are a few notable exceptions, each of which has stirred individual controversy on release, exposing audiences to the possible atrocities of war and military service.

The public's first real exposure to military rape came around World War II when the idea of sexual assault as a battle tactic began to permeate news stories and popular culture. Events like the Rape of Nanking were covered in films like the 1944 documentary *The Battle of China*, Volume 6 of 7 in Frank Capra's U.S. government-commissioned propaganda series, *Why We Fight*. This film series was aimed primarily at soldiers to inspire them to fight and was later shown to the American public to rally support for U.S. involvement abroad. This government-issued film series helped control the American public's understanding of war rape and sexual assault.

After World War II ended, war rape began to find its way into popular culture through films like *Two*

Women starring Sophia Loren, which showed an Italian woman and her daughter fleeing the city during World War II. After the liberation, the pair head back toward Rome only to be captured and gang-raped by some Moroccan soldiers serving under the French forces. By 1960 standards, the rape scene was quite controversial, highlighting the atrocities of war in a realistic way that struck a chord with audiences.

Since *Two Women*, war rape and military sexual assault have appeared in only a few films and documentaries. It appears that filmmakers typically avoid showing the graphic topic in a direct way and rather allude to rape indirectly. However, in 2007, the French filmmaker Pascale Bourgaux spent over a month interviewing U.S. women raped during their military service. The documentary, *Rape in the Ranks: The Enemy Within*, follows the stories of four women who suffered MST. The documentary has, in effect, been banned from the United States where it has no actual release and has only been shown publicly at a handful of independent screenings.

Conclusions

Rape under military circumstances involves a lengthy historical narrative that entered into public consciousness in the 20th century. Throughout the second half of the 20th century, rape became globally recognized as a problem associated with warfare, and the Fourth Geneva Convention moved to condemn its practice. As a result of concern over a rise in sexual traumas, the U.S. military addressed the situation by implementing military training procedures, annual reports, and a designated office to enforce the Department of Defense's policy on sexual assault. Despite these initiatives, the issue of MST continues to persist not only in periods of warfare but during military training and service. Public criticism resonates from how military personnel are charged and the subsequent legal actions taken against them in matters of rape and sexual assault. Public understanding of the issue is largely shaped by films, scholarly texts, and journalistic reportings.

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See also Court-Martial; Crimes, Military; HIV/AIDS; Laws of War; Prisons, Military; Sexually Transmitted Diseases

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RAPID DEPLOYMENT FORCE

A rapid deployment force (RDF) is typically configured as an elite body of troops that is designed to move greater distances in shorter times than their counterparts in traditional armed forces. Because of time-distance considerations, such a force will likely be composed of light infantry, airborne or air mobile troops, and a mix of Special Forces, with little organic air, armor, or artillery support. To remain in action for very long, the force will require quick resupply and reinforcement. This entry describes the evolution of U.S. RDFs and looks at variations of the RDF concept worldwide.

The concept of a light force capable of agile and rapid employment is not unique to modern times. But the notion of *rapid deployment over great distances* came of age only with the advent of long-range jet transport aircraft. And sustainment of RDFs became feasible only with land-based and/or afloat prepositioning of armor, ammunition, vehicles, and even foodstuffs and water, together with continuous air resupply. To augment self-sustaining troops arriving by long-range military airlift, other rapid deployment personnel are typically flown in, sometimes on civilian airliners, to "marry up" with prepositioned supplies and equipment. Timely arrival of tactical air cover may be enabled by the use of an "air bridge" of tanker aircraft, and naval

support of operations will depend on proximity and types of ships immediately available.

Variations on the Concept

Theoretically, there are many variations on the RDF concept. A range of real-world examples provides a spectrum of operations from high-end global-reach deployments described above, to regional deployments involving multinational forces in the middle of the spectrum, to neighboring state—or even intrastate—deployments at the lower end.

The most credible global-reach RDF capability now resides within the U.S. military, about which more is given below. A future global-reach capability might be established by the United Nations under auspices of the Military Staff Committee authorized by Chapter VII, Article 47 of the Charter. Despite persistent advocates, however, all efforts to establish a standing UN RDF have thus far proved unsuccessful, and prospects are unpromising.

A number of regional RDFs have taken the field, including one sponsored by the Economic Community of West African States, employed successively in the Ivory Coast and in Liberia. Another regional initiative has been taken by the six states of the Gulf Cooperation Council that recently agreed to create a combined RDF to address security threats in the Persian Gulf.

European states have long been involved in planning for, and occasionally deployment of, multinational forces that can be characterized as RDFs.

The so-called battlegroup concept that has been sponsored under auspices of the Common Security and Defence Policy of the European Union appears to be designed to meet intraregional rather than extraregional contingencies. Meanwhile, under auspices of North Atlantic Treaty Organization (NATO), an Allied Command Europe Rapid Reaction Corps (ARRC) has been established, which has provided components to the “NATO Response Force” in Afghanistan.



ARRC assumed command of HQ International Security Assistance Force IX in Afghanistan. ARRC maintains the collaborative effect between International Security Assistance Force forces and the local population.

Source: © ARRC/NATO.

Finally, a considerable number of individual states have established so-called RDFs, including Argentina and Great Britain, erstwhile belligerents in the Falklands War.

The American RDF Concept: Origins and Evolution

A presidential directive (PD 18) in 1977 called for the establishment of a mobile military force that would not divert assets from NATO or from South Korea. However, it was not until after the Iranian revolution of 1979 that a concerted effort was made to actually establish the force. President Jimmy Carter announced in October of that year the formation of an American RDF capable of operating anywhere in the world.

Following the Soviet invasion of Afghanistan in December 1979, which prompted the enunciation of the Carter Doctrine in January 1980, the RDF concept of operations was soon focused on the Persian Gulf region. Carter asserted that the Gulf was an area of vital interest to the United States and, furthermore, that any outside attempt to gain control of that oil-rich area would be “repelled by any means necessary, including military force.” Clearly intended to deter further Soviet adventures in Southwest Asia, the Carter Doctrine created an intense sense of urgency within the American military establishment to develop the capability, then largely lacking, to provide teeth for the president’s warning.

Already in existence was the U.S. Strike Command that had been established in 1961 at MacDill Air Force Base as a unified combatant command capable of responding to global crises. In 1972, Strike Command had been redesignated as the U.S. Readiness Command (REDCOM). The commander of REDCOM was directed in 1979 to establish the Rapid Deployment Joint Task Force (RDJTF) headquarters as a separate subordinate command within REDCOM. Defense Secretary Harold Brown formally established the RDJTF in March 1980, and, in 1981, Defense Secretary Caspar Weinberger announced that the RDJTF would evolve into a separate command with specific geographic responsibilities. To complete the metamorphosis, the RDJTF became an independent unified command in 1983 as the U.S. Central Command. (REDCOM was subsequently replaced by the U.S. Special Operations Command in 1987.)

The first major test of Central Command’s concept of rapid deployment operations came in August 1990 when Iraq invaded Kuwait. For several anxious days, U.S. quick response forces were flown into eastern Saudi Arabia, first to deter, and then if necessary to defend against, an Iraqi thrust out of Kuwait south into the Saudi oil fields. After reaching a critical mass, the rapid deployment gave way to a systematic, massive buildup that later culminated in Operation Desert Storm in January 1991.

In retrospect, the early phase of Operation Desert Shield during the month of August 1990 was the *first*, and arguably, the *only* full-scale test of the U.S. RDF concept. Subsequent interventions by U.S. military forces abroad have certainly involved rapid deployments over long distances—the hallmark of RDF operations first conceived and rendered technologically feasible over four decades ago. The ongoing “transformation” of the American military since the end of the Cold War has emphasized lighter forces, greater mobility, and the overarching imperative that virtually all combat forces must now be “expeditionary” in design and employment doctrine, thus broadly institutionalizing the RDF concept across all the U.S. armed services.

William L. Dowdy

See also Aerial Refueling; Air Mobility Command; Airborne Units; U.S. Central Command

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RAYTHEON

Raytheon is an America-based, global corporation that stands as one of the largest defense contractors for the U.S. government. It is the largest producer of guided missiles in the world, as well as the fifth largest

military contractor overall. It employs roughly 72,000 people worldwide. This entry traces the history of Raytheon and discusses its products and technology.

Raytheon Company formed in 1922, when two alumni from Tufts University, Lawrence K. Marshall and Vannevar Bush, partnered with Charles G. Smith to found the American Appliance Company in Cambridge, Massachusetts. The firm began with a focus on refrigeration technology. From there, the company quickly moved into the emerging field of radio and developed the Raytheon tube, from which the company then took its name. Literally, the name Raytheon translates as “light of the gods.” They enjoyed great success after changing their center of attention in 1925 to radio technology. The company continued to make consumer electronics as their chief product line through the remainder of the decade and into the 1930s. The company expanded, acquiring Q.R.S. Company, a major manufacturer of electron tubes and switches, in 1928. In addition, it added Acme-Delta Company in 1933, a producer of transformers, power equipment, and electronic auto parts.

World War II

With the outbreak of the Second World War and American participation in the conflict, Raytheon grew to become a major defense contractor with a significant role in radar technology. Radio detection and ranging, or radar, systems were originally developed by British corporations. One of these, the A. C. Cossor Company, developed radar in the 1930s and was the main producer of this technology for the British Chain Home Defense network. As a result of wartime demands, the company’s production capability was stretched to the maximum. With U.S. entry into the conflict, Raytheon was selected to take on the additional demand that Cossor could not meet. This came about as the result of a contract from the U.S. government and a partnership with the Massachusetts Institute of Technology’s Radiation Laboratory. The primary item produced by Raytheon was the magnetron tube, a key component used in radar sets. Within a few months after receiving the contract, Raytheon began to mass produce the components in order to help meet wartime demand.

Cold War

With the end of World War II, Raytheon began to broaden its electronics development wing, at the

same time enhancing its role in the defense industry. Initially, the company accomplished these goals through the acquisition of various other concerns. Among the businesses acquired by Raytheon at this time was the Submarine Signal Company, then a major manufacturer of maritime safety equipment, including guidance systems. The above acquisition aided Raytheon in its development of the first missile guidance system capable of hitting a flying target. The company began production of the system in 1948. Two years later, its Lark missile became the first to destroy target aircraft in flight. This accomplishment led to contracts for the firm to develop an additional system, the air-to-air Sparrow missiles. Likewise, these innovations drove development of a third weapon system, the ground-to-air Hawk missiles. During the same period, the company embarked on the manufacture of transistors as well as radio and television transmitters. These products were, to some extent, generated by the technology developed in their guidance systems programs. In 1959, Raytheon further expanded through the acquisition of Apelco Applied Electronics and changed its name to the Raytheon Company. In 1961, they formally merged with the British electronic company A. C. Cossor, formalizing a partnership that had existed going back to World War II. Cossor was still a member of the Raytheon group of corporations as of 2012.

Through the 1960s, while it continued as a major defense technology corporation, Raytheon branched out into the consumer appliance industry. In 1965, for instance, the corporation diversified into the refrigeration industry with the acquisition of Amana Refrigerators, Inc. The firm quickly combined the technological expertise it held in electronics with the new investment in consumer appliances with important results. The most significant development to derive from this fusion came in 1967 when the company began marketing the first tabletop microwave ovens under the Amana brand name. The company continued to manufacture both consumer electronics and military hardware through the 1960s and 1970s.

The 1980s witnessed a major change in the corporate direction of Raytheon as it purchased Beech Aircraft Corporation. The acquisition of the aircraft firm initiated a movement within the company to a renewed interest in air power and air defense technology. The shift in direction engendered by

this purchase manifested in the development of the Patriot missile defense system.

Post-Cold War

Raytheon supplied numerous guided missile systems to the U.S.-led coalition in the Persian Gulf War, 1990–1991. The most famous of these systems was the Patriot missile, which achieved significant results during the conflict. The success of the coalition in this conflict generated fresh orders for Patriot missile systems.

By the same token, it served to drive the company in a new direction. Through the 1990s, Raytheon moved to focus more of its efforts in the defense industry. As a result, it began acquiring a number of other technology firms. At the same time, Raytheon began to divest itself of some commercial subsidiaries, the most prominent of which was Amana Refrigerators. All of these measures were aimed at establishing Raytheon as the preeminent corporation in the defense electronic industry.

Conclusion

From its inception in the early 1920s, Raytheon stood out as a major technology firm. Soon after its creation, the company began to serve as an important contributor to the national defense of the United States. Through the Second World War and after, Raytheon worked to maintain its role in the defense industry as well as expand its consumer appliance division. With the return to the company's focus on military hardware, Raytheon continues to be a significant corporation in the defense industry, providing major components for guided missiles.

James R. Mc Intyre

See also Missiles, Air-to-Air; Missiles, Conventional; Missiles, Cruise; Radar

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REALISM IN INTERNATIONAL RELATIONS

Realism is a school of thought in the study and practice of international relations. Realists understand international politics as a struggle among sovereign states for power, measured in terms of military forces, wealth, natural resources, population, and territory. Sovereign states exist in an anarchic system in which rules and agreements, including formal treaties, are easily broken. No super-sovereign world government exists to punish states that violate treaties and international law, so states must rely on themselves to ensure their survival in a competitive, dangerous world. Survival is the *sine qua non* of foreign policy; governments that interpret the national interest in alternative ways do so at their peril. To survive, states must arm themselves—or secure well-armed allies—to deter potential aggressors and to defend their territories, populations, and interests against undeterred attackers. Security thus requires military power; in the Latin adage, “*si vis pacem, para bellum*” (if you wish for peace, prepare for war). This entry discusses the principles of realism and the views of prominent realists.

Realists are pessimistic about and even dismissive of international organizations like the United Nations and emphasize the failures of such organizations to prevent aggression and war. One commonly cited example is the League of Nations, the post-World War I organization intended to maintain peace but that failed to halt Japanese, Italian, and German aggression and collapsed shortly before World War II. Similarly, many realists believe that progress is virtually impossible—that human nature or the anarchic condition of the international system condemns international relations to be an endless struggle for power or security.

Hans Morgenthau, the modern godfather of realism, argued that the international struggle for power has and will continue to play out in predictable ways, most notably in the system's tendency toward a balance of power—a rough equilibrium among the Great Powers (the most powerful states in the system), which seek to maintain their status

and prevent the emergence of a preponderant power capable of imposing hegemony. These states pursue greater power for themselves but also seek to limit or counteract competitors' military capabilities by "balancing" against other powerful states, often by forming alliances or coalitions against any state that threatens to become the singularly preponderant power in the system; for example, Napoleon's bid to conquer continental Europe provoked coalitions of other European powers opposed to French hegemony.

Realists prescribe alliance or coalition building as one method of balancing power; an alternative method is to increase one's own armaments to keep pace with or outweigh the capabilities of potential adversaries. Many realists consider "internal balancing" more reliable than alliances—which, like other international agreements, are easily broken. Critics, however, argue that increasing armaments, even when motivated strictly by defensive concerns, can lead to arms races (like the Cold War nuclear arms race between the United States and the Soviet Union) and security dilemmas in which one state's ostensibly defensive measures are misinterpreted by others as aggressive and indicative of hostile intentions.

Critics consequently argue that realist prescriptions are warlike, because preparing for war brings war, not peace. But realists do not necessarily condone frequent warfighting; rather, most realists counsel prudence, diplomacy, and judicious use of power resources. Government leaders, military officials, and scholars who espouse realist principles do not hesitate to advocate military force when necessary—but only when necessary. Foreign adventurism risks the squandering of blood and treasure, which should be marshaled to protect the state and its interests in a worst-case scenario. In this vein, the prominent realist scholars John Mearsheimer and Stephen Walt argued in 2003 against a U.S.-led invasion of Iraq on the premise that war is wasteful and unnecessary, especially when other coercive methods such as containment and deterrence appeared sufficient.

Realists agree that statesmanship requires prudence, but not everyone agrees on realism's premises and implications—and indeed, this wide-ranging and inclusive school of thought encompasses many variations. For example, Mearsheimer's "offensive realism" asserts that the system's most powerful states, Great Powers, continually seek to expand

and maximize their power at their rivals' expense; in contrast, "defensive realists" argue that many states are content to preserve the status quo, which in turn is threatened only by a small number of revisionist states seeking to expand and move up the ranks of the powerful in the global arena. Walt's "balance-of-threat" theory, for example, posits that states balance against the state that is most threatening, not necessarily the most powerful.

Some realists' claims that states balance against only those states that are both powerful and revisionist (or "threatening") permits this school of thought to include theories of power preponderance, which allows for the existence of a hegemonic leading state far more powerful than any other in the system—a role many have ascribed to the United States during the post-Cold War era. Theories that distinguish states on the basis of how threatening they appear to be also raise questions about what makes a state threatening to others, which in turn has opened doors to variations on realism that involve perceptions—internal, political, and economic factors—and other complicating variables that more parsimonious structural realists like Kenneth Waltz reject as superfluous. But most realists—academics and policymakers alike—share Waltz's emphasis on rational calculations of the national interest rooted in power as a means of ensuring survival in a dangerous world.

Realists generally agree that states require arms and allies, that coercion and war are necessary methods of influence in international relations, and that states cannot rely on international law, international organizations, or human progress to ensure their survival. In theory and practice, realists maintain that preservation requires states to prepare for war.

Jonathan M. DiCicco

See also Alliances; Deterrence; Political Science and International Relations

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RECONSTRUCTION

Reconstruction was the extended process of returning the ex-Confederate states into the Union in the wake of the American Civil War. The Civil War lasted from 1861 to 1865, but the reconstruction of the South was already under way by 1863 as Union authorities considered the fate of the occupied portions of the Confederacy. Reconstruction formally concluded in 1877 with the removal of the last federal soldiers and the restoration of the Democratic Party's control in all of the former Confederate states. Key issues of Reconstruction included disagreements among Unionists regarding plans for the South, conflicts between Black and White Southerners' postwar expectations, and the political struggle of Republicans to build a party in the South and maintain their momentum in the North. The use or disuse of the U.S. military in resolving each of these challenges provoked considerable debate. This entry describes the development of Reconstruction during the Civil War, the shift from presidential reconstruction to congressional reconstruction, the rise of Southern Republican state governments, the return of Democratic control in the South, and the end of Reconstruction.

Wartime Reconstruction

In 1861, most Northerners and Southerners assumed that the Civil War would be a relatively brief affair, and few expected any radical social transformations. By 1863, however, "the Southern Question" and "the Negro Question" became pressing concerns. The Union Army occupied substantial portions of the Confederacy, thousands of Black Southerners pressed their claims to freedom by flocking to Union Army lines, and President Abraham Lincoln's January 1863 Emancipation Proclamation declared an end to slavery in areas still in rebellion. Lincoln's priorities included ending the increasingly bloody war, restoring the Union as quickly as possible, and gaining White support for emancipation. In December 1863, the president outlined a plan offering a full pardon and the restoration of property

to White Southerners who swore an oath of allegiance to the United States and its laws, including the Emancipation Proclamation. He also proposed the readmission of any seceding state if 10% of that state's prewar voting population took a loyalty oath and approved a new state constitution prohibiting slavery. For many Northern Republican congressmen, however, Lincoln's Ten Percent Plan appeared too lenient. In 1864, a Republican faction that became known as the Radicals passed the Wade-Davis Bill, which required 50% of a seceded state's White male citizens to pledge their loyalty before the state could draft a constitution and gain readmission to the Union. The Radicals hoped that these strict measures would delay the process of restoration of property to White Southerners who swore an oath of allegiance to the United States and its laws, guarantee Black equality, and provide a foundation for fundamental changes in Southern society. Lincoln feared that the bill would undermine any hope of building political influence among Southern Whites, and he refused to sign it, resulting in a pocket veto (under the U.S. Constitution, the president at the end of a congressional session can veto a law by not signing it, and he does not have to issue a formal veto message).

By the spring of 1865, the Confederate's military situation was desperate, the U.S. Congress had passed the Thirteenth Amendment to the Constitution abolishing slavery, and the amendment was well on its way to ratification by the states. However, there was little other consensus among Unionists regarding the course of Reconstruction, or even whether Congress or the president had ultimate authority over the process. Most Democrats and some conservative Republicans argued that secession was illegal and that there was no need to formally readmit the Confederate states since they never legally left. Conversely, moderate Republicans and Radicals asserted that the Confederate states forfeited their rights by seceding and legally should be treated as U.S. territories under the authority of Congress. Most moderate Republicans favored the extension of Black suffrage and civil rights as well as some limitations on ex-Confederate suffrage, while Radical Republicans additionally insisted on military oversight for ex-Confederate states. Some Black Southerners and Northern Radicals even favored redistribution of land from former Confederates to former slaves, a bold move with wartime precedent. In January 1865, General William T. Sherman issued



Photomontage of members of the first South Carolina legislature following the Civil War, mounted on card with each member identified.

Source: Mercer Brown. Courtesy of the Library of Congress.

Special Field Order 15 offering plots of abandoned farmland in portions of South Carolina and Georgia and the use of government mules to former slaves.

Ultimately, neither the Union military nor Congress endorsed the wholesale confiscation and redistribution of Southern property, but the

government took unprecedented actions to respond to the war's devastating and dislocating effects on Southern society. In March 1865, Congress established within the War Department the Bureau of Refugees, Freedmen, and Abandoned Lands—popularly known as the Freedmen's Bureau—to aid destitute White and Black Southerners. Congress initially mandated the Freedmen's Bureau to operate until the end of the war and for a year thereafter, but the agency was renewed in 1866 and was not discontinued until 1872. Agency officials provided food and clothing, supported Black schools, and investigated and tried cases of physical abuse. The Freedmen's Bureau also oversaw labor contracts between planters and former slaves in an attempt to forge economic stability in the postemancipation South. The agency provided some degree of physical relief, justice, and order to a turbulent situation, but it also drew criticism from all sides. Former masters sometimes resented the agency's interference in local affairs and accused agents of coddling freed people. On the other hand, Black Southerners sometimes accused the government of valuing stability over equality or justice, and their hopes for a broader redistribution of property remained unfulfilled.

From Presidential to Congressional Reconstruction

Two developments in April 1865 quickly lent the questions of Reconstruction renewed urgency: (1) the primary Confederate armies surrendered, effectively bringing an end to the war and (2) Lincoln was assassinated, elevating Tennessee Unionist Andrew Johnson to the presidency. Johnson had long been an outspoken foe of Southern planters, and many Radicals thought of Johnson as an ally in their plans for Reconstruction. But in the spring of 1865, Johnson asserted executive control over Reconstruction, issued widespread pardons to Confederate officials, and proposed to quickly reconstitute Southern state governments without requirements for Black voting or civil rights as long as the states recognized emancipation. Johnson hoped that such measures could forge a coalition of Northern Democrats, conservative Republicans, and Southern Unionists to shape postwar politics. Most Southern states accepted Johnson's lenient terms, but they also sought considerable continuity with past patterns as they rebuilt their state governments. In late 1865,

Southerners elected prominent ex-Confederates to Congress and enacted Black Codes to control many aspects of the newly freed peoples' lives, including restricting the movement of Black workers, outlawing gun ownership, and instituting apprenticeships for Black children. From the perspective of Black Southerners, such postwar developments looked far too similar to the conditions of the preemancipation South. In 1866, White rioters in Memphis and New Orleans unleashed appalling violence on Blacks who dared to challenge White authority.

The apparent intransigence of the ex-Confederates outraged many moderate Republicans and Radicals, and about a year after the war had ended, Congress launched a more aggressive campaign of Reconstruction. Congress countered the Black Codes by passing the Civil Rights Act of 1866 to specify protections guaranteed to a national citizenship. Johnson vetoed the act, but Congress overrode the veto and incorporated elements of the civil rights law into a constitutional amendment. Congress passed this as the Fourteenth Amendment in 1866, and it was ratified in 1868. Radicals' conflicts with President Johnson intensified in March 1867 when Congress enacted a series of Military Reconstruction Acts over Johnson's vetoes. The acts divided the ex-Confederate states (excluding Tennessee) into five military districts with the objectives of guaranteeing Black Southerners' voting rights, establishing Republican regimes to create and enforce new state constitutions, and maintaining Republican control of Congress. In each military district, Union generals were given authority to hold elections and rule on voter eligibility. Radicals also passed the Tenure of Office Act to prevent the president from removing officeholders without the Senate's consent. Johnson argued that Congress had overstepped its authority, and in 1868, he deliberately violated the Tenure of Office Act by removing the Radical secretary of war, Edwin M. Stanton. The House of Representatives responded by impeaching Johnson. Ultimately, the Senate fell one vote short of the two-thirds majority needed to convict Johnson, but control over Reconstruction had shifted decisively to Congress. In the 1868 presidential race, the incumbent Johnson could not even secure the Democratic Party's nomination, and the Union war hero and moderate Republican, General Ulysses S. Grant, won the election. Large Republican majorities in both houses of Congress allowed Radicals to further advance their

agenda in February 1869 by passing the Fifteenth Amendment, guaranteeing voting rights regardless of race “or previous condition of servitude.”

The Rise of Southern Republican State Governments

Under the protection of the U.S. military, between 1867 and 1870, Republicans gained control of Southern state governments, created new state constitutions, and gained readmission to the Union. The new constitutions included a variety of reforms, including provisions for public education, universal manhood suffrage, and protection of civil rights. The new Republican state governments depended on the support of a coalition of Black Southerners with native White Southerners and a small contingent of transplanted Northerners. White Republicans, derisively known as “scalawags” and “carpetbaggers” by their opponents, dominated much of the Southern Republican leadership, but African Americans constituted the largest part of the party. In South Carolina, Mississippi, and Louisiana, Blacks were an outright majority of eligible voters, and the formation of Union Leagues to mobilize Black voters became key to establishing and maintaining Republican governments. Black Southerners also aspired to hold office, and between 1867 and 1877, more than 600 African Americans served in state legislatures. Under Republican leadership, state governments were far more active than prewar governments. The states sponsored railroad development and constructed schools and hospitals. Black and White Southerners alike were given unprecedented access to medical care, legal counsel, and debt relief.

The state Republican governments provided objective improvements to the quality of life in the South, but some policies provoked resentment. The expansion of government services was expensive and resulted in significantly higher state taxes. Although corruption and waste were a part of Southern politics, both before and after Reconstruction, many White Southerners viewed the dramatic increase of revenue under the postwar Republican regimes as evidence of large-scale public graft. Racism also undermined Republican rule. Many Whites were offended by the extension of Black political and civil rights, and Democratic appeals to White solidarity were reinforced by violence targeting Black

Southerners and their White supporters. Southern Republicans themselves were divided by racial issues with some Whites hesitant to grant leadership and office holding to Blacks, and some Blacks questioning whether they should commit to such reluctant White allies. As a consequence, Republican dominance was relatively short-lived in parts of the South, with Democrats regaining control of Tennessee and Virginia in 1869, North Carolina in 1870, and Georgia in 1871.

The Return of Democratic Control in the South

The campaign of “Redemption,” as Democrats called their return to power in Southern states, frequently exploded into violence as White vigilantes across the South employed terror to intimidate White and Black Republicans. Under the leadership of the famed cavalry general Nathan Bedford Forrest and other ex-Confederates, the Ku Klux Klan became virtually a paramilitary auxiliary of the Democratic Party. Republican political leaders, the Union Leagues, and new institutional symbols of Black assertiveness, such as Black churches and Black schools, were primary targets of “KuKluxism,” as violence from a variety of groups became known. Protecting freed people and the young Southern Republican organizations soon became a major challenge. Black and White army veterans provided leadership for Union Leagues, which often assumed a paramilitary character to counter the Klan violence. But Republican leaders recognized the need for more formal institutions to keep the peace. Republican governors occasionally mustered state militias to meet these threats, but such bodies were not always properly equipped for counterinsurgency operations, and maintenance costs further strained state budgets.

Southern Republicans sometimes sought federal aid, and the national government responded with a variety of measures. The Enforcement Act of 1870 and the Ku Klux Klan Act of 1871 permitted the federal government to intervene more aggressively and deploy military forces to protect citizens’ political and civil rights. The mobilization of federal military resources and authority to support Southern Republicans faced its own problems, however. Although constituents sometimes begged for protection against imminent violence, Southern Republican

leaders were often cautious about soliciting outside support. Federal intervention might prop up a regime, but state leaders recognized that the presence of a standing army could also undermine their legitimacy and the long-term prospects for building the Republican Party in the South. For their part, Union officers sometimes faced complicated questions of jurisdiction and were typically reluctant to overreach their authority. Federal garrisons tended to be spread relatively thin and sometimes lacked the mobility necessary to effectively counter guerrilla violence.

Furthermore, Northern interest in and commitment to Reconstruction waned by the 1870s. The Freedmen's Bureau from its start was conceived as a temporary agency; in 1869, Congress reduced its

role to supporting education and distributing payments to veterans, and in 1872, Congress discontinued the agency altogether. Meanwhile, in the late 1860s, the national economy boomed. Much wealth was poured into development of the western United States, where conflicts with Indians also seemed to demand military attention. Many Republicans poured political support and personal investment into the development of railroads, mining, oil drilling, and manufacturing. While the economic boom led to great wealth, it also produced spectacular scandals as congressmen and federal officials at a variety of levels, including Grant's vice president, were implicated in schemes such as manipulation of the stock market and exchanging government favors



President Ulysses S. Grant signing the Ku-Klux Force Bill in the president's room with Secretary Robeson and General Porter, at the Capitol, April 20, 1871.

Source: Illustration from Frank Leslie's *Illustrated Newspaper* (1871, May 13). Courtesy of the Library of Congress.

for stocks. Corruption was rife among Democrats as well, with “Boss” William M. Tweed’s political machine in New York City grafting an estimated \$100 million of public funds. In light of such revelations, many grew increasingly skeptical of politicians and the extensive taxes and spending of Reconstruction era governments.

During the 1872 presidential election, in an ominous development for the Radical program, a group calling themselves Liberal Republicans abandoned Grant and joined forces with Democrats to nominate Horace Greeley on a platform of civil service reform, smaller government, and “home rule” or decreased federal interference in the South. Grant won reelection, but over the next several years, continued charges of corruption against the secretary of war, Grant’s own private secretary, and other officials further eroded Northern support for Reconstruction. In 1873, a financial panic plunged the economy into a severe economic depression. For many Northerners, the “Southern Question” receded in significance as Americans endured the worst contraction the U.S. economy had ever suffered for the next 5 years. During this period, White Southern Democrats became more openly violent against Black voters, leading many Blacks to avoid the polls. Although the Fifteenth Amendment and congressional measures provided a legal basis for the prosecution of such outrages, many Northerners despaired of reforming Southern society in light of the seeming lack of progress—and indeed deterioration—of race relations over the years of Reconstruction occupation. A series of U.S. Supreme Court rulings in 1873 and 1876 further undermined federal control over Reconstruction by restricting congressional regulation and federal enforcement of citizenship rights and returning these matters to the states’ jurisdiction. Northerners increasingly ignored the violent intimidation of Black Southerners, and between 1873 and 1876, Democrats regained control of Texas, Arkansas, Alabama, and Mississippi.

The End of Reconstruction

Events of the presidential election of 1876 led to the end of Reconstruction. The Democratic candidate, Samuel J. Tilden of New York, won the popular vote, but fraud and violence against Black voters led to disputed results in Florida, Louisiana, and South

Carolina—the last three Republican-controlled Southern states. Without these states, Tilden stalled one electoral vote short of the majority required for victory. In early 1877, Congress established an Electoral Commission to resolve the crisis. In a strictly partisan vote, the commission awarded the presidency to the Republican candidate, Rutherford B. Hayes of Ohio. Democrats were outraged, but Hayes and the Republican Congress assuaged them by offering increased federal support for Southern internal improvements and a return to “home rule” through federal noninterference and the removal of the last federal troops from the South.

By the end of 1877, Democrats “redeemed” the last Southern state governments. Union victory in the Civil War had decisively ended slavery and defeated the Confederacy’s bid for independence. However, ex-Confederates largely won the long Reconstruction struggle over the terms of reunion and the fate of Black Southerners. The scale of government and military intervention in the aftermath of the war was unprecedented, but the compromises of 1877 completed a retreat from Reconstruction and set the tone for the following decades of a relatively limited national government. The federal government would never again so forcefully assert Black civil or political rights until the Civil Rights Movement of the mid-20th century, when American leaders again deemed military presence necessary to support reform in Southern society.

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See also African Americans; Civil Disorder; Civil War, American; Civil-Military Relations; Occupations; Posse Comitatus Act

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RECREATION

Military commanders throughout history have known that soldiers' morale directly affects their performance on the battlefield. Until the 20th century, however, matters of morale focused on the immediate necessities of food, clothing, and equipment. Civilians who volunteered or sold necessary provisions supplemented the work of the Quartermaster Corps and, beginning in the late 1800s, Post Exchanges. The military did not provide organized recreation activities but left soldiers to devise their own entertainment. With time, the military broadened its focus on morale and began to consider organized recreation an essential part of maintaining soldiers' welfare. Recreation served the important functions of creating diversions from boredom and illicit behaviors, improving the quality of soldiers' daily experiences, and preserving a sense of normality and domestic relationships within the military and wartime environments. The particular form of recreation activities has varied with time and location and has evolved with the changing makeup of the military itself. This entry discusses the history of recreation programs and the types of activities available for service members in the U.S. military.

World War I Programs: Reminders of Home

World War I first prompted the military to devote considerable attention and resources to recreation activities for soldiers and sailors. On the eve of U.S. entry into the war, many Americans believed that

military camps posed serious moral and physical threats to young men. Removed from their familiar and familial environments and situated in a military culture that emphasized virility, many young men spent their off-duty hours in brothels and saloons. As large numbers of soldiers subsequently found themselves stricken with venereal disease and unable to perform their duties, military officials began to reconsider the advisability of these leisurely activities. Planning for war in Europe, they wanted to avoid a similar situation and determined that recreation programs would provide an essential diversion for soldiers stationed in training camps and overseas locations. Coupled with the efforts of Progressive Era social and religious reformers, the military provided formal recreation programs for soldiers both in the United States and throughout European battlefields.

Less than 2 weeks after entering the war, the secretary of war created the Commission on Training Camp Activities to meld the efforts of several existing associations: the Young Men's Christian Association (YMCA), the Young Women's Christian Association, the Knights of Columbus, the National Jewish Welfare Board, the American Library Association, the War Camp Community Service, and the Salvation Army. Formed with the primary goal of providing recreation to prevent soldiers from soliciting prostitutes, drinking alcohol, and gambling, the Commission on Training Camp Activities also sought to use the military to make good citizens of those who came out of their wartime experiences as healthy, moral, and educated men. Thus, the Commission on Training Camp Activities sought to repress illicit activities through the use of social hygiene education and the monitoring of camp communities, even as it provided wholesome alternative activities such as athletic and musical events, plays and films, dances and educational materials. The American Library Association complemented these activities by providing and supplying libraries within the training camps and later shipping books to soldiers at war.

Outside the training camp, the War Camp Community Service organized recreation for soldiers on leave in nearby communities, while the Young Women's Christian Association built Hostess Houses near camps where soldiers could spend time with their wives and families. The Red Cross provided similar services for soldiers in military camps and

along transit lines. Female volunteers also provided recreation services for patients in military hospitals and became known as “gray ladies” in a nod to their distinctive uniforms. The YMCA provided the majority of recreational facilities for the American Expeditionary Forces and operated the military’s Post Exchanges, ultimately erecting more than 4,000 huts and canteens across Europe. The YMCA also operated Leave Areas throughout Europe where soldiers could find comfortable lodging and entertainment in relaxing environments. The Knights of Columbus, the National Jewish Welfare Board, and the Salvation Army supplemented the YMCA huts with similar clubs of their own. Military and organization officials believed these recreation programs to be vital to the soldiers’ well-being, but they also believed that soldiers needed to be around the American women who served the food, fried the donuts, and danced with homesick men. Officials argued that women would remind men of their mothers and sisters, and it would inspire the men to wholesome behavior. Whether the women produced good behavior or not, the military relied on their services throughout the century.

World War II: The United Service Organizations and the Red Cross

The unprecedented military call-up of World War II demanded a more comprehensive and streamlined recreation program. What had previously been called the army’s Morale Division became known as the Special Services Division in 1942. Responsible for recreation, the Post Exchanges, and the Soldier Show, Special Services personnel were trained in the work of developing entertainment, athletics, and crafts for soldiers. These officers organized activities on bases and coordinated with the United Service Organizations (USO) to provide an extensive recreation program for soldiers stationed in the United States and around the world.

Formed in 1941, the USO concentrated the support of several civilian agencies into a single entity. Joining the efforts of the YMCA, the Young Women’s Christian Association, the National Catholic Community Services, the National Jewish Welfare Board, the Salvation Army, and the National Travelers Aid Association, the USO sponsored more than 3,000 clubs for soldiers and sailors within the United States. USO clubs offered free

coffee and doughnuts, a place to write home or see a movie, and—most popularly—a place to dance with young women. Thousands of women, all of whom had been screened by local committees, sought to demonstrate their commitment to the war effort and the military by volunteering their time in clubs. Although some USO clubs were racially integrated, most were racially segregated. Women in uniform also often found the clubs unsettling as most activities paired the female volunteers with male soldiers and designed few activities for military women. Additionally, USO Camp Shows, Inc. dispatched groups of performers to camps and clubs across the country to perform variety shows and plays. Soldiers and sailors in New York City could find entertainment at the famous Stage Door Canteen, a Broadway club run by the American Theater Wing, that offered dancing, entertainment, refreshments, and the frequent sight of a celebrity. The club became so popular that others opened in major U.S. cities, as well as in London and in Paris. The Red Cross provided recreation activities and entertainment for hospital patients as it had done in World War I.

Soldiers and sailors stationed throughout the various wartime theaters enjoyed recreation provided by the armed forces, the Red Cross, and the USO. The Army Special Services opened Service Clubs and operated Soldier Shows and Jeep Shows in which soldiers performed variety shows, plays, and musical acts in clubs and combat areas. The Red Cross organized nearly 2,000 clubs for military personnel around the world, while USO Camp Shows, Inc. brought world-famous celebrities such as Bob Hope, Marlene Dietrich, Laurel and Hardy, and Lucille Ball to entertain the troops. Red Cross Service Clubs, Fleet Clubs, and Aeroclubs could be found in all theaters, in large cities, remote villages, and even in “Donut Dugouts” near the front lines. All clubs provided athletic equipment, refreshments, and American women to talk with, while large facilities offered overnight accommodations. The Red Cross also ran rest homes for soldiers and sailors on leave. In 1942, in an effort to reach troops who could not travel to Service Clubs, the Red Cross began its Clubmobile program. Traveling on converted trucks and buses, women traveled across England and continental Europe to bring coffee, donuts, and newspapers to soldiers. Some Clubmobiles also had phonographs that provided music for impromptu dances.

The Korean and Vietnam Wars: Service Clubs and Touring Shows

Although the USO disbanded after World War II, the beginning of hostilities in Korea revived its efforts, and the organization again sent popular entertainers to put on shows for American troops. Likewise, the Red Cross revived its club program, renaming it the Supplemental Recreational Activities Overseas program, which was open to all UN personnel. The women who operated clubs also traveled in jeeps to take their refreshments and audience participation games to troops stationed far from the clubs. The military operated its own Service Clubs, staffed by civilian women.

During the Vietnam War, the military, the Red Cross, and the USO combined their services again to provide recreation for soldiers. Army Special Services opened 52 clubs that employed civilian women to coordinate recreation programs for all American military personnel in the country. Service Clubs featured stages for shows and performances, auditoriums, libraries, weight rooms, and sitting areas. Special Services personnel ran movies, scheduled game tournaments, and hosted themed and holiday parties. Additionally, personnel coordinated shows performed by local entertainers, USO troupes, and Command Military Touring Shows of talented soldiers selected for temporary duty to travel and perform for their fellow soldiers. The Red Cross resurrected the Supplemental Recreational Activities Overseas program and sent 627 "Donut Dollies" to operate 20 recreation centers on large military bases where soldiers could find free snacks, games, and conversation. To reach troops in the field, the women took their board games and refreshments on jeeps and helicopters to remote firebases and landing zones. Troops could also find a place to relax at several USO clubs across Vietnam and in Thailand, as well as in major U.S. airports. The USO continued its history of sending both famous and unknown entertainment groups to entertain soldiers. Bob Hope continued his tours and was joined by several Miss America pageant winners, National Football League players, and other entertainers, as well as many amateur groups.

Programs for Families and Deployed Troops in the Modern Era

The post-Vietnam War years witnessed many changes in recreation programs. As the all-volunteer

military integrated an unprecedented number of women into the forces, recreation programs that had relied on women to entertain a military of mostly single men prompted more criticism than they had in the past. Army Recreation Centers, for example, began to hire men to run programs that paid increasing attention to the needs of female personnel. Additionally, as a greater proportion of military personnel had families, the armed forces began to consider the morale of military families to be as important as the morale of individual soldiers and sailors. Each of the services' recreation programs currently provides athletic programs and entertainment for soldiers stationed in the United States and deployed around the world, in addition to services such as child care, Family Readiness Groups, and youth recreation programs.

Much of the military's stateside recreation is focused on family entertainment. Armed Forces Recreation Center Resorts at Walt Disney World in Hawaii, Germany, Korea, and Virginia Beach allow military families to find entertainment outside the base. Military personnel can also find discounted rates for travel and various events through Information, Tickets and Tours offices, as well as through several private companies. Sesame Street has even partnered with the military to provide its Talk, Listen, Connect program designed to help children who have a parent deployed. Additionally, the military continues to rely on its own personnel for entertainment. The Army's Soldier Show and the Air Force's Tops in Blue feature amateur soldiers in traveling musical variety shows, while the Army's USA EXPRESS is a touring band of soldiers that performs a variety of musical genres. Military personnel and families also enjoy the Army Concert Tour, which brings famous musicians to military installations around the country.

Personnel stationed in warzones continue to enjoy entertainment programs like their predecessors did, in addition to modern conveniences and services. While the accessibility of e-mail and Skype and the convenience of portable DVD players and iPods have somewhat lessened the demand for the audience participation games and sing-alongs of previous wars, the military and the USO continue to provide entertaining programs for soldiers and sailors. The USO provides more than 1,200 shows annually, although since the early 1980s, USO shows have featured only celebrity entertainers. In recent

years, the Dallas Cowboy Cheerleaders, the comedians Robin Williams and Stephen Colbert, and the country singer Toby Keith, among many others, have traveled to Afghanistan and Iraq. The USO also operates more than 100 centers on bases and in warzones throughout the Middle East, and it continues to staff welcome centers in major American airports for armed forces personnel in transit. The organization also provides care packages, holiday packages, prepaid international phone cards, and deployment support kits to deployed troops and their families. The USO in a Box, USO2GO, and Mobile Entertainment Gaming System programs reach troops without access to recreation centers by shipping the popular features of a USO club—laptops with Internet access, video games, and televisions—to soldiers at remote locations.

The military also devotes considerable energy to providing recreation options for its deployed troops. Soldiers stationed in Somalia, Saudi Arabia, Iraq, and other locations in the early 1990s could visit recreation areas and beaches managed by the armed forces during their time off duty. The Army and Air Force Exchange Service, the Navy Exchange, the Marine Corps Exchange, and the Coast Guard Exchange also service soldiers both at home and in deployment. These contemporary PXes (Post Exchanges) provide necessities and other merchandise, operate popular fast-food restaurants and movie theaters, and occasionally dispatch trucks to troops at remote outposts. All profits are in turn invested in recreation and morale programs.

Kara Dixon Vuic

See also Armed Forces Radio and Television Service; Bands and Music; Chaplains; Family, Military; Leaves and Furloughs; Morale; Red Cross, International Committee of; Sexually Transmitted Diseases

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RECRUITING ON COLLEGE CAMPUSES

There is considerable controversy about the presence of the Reserve Officers' Training Corps (ROTC) on college campuses. The periodic visits of military recruiters who seek to interest students in entering other officer commissioning programs after they graduate have also been controversial. These periodic visits are episodic and do not involve a permanent presence. In general, those opposed to them cite grounds identical to those used in opposition to the ROTC. This entry discusses the history of military recruitment on college campuses and looks at opposition to the presence of recruiters.

Opposition to military recruiting on campus has, in recent years, usually been framed in relationship to the recently repealed statutory ban on open and admitted homosexuals serving in the military. This was known colloquially as the Department of Defense's "Don't Ask, Don't Tell" (DADT) policy. People opposed to DADT argued that allowing a military presence on campus endorsed discrimination against gay men and lesbians, which they regarded as morally (and, from some perspectives, legally) unacceptable. In addition, numerous colleges and universities have had for some time policies that specifically bar any discrimination based on sexual orientation or preference. However, legislation enacted in early 2011 repealed the "gay ban," effective September 20, 2011, and, as will be noted below, several universities have already begun to reestablish ROTC units on their campuses. Opposition to ROTC on campus, though, is much broader, and of much longer standing, than that related to DADT. Even though its intensity and relevance to policy has varied greatly over time, such opposition has existed ever since ROTC was first formally established by Congress in legislation enacted in 1916 and 1920.

Although figures vary from year to year, over the past two decades the ROTC has been the source for the majority of newly commissioned U.S. Army officers and the single biggest source for new U.S.

Air Force officers. It is also a major source for the Marine Corps and the U.S. Navy (the latter two services rely much more on postcollege commissioning programs). In 2010, there were approximately 475 ROTC units of all three services (the Marine Corps does not have a separate ROTC program; Navy ROTC has a Marine option). There were roughly another 2,400 arrangements whereby other colleges and universities sent students to these units even though they did not have ROTC on their own campuses. (Many institutions host units from, or have arrangements with, more than one service, so these figures overlap immensely in terms of the number of institutions involved.)

Military training on American college campuses dates back to the Morrill Act of 1862, which authorized the establishment of land grant colleges and mandated that one of the subjects of instruction be “military tactics.” From 1862 through 1916, however, military instruction in colleges and universities was haphazard and spotty. The National Defense Acts of 1916 and 1920 established a basic framework for ROTC in both public and private institutions of higher learning, which remains today. Since then, two major structural modifications have occurred in the program. First, compulsory ROTC participation during the first 2 years of college (all involuntary ROTC service was in Army ROTC) was phased out at virtually all state institutions by the mid-1970s. Private institutions had never had ROTC attendance mandated by law. Second, scholarships for ROTC students, for which they incur a longer active-duty service obligation, were authorized by law for the navy in 1946 and for the army and the air force in 1964.

Organized opposition to a military presence on college campuses can be traced back to the 1920s and the aftermath of World War I, and it persisted throughout the interwar era. It was based on general pacifism, often but not always with religious motivations. In some cases, antiwar and antimilitary groups had a goal, which may or may not have been intermediate in nature, of eliminating only compulsory ROTC, without denying it to students who wanted it. World War II, its aftermath, and the early Cold War tended to dampen anti-ROTC pressures, but by the late 1950s, they were rising again, and reached a crescendo during the Vietnam War years. One result was that ROTC enrollment dropped dramatically from more than 300,000 in

1961 to about 60,000 in 1973, although much of the drop was due to the end of compulsory Army ROTC. Current (2010) enrollment remains at about 60,000.

In general, anti-ROTC views, since the late 1950s, have derived from two separate attitudinal tracks. First is the traditional one of opposition to military institutions and war, sometimes across the board, sometimes in relationship to current U.S. foreign and defense policy. Second is a belief among university faculty and staff that ROTC courses and activities are not academically rigorous enough to warrant inclusion in the curriculum, and that ROTC officer instructors do not have the requisite academic credentials to be granted any or all faculty privileges. Another source of opposition, melding these two, is that the military, being an allegedly authoritarian institution not devoted to free scholarly inquiry, is incompatible with the academy.

The specific DADT-based opposition to ROTC was a comparatively recent development, based on the broader national movement to accord full social and legal legitimacy to openly gay people. Some have suggested that ending DADT will greatly reduce anti-ROTC sentiment on college and university campuses. Faculty and administrators at some institutions that ended ROTC during the Vietnam War era have stated their willingness to reinstate it if DADT is repealed. More specifically, Harvard, Columbia, Yale, and Stanford Universities have reinstated ROTC programs (although Brown University has decided to continue its ROTC ban, apparently because transgender people are not allowed into the armed forces).

On the other hand, it has been argued that at least some anti-ROTC sentiment for the stated reason of opposition to DADT has been, in fact, a “smoke-screen.” Even if DADT is repealed, they assert, the generally antimilitary orientation of many college faculty and staff would frustrate attempts to bring it back, or continue to generate pressure to remove it where it already exists. It should also be noted that several public laws enacted since the mid-1990s require that colleges and universities that receive any federal funds provide the same access to military recruiting personnel, including ROTC, that is available to other prospective employers. There are strong indications that *student* anti-ROTC views are minimal, and that opposition to a military presence on campuses is very much a generational attitude

found primarily among older faculty who came of age during the Vietnam War era.

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See also Commissioned Officers; Conscientious Objection; “Don’t Ask, Don’t Tell”; Peace Movements; Recruitment, Officer; ROTC; Training, Army Officers; Training, Marine Corps Officers; Training, Naval Officers

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RECRUITMENT, ENLISTED

Enlisted recruitment involves attracting interest from qualified recruits and converting that interest into enlistment contracts and then actual accessions to the various military services at Military Entrance Processing Stations. The primary age demographic for enlisted recruitment is 18 to 24 years. The primary measure of enlisted recruitment quality is the Armed Forces Qualification Test. This entry outlines the various strategies utilized in enlisted recruitment, highlights the increasingly important role of advertising to enlisted recruitment, discusses the growing importance of women and minorities to enlisted

recruitment, and details the changes that have occurred to enlisted recruitment since the advent of the all-volunteer force (AVF).

Strategies

Military policymakers have multiple strategies available to them to accomplish enlisted recruitment. The main strategies for enlisted recruitment are utilizing recruiters, purchasing advertising, offering enlistment bonuses, and providing supplemental college benefits beyond those already provided by the Department of Defense. Of these strategies, the most effort and the largest expenditure involves utilizing recruiters.

The role of the recruiter in the recruitment process is especially important. The recruiter serves as the personification of military service. More specifically, the recruiter fulfills multiple functions that include advertiser, public relations specialist, guidance counselor, human resources expert, and mentor. The recruiter’s primary task is threefold. First, the recruiter must convert individuals with no particular commitment to the military, known as *leads*, into individuals agreeing to an appointment with the recruiter, known as *prospects*. This process of contacting leads is termed *prospecting* and is conducted either face-to-face or remotely through the use of telephone, texting, e-mail, or social media websites such as Facebook or Twitter. Second, the recruiter must convert prospects into applicants by securing an agreement to process for enlistment. This process is termed *interviewing* and involves discussing personal goals, offering career plans, and asking the prospect to enlist. Third, the recruiter must process the paperwork required for enlistment, ensure the eligibility of the applicant, and follow up to confirm completion of the enlisted recruitment process. In addition to these short-term tasks, the recruiter also pursues long-term missions. One example includes networking with community leaders at schools, businesses, religious institutions, and civic organizations to promote community awareness of the benefits of military service. Recruiters are structured around the recruiting center. Recruiting centers are arranged geographically across the country in local communities both large and small. Each military service has a recruiting command that executes the recruiting mission nationally. Recruiting battalions and companies execute the recruiting mission regionally. Recruiting

centers and the recruiters themselves execute the recruiting mission locally.

Following the role of the recruiter in the recruitment process, the next two largest areas of effort are (1) the purchase of advertising and (2) the offer of enlistment bonuses, which fluctuate in relative importance depending on circumstances. Recently, the relative importance of the purchase of advertising and of the offer of enlistment bonuses has been approximately equal. The least utilized enlisted recruitment strategy is the provision of supplemental college benefits. Individual military services use College Fund programs for supplemental education benefits. It is important to note that the Department of Defense offers separate college benefits such as the Montgomery G.I. Bill and the Post-9/11 G.I. Bill that are larger and more comprehensive than supplemental college benefits offered by the individual services.

All of the above enlisted recruitment strategies have limitations. For instance, increasing the number of recruiters requires a large increase in infrastructure and overhead because recruiters have a limited geographic area of operations. Purchasing advertising is increasingly expensive if an audience is to be targeted and calibrated effectively. Offering enlistment bonuses is costly because the government is required to pay the same enlistment bonus to every enlistee, not just to the enlistees who were convinced to join the military specifically because of the enlistment bonus. Other enlisted recruitment strategies have not been consistently pursued for various reasons. For example, increasing enlisted pay results in an increase in enlisted recruitment. However, it is costly because the government then is required to keep paying the resulting higher personnel costs every month, even after its recruiting goals have been adequately met. It is important to note that the use of enlistment bonuses has increased most of the enlisted recruitment strategies mentioned above, some fourfold over the past decade.

Advertising

The importance of advertising for enlisted recruitment has increased dramatically over the past decade. Recruiting advertising has both short- and long-term goals. The short-term goal of recruiting advertising is to produce enlistments. The long-term goal of recruiting advertising is to create brand

recognition for each military service in general or a particular branch of the military specifically. Expenditures on recruiting advertising have more than doubled in the past decade to more than \$600 million for all military services combined.

Over the past 50 years, mass media has changed dramatically. Youth spend a significantly larger proportion of their time watching cable television, exploring the Internet, and playing video games. These increases contrast with large decreases in the amount of time youth spend reading print literature, such as magazines and newspapers, and watching broadcast television. Marketing firms in general and military policymakers in charge of enlisted recruitment specifically understand these trends. Even though television continues to have the largest proportion of advertising, the specific categories on which advertisers focus most have shifted over time. For instance, advertising expenditures in broadcast television, magazines, and newspapers have all fallen significantly. Advertising expenditures in cable television and the Internet have risen in relatively inverse proportion.

As the various forms of media have proliferated and become more diffuse, targeting a particular audience has become more complex. For instance, successful advertisements must first reach a particular threshold level before they will capture the attention of the intended audience. However, advertisers must be careful, as saturation can be reached quickly. Saturation occurs when additional advertisements have no added value on the intended audience. Ideal advertising efficiency rests between the two extremes of threshold and saturation. Furthermore, venues such as cable television programming and Internet sites have become more specialized. Marketing efforts can potentially target a particular audience more directly and effectively today than in the past. However, the costs of doing so have increased significantly, and technological developments that provide consumers with more control over media have also made marketing more difficult. For instance, consumers with a digital video recorder have the ability to skip commercials completely if they so choose. Marketing has attempted to target these specialized audiences by focusing increasingly on Internet and cable television. This trend began in the mid-1990s and has extended more recently to sponsoring events such as the National Association for Stock Car Auto Racing (NASCAR), football games, and

mixed martial arts. This trend holds true for both the broader advertising market and the more specific enlisted recruitment advertising market.

Due to the diffusion of media, the costs of reaching an audience have increased dramatically. However, the general consensus is that purchasing advertising is still a cost-effective strategy for enlisted recruitment. All military services pursue it, albeit with different focuses among the various services. For instance, the army and the Marine Corps tend to focus on television advertising, while the air force and navy tend to focus on radio and magazine advertising. It is important to note that the approach of each service to advertising is interconnected with that of the other services. Interservice competition exists in which successful advertising for one service can directly hamper the advertising efforts of another service.

Women and Minorities

Women and minorities have played an integral role in the U.S. military throughout its history. However, both groups have faced tremendous obstacles to equal participation. The U.S. Navy was the first service to utilize women significantly, recruiting women in World War I. Most of these women served in the navy as clerical workers and nurses during the war, but they did remain after conflict ended. Moreover, Congress under the Naval Reserve Act of 1925 banned women from remaining in the naval services, except as nurses. Once again in World War II, women served in the armed forces, this time in larger numbers—280,000 according to some estimates. Even with these early starts, women consistently represented only a fraction of the total U.S. military, usually less than 2% prior to the introduction of the AVF. Since the advent of the AVF, and especially following Operation Desert Storm in 1990–1991, the percentage of women participating in the armed forces has grown dramatically, now representing almost 15% of the total force.

Minorities also participated in the U.S. armed forces throughout history, but they faced significant obstacles. President Harry S. Truman ordered the integration of the armed forces with Executive Order 9981 on July 26, 1948. Significant change proceeded slowly until real integration was achieved by the mid-1950s. When the draft came under increasing scrutiny in the late 1960s, some supporters of

the draft argued that an all-volunteer military would increasingly place the burden of military service on minority groups. As a result, the end of the draft and the start of the AVF made diversity a focal point of enlisted recruitment.

In 1974, Congress mandated the Department of Defense to report statistics detailing on an annual basis the diversity of the military. Multiple programs were established to promote diversity within the enlisted recruitment process. Most recently, the 2009 National Defense Authorization Act mandated the creation of the Military Leadership Diversity Commission. After 18 months of investigation and research, the commission released its report on March 7, 2011. The commission reported that the U.S. armed forces currently evidence low representation of minorities and women in senior military leadership positions. The commission recommended targeting enlisted recruitment specifically toward the goal of increasing representation from women and minorities to avoid the appearance of a lack of opportunity for women and minorities.

Changes

Enlisted recruitment has changed over time. The draft ended in 1973. It was replaced with the AVF. As a result, enlisted recruitment became directly linked to improving and marketing the benefits of enlisted service. These benefits included increased enlisted pay, medical and dental care, paid leave, job skills training, and increased college benefits. Enlisted recruitment also focused on touting other indirect benefits of enlisted service, such as job stability, job security, and advancement opportunity. It is important to note that in addition to direct benefits, the hierarchical organization of the military has helped enlisted recruitment. Many youth enlisted due to the fact that military promotion is based strictly on seniority and merit. Since no lateral promotions occur from outside organizations, as is common in other industries, recruits can be certain that they will be given a fair shot at promotion if they put in the requisite work. Providing, improving, and marketing the benefits drove enlisted recruitment from 1973 until 2001. With the terrorist attacks on America on September 11, 2001, there was an accompanying surge in American patriotism. The concept of defending America from attack led

to many enlistments. High-profile cases, such as National Football League star Pat Tillman forgoing a significant athletic contract to enlist in the army, made national news.

Even though the primary motivation for enlisting had shifted from benefits, the modest rise in enlisted recruitment initially after 9/11 was followed by a slow and steady decline. By 2005, enlisted recruitment was far below its goals. Most notably, in that year alone the army missed its quota by almost 7,000 recruits. With enlisted recruitment numbers declining, quality also declined as the result of increased reliance on enlistment waivers. Enlistment waivers provide exceptions to general standards of enlisted recruitment, and reliance on them generally signals lower standards.

Since 2005, there has been a notable shift in enlisted recruitment back to a focus on increased benefits. When these increased benefits combined with a widespread recession and record unemployment, the number of enlisted recruits increased dramatically. The increase in applications has also affected quality. With larger numbers of applications to choose from, enlisted recruiters needed to rely less on enlistment waivers for areas of disqualification such as Armed Forces Qualification Test scores, age, or prior criminal activity. The result is that the current quality of enlisted recruits has hit historic highs. Significantly, the current enlisted recruit tends to be younger, smarter, and more educated than enlisted recruits in the past and the American population as a whole. Overall, more than 3 million enlisted recruits have joined the military since 9/11. It is important to note that even with these large numbers of enlisted recruits, still less than 1% of the nation's population has deployed to Afghanistan and Iraq over the past decade. The result is a higher quality enlisted force that is increasingly a smaller percentage of the nation's overall population.

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See also Advertising, Military-Sponsored; All-Volunteer Force; Diversity; Internet; Women

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RECRUITMENT, OFFICER

Officer recruitment involves identifying qualified officer candidates, providing them with information about military service, convincing them of the rationales for becoming an officer, processing them through one of the available officer programs, and then commissioning them as officers. This entry includes a brief history of contemporary officer recruitment, discusses the role of advertising in officer recruitment, details the various officer programs, and highlights the growing importance of women and minorities to officer recruitment.

There are significant differences between officer recruitment and enlisted recruitment. The numerical requirements of enlisted recruitment are much larger than those of officer recruitment. However, officer recruitment demands higher standards due to increased responsibility. While enlisted recruitment focuses primarily on the tangible benefits of military service, officer recruitment focuses more heavily on the increased responsibility, leadership opportunities,

and character development associated with being an officer. Although increased responsibilities are compensated with higher pay, these intangible skill sets are the benefits most often highlighted during officer recruitment. There are also similarities between officer recruitment and enlisted recruitment. For instance, the role and importance of advertising to both is similar.

History

In 1969, the Gates Commission began studying the implications of ending the draft. Converting from the draft to volunteer military service fundamentally altered officer recruitment. Military policymakers had to develop the means to communicate effectively the benefits of voluntarily becoming an officer. Some critics at the time argued that it would either not be possible to maintain the appropriate numbers of officers required for national security or that the standards for becoming an officer would have to be lowered in return for achieving a sufficient number of officers. When the draft ended in 1973, the all-volunteer force (AVF) replaced it. Officer recruitment within the AVF involved pay raises aimed at making officer service more competitive with the prevailing civilian labor market for a college graduate. As a result, officer recruitment, measured both in numerical strength and in overall quality, became critical to ensuring the success of the AVF. The increased importance of officer recruitment also elevated advertising, market research, marketing, and public relations as necessary tools for successfully conducting officer recruitment.

The terrorist attacks on America on September 11, 2001, affected officer recruitment in a direct fashion. The ensuing U.S. military campaigns, first in Afghanistan and then in Iraq, demonstrated a higher likelihood of an increased number of deployments as well as longer individual deployments for officers. There was also a notable shift in the utilization of National Guard and Reserve units from exclusively homeland defense to repeated deployment worldwide, oftentimes in combat situations. All these factors presented unique obstacles to conducting officer recruitment successfully in the post-9/11 era. Beginning in 2008, the U.S. economic downturn offset some of these obstacles. A widespread recession and high levels of unemployment contributed to a more favorable officer-recruiting environment.

Many college graduates found the job stability, secure employment, and leadership opportunities of becoming a military officer an attractive option.

Advertising

One area where there is little distinction between officer recruitment and enlisted recruitment is advertising. In general, the role and importance of advertising to both is similar. The main distinction between the two regarding advertising is that the message differs. In enlisted recruitment, the message of advertising focuses on the tangible benefits of enlisted service, especially job skills, education benefits, and enlistment bonuses. In the case of officer recruitment, the message focuses on the leadership opportunities associated with becoming an officer and the usefulness of these skills in both the military and civilian sectors. However, this distinction is not always vivid. For example, the Marine Corps advertising message of “The Few. The Proud.” is utilized for both officer and enlisted recruitment, usually with only a slight variation in the visual packaging.

Advertising has become increasingly important to officer recruitment. On August 3, 2009, the U.S. Army launched the first officer-specific recruiting campaign. The army labeled this effort the Officership Campaign. The advertising effort of the campaign focused on accomplishing two objectives. First, the campaign sought to define for officer candidates exactly what it means to be an officer. The advertising effort characterized officers as leaders, mentors, problem solvers, and decision makers. A significant part of the campaign attempted to illustrate officer leadership with actual contemporary officers as examples. Second, the campaign sought to educate officer candidates on the multiple programs available to become an officer. The fundamental message was that there is a vast array of options from which officer candidates can choose, depending on their particular circumstances.

Officer Programs

There are four main officer programs. The largest officer program is the Reserve Officers’ Training Corps, also known as ROTC. This program annually produces approximately 45% of all officer commissions. ROTC has a long and storied history dating back to the early 20th century. It began with the National Defense Act of 1916. It has grown to

become a federal entity that offers multiple options for officer candidates. ROTC offers 2-, 3-, and 4-year programs as well as various scholarships that provide full funding for tuition, books, fees, and living expenses. ROTC combines a rigorous civilian education at institutions across the country with standardized military training both during the academic year and during the summer. ROTC units exist at more than 300 universities and colleges across the nation, with commissioning options in all five of the military services. Officer candidates successfully completing the ROTC program receive a college degree and an officer commission.

The second largest officer program involves the four federal service academies. These programs annually produce approximately 25% of all officer commissions. The four federal service academies are the U.S. Military Academy, the U.S. Naval Academy, the U.S. Coast Guard Academy, and the U.S. Air Force Academy. The U.S. Military Academy is located at West Point, New York. West Point was founded on March 16, 1802, commissions officers into the U.S. Army, and is the oldest service academy. The U.S. Naval Academy, located at Annapolis, Maryland, was founded on October 10, 1845, and commissions officers into both the U.S. Navy and the U.S. Marine Corps. The U.S. Coast Guard Academy, presently located at New London, Connecticut, was originally founded in 1876 aboard the schooner *Dobbin*, and it commissions officers into the U.S. Coast Guard. The U.S. Air Force Academy, located at Colorado Springs, Colorado, was founded on April 1, 1954, and commissions officers into the U.S. Air Force. At these four institutions, officer candidates earn an undergraduate degree within a comprehensive military environment. Officer candidates, referred to as either cadets or midshipmen, depending on the service, earn a bachelor of science degree in various fields and receive full room, board, tuition, medical, dental, and a modest monthly allowance. Admission to all four federal service academies is highly competitive and requires strong test scores, usually on the Scholastic Aptitude Test. The four federal service academies also require that officer candidates be young and unmarried. Three of the four federal service academies, the U.S. Coast Guard Academy being the one exception, have approximately 4,000 students with 1,000 officers commissioned annually and require a congressional nomination for admittance. The U.S. Coast Guard

Academy does not require a congressional nomination and is the smallest federal service academy, with approximately 1,000 total cadets. The four federal service academies combine an excellent tuition-free education with rigorous military training resulting in a college degree and an officer commission.

The third largest officer program is Officer Candidate School. It is important to note that the U.S. Air Force calls their program Officer Training School, or OTS. This program annually produces approximately 20% of all officer commissions. The officer candidates in this program are already college graduates but have no prior military training. Officer candidates in this program usually are older than typical officer candidates in ROTC and the four federal service academies. Both Officer Candidate School and Officer Training School are short-term programs, varying in length up to 20 weeks of intensive military training. Officer candidates receive an officer commission on completing the program.

The fourth and smallest officer program is the direct commission program. This program annually produces approximately 10% of all officer commissions. Officer candidates in the direct commission program are already college graduates and are trained specialists in a particular field. Examples of specialized fields include legal, medical, ministerial, and engineering. Officer candidates in the direct commission program receive an officer commission in the Judge Advocate General's Corps, the Medical Department, the Chaplain Corps, or the Corps of Engineers in one of the military services.

Women and Minorities

Since the creation of the AVF in 1973, officer recruitment of women and minorities has received increased attention. Some supporters of the draft argued that an all-volunteer military would increasingly place the burden of military service on minority groups. As a result, military policymakers began paying particular attention to tracking, analyzing, and promoting diversity within the military. Diversity became increasingly important for officer recruitment for two reasons. First, diversity became critical to ensure that military service within the all-volunteer system was egalitarian and representative. Second, diversity became critical to ensure that the military officer corps was representative of both the larger military enlisted population and

the American population as a whole. Achieving diversity along these two lines became increasingly important for officer recruitment. Successfully doing so would illustrate that there was significant opportunity for promotion within the U.S. military for all officer candidates, including women and minorities. In turn, success in this area would help strengthen future officer recruitment among women and minorities.

Military policymakers have made significant efforts to ensure that officer recruitment maintains diversity. On October 7, 1975, President Gerald R. Ford signed legislation allowing women to enter the four federal service academies. The first group of women graduated from the academies and received their commissions in 1980. Similar efforts occurred rapidly throughout the other officer programs. In fact, the number of women and minority officers has more than doubled since the advent of the AVE.

More recently, the 2009 National Defense Authorization Act established the Military Leadership Diversity Commission. Congress tasked the commission to evaluate the diversity of the U.S. military, specifically focusing on diversity within military leadership. After 18 months of intensive study, the commission released its report on March 7, 2011. The commission reported that even with significant progress on diversity in the military overall, there is less diversity in officer ranks, especially among the most senior officers known as general and flag officers. The commission's recommendations included ensuring that officer recruitment continues to focus on communicating to women and minorities the benefits and opportunities associated with becoming an officer.

William A. Taylor

See also Advertising, Military-Sponsored; All-Volunteer Force; Commissioned Officers; Internet; ROTC; U.S. Air Force Academy; U.S. Coast Guard Academy; U.S. Military Academy; U.S. Naval Academy

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RED CROSS, INTERNATIONAL COMMITTEE OF

The International Committee of the Red Cross (ICRC) is an international humanitarian agency located in Geneva, Switzerland. The ICRC has been awarded the Nobel Peace Prize three times, in 1917, 1944, and 1963. Its current president is Peter Maurer, and it is governed by four bodies—an Assembly, an Assembly Council, a six-member Directorate (headed by Yves Daccord, who serves as Director General), and the presidency. The ICRC is part of the International Red Cross and Red Crescent Movement, which itself contains the International Federation of the individual national branches of those organizations. While specific national organizations tend to deal with disaster relief efforts in their home countries, the ICRC is involved internationally in civilian and prisoner-of-war (POW) relief during times of war or unrest, and it aims to act as a neutral observer to ensure that all sides of a conflict maintain international standards of conduct. This entry discusses the humanitarian work and history of the ICRC and looks at current issues.

Background

In 1859, Henri Dunant, a Swiss Calvinist businessman and aid worker, witnessed more than 40,000 sick and wounded soldiers abandoned and lacking proper attention after a battle in Solferino, Italy, between the Austro-Hungarian Empire and the Franco-Sardinian alliance in the Second Italian War for Independence. Dunant self-published the book *A Memory of Solferino* in his native Switzerland in 1862; and the following year, Dunant and five other Swiss men created the International Committee for Relief to the Wounded. The first conference in 1863 selected the Red Cross as an international designation for battlefield aid workers. The formation of the organization came at a crucial time for humanitarian work—in 1864, the signing of the First Geneva Convention created some of the first legal protections for the sick and wounded in battle.

The First Geneva Convention was followed by a second in 1906 and a third in 1929, as well as the two Hague conventions in 1899 and 1907. The Geneva Convention of 1949 serves as the most current basis for the work of the organization under international law. Throughout the development of the current body of international humanitarian law, national Red Cross Societies began to develop in countries around the world, with the Red Crescent symbol used in the Ottoman Empire. Henri Dunant, by the turn of the 20th century living an impoverished life in rural Switzerland, received the first Nobel Peace Prize in 1901.

Clara Barton founded the American Red Cross in 1881 and played an instrumental role in securing U.S. ratification of the Geneva Convention of 1864. The American Red Cross is a constituent member of the International Federation of Red Cross and Red Crescent Societies. Although much of the American Red Cross's humanitarian work focuses on aiding the victims of natural disasters within the United States, this organization plays a crucial role in serving the needs of American servicemen and servicewomen, especially those held as POWs. During World War II, Red Cross packages sent to American POWs provided food and other supplies that proved vital to their survival.

History in the 20th Century

World War I would be the first major test of the Red Cross's humanitarian capabilities, bring-

ing unprecedented casualties and destruction to the European continent. The Red Cross operated a Prisoners of War Agency to maintain information on POWs for their families and established the precedent of Swiss delegates visiting and inspecting POW camps. The horrors caused by chemical weapons used during the First World War encouraged the group to lobby successfully for the permanent banning of all chemical weapons in 1925. The ICRC was also instrumental in the establishment of the Third Geneva Convention in 1929, which granted POWs humanitarian rights in international law. These new laws, particularly with regard to POWs, would enable the Red Cross to perform a great deal of relief work in the Second World War. The post-World War I era also saw a huge proliferation of national Red Cross movements throughout the world.

When World War II broke out, the ICRC again went into action. Despite the ICRC's successful work to alleviate and monitor the conditions of POWs in Nazi-occupied Europe, the organization's wartime aid to civilians was not as effective. While the Red Cross had assisted civilians as best as they could during World War I, two decades later there was still no international legal obligation to civilians affected by war. While the Red Cross lobbied to gain regular access to concentration camps, the German government consistently denied the request. The Swiss government, fearing retaliation from the Nazis, prevented the ICRC from publicly denouncing Nazi atrocities against civilians. Most important, the ICRC failed to make public reliable information on the Holocaust that was received in 1942, leading to major international criticism after the war and a definitive separation from the Swiss government from the governance of the ICRC.

After World War II, one of the major changes to be implemented in the 1949 update of the Geneva Conventions was the protection afforded to civilians. According to the new protocols, civilians would be granted the same international protections during wartime that were traditionally given to combatants and POWs. The ICRC was also given the responsibility of the International Tracing Service in the postwar era, which sought to reunite family members displaced by the war and persecution. The International Tracing Service still operates from an archival facility open to researchers in Germany and maintains records on displaced persons, forced laborers, and concentration camp inmates.

The ICRC's politically neutral stance would continue to serve both as a basis for its legitimacy and as a point of contention in disagreements with particular states. After some contention, the Red Cross successfully lobbied Washington to abide by the Geneva Conventions in Vietnam in the 1960s, and when the United States refused to grant Geneva protection to civilian prisoners several years later, the public disapproval was strong and widespread.

While not all governments would cooperate with the ICRC (notably demonstrated when the Nigerian government shot down a Red Cross plane in 1969 during that country's civil war), it was and remains generally politically wise for governments to cooperate with the Red Cross. During the Cold War era, however, many socialist and Third World governments refused the Red Cross presence, notably North Korea and North Vietnam.

Current Issues

The International Committee of the Red Cross struggles to maintain neutrality in humanitarian efforts in today's global climate, and even after the Cold War, the issue of the Red Cross as a symbol of Western ideals or individuals has been a stumbling block in some nations. One of the bigger challenges facing the ICRC today is the question of how to operate in the Islamic world. Because the ICRC's symbol is a cross, the question of ICRC neutrality is at the forefront of that discussion, given the current widespread Red Cross presence in Islamic countries. The ICRC has gone so far as to hold conferences in major Middle Eastern cities to campaign for the compatibility of international humanitarian law with traditional Islamic Sharia law. Aiding these efforts is the strong presence of Red Crescent societies throughout the Islamic world. First used in 1878 by the Ottoman Empire, there are now Red Crescent societies in every Islamic country. The condition for independent statehood to become a member of the International Federation of Red Cross and Red Crescent Societies was only lifted once, for Palestine in 2007.

Despite these issues, the ICRC currently maintains a strong global presence with more than 11,000 employees worldwide, and its neutral humanitarian aid has allowed the organization to work in situations such as the Israel-Palestine

conflict and in regions affected by the Global War on Terrorism. It is engaged in operations aiding refugees and civilians, promoting public health and clean water initiatives, and aiding economic development and security throughout the world. According to the ICRC, its 10 largest operations are in Pakistan, Afghanistan, Iraq, Somalia, the Sudan, the Democratic Republic of the Congo, Israel and the Occupied Territories, Colombia, Yemen, and Mali.

Conclusion

The ICRC maintains a strong presence in more than 80 countries, and it is a major current and historical source for not just humanitarian aid but also the codification and promulgation of international humanitarian law. The extent of the ICRC's aid programs worldwide proves the human value of an organization whose founding was dedicated to alleviating human suffering. The relationship of the ICRC to individual states in years to come will be determined by the ability of the Red Cross to maintain its neutrality as well as the willingness of individual states to cooperate with international law and humanitarian concern.

Hillary Jean Sebeny

See also Geneva Conventions; Hague Conventions; Laws of War; Prisoners of War

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REGIMENT

The term *regiment* was derived from 16th-century French and was utilized to describe a designated number of companies that varied in different armies and over time. A colonel usually commanded the unit. While historically regiments represented primary units of tactical and administrative organization consisting of three battalions and a regimental headquarters company, since the 1950s the status of regiments has been in flux, particularly in the U.S. military. This entry discusses the history of the regiment and the makeup of regiments in the U.S. Army.

The initial institution of the regiment developed at a time when the military institutions of Europe were changing from the medieval feudal model to the more modern bureaucratic model of military organization. By the 18th century, the term applied to a unit consisting of roughly 10 companies of infantry. Since the size of companies could vary between 80 and 100 men, a regiment was anywhere between 800 and 1,000 plus additional officers. Identification of regiments during the period is also difficult due to the fact that the terms *battalion* and *regiment* were often used interchangeably to describe European and North American military organizations. They were often identified by the region where they were recruited or by the name of their colonel as they were often considered his property. All of the preceding descriptors applied to the regiments that composed American armies from the American Revolution through the Mexican-American War.

American Civil War

In the U.S. Civil War, both the Union and the Confederacy raised numerous regiments that included roughly 1,000 men when they took the field. Combat casualties and sickness could quickly attrite these numbers down to as low as 400. In this conflict, the regiment was the essential tactical unit. At the time, the U.S. Army relied on a concept known as the expandable army, under which state units would be recruited to rapidly enlarge a very small peacetime force. In the North, this practice led to competing systems of the U.S. Army, USA, and U.S. Volunteers, USV. Both of these organizations supplied regiments to the Union Army. In the Confederacy, various states raised their own regiments, which were then

sent to join the larger field armies. On both sides, units were often designated by the state from whence they were recruited and a number. This practice, along with the expandable army concept, remained in place through the First World War.

World War I

Toward the end of the First World War, the Rainbow Division—so called because it drew from numerous states—was created as a means of creating a more unified national military force. Still, many regimental organizations remained intact. Likewise, the National Defense Act of 1920 greatly modernized the overall army organization. Still, the regiment remained a significant component, even though it was superseded by the division as the main tactical unit.

World War II

During World War II, U.S. infantry regiments were composed of three battalions each. The respective battalions were themselves made up of four companies. Three regiments, in turn, created a division, which contained 15,000 men. During this conflict, regiments were then designated solely by numbers.

Cold War and Beyond

In the aftermath of World War II, and paralleling the emergence of the Cold War, the U.S. Army arrived at an increasing awareness of the need to develop a more modern organizational framework. This need drove the developments of the Combat Arms Regimental System, which served as the means of assigning designations to units of the five combat arms between 1957 and 1981. These branches included Infantry, Field Artillery, Armor, Cavalry, and Air Defense Artillery. The U.S. Army Regiment and accompanying regimental system (also known as USARS) were established in 1981 to replace the Combat Arms Regimental System that existed throughout the Cold War.

The purpose behind the institution of the U.S. Army Regimental System was to provide each soldier with the opportunity for continuous identification with a single regiment. The regiment they would identify with was the one in which they would likely serve recurring assignments over the period of their enlistment. This was designed to boost unit

identification and belonging on the part of enlisted soldiers and to enhance the overall esprit de corps of the unit through the inculcation of their respective culture and traditions. As noted, this replaced the Combat Arms Regimental System, which was in use between 1957 and 1981.

Since its implementation in 1981, all active-duty soldiers have been required to affiliate with a specific regiment; regimental affiliation is based on the unit associated with soldiers' specialty. The affiliation begins on their arrival at their first assignment for both officers and enlisted personnel. The only exception is if the soldier should voluntarily select another regiment. Combat soldiers and enlisted personnel whose initial assignment is not to a regimental body may defer their selection until they are provided with such an assignment.

The combat arms included in the regimental system are the Air Defense Artillery, Armor, Aviation, Cavalry, Field Artillery, and Special Forces regiments. Inclusive of all the various subgroups under these general distinctions, the Army Regiment System boasted some 181 regiments of various sizes determined primarily by their specific missions within the context of the overall military organization.

Currently, the U.S. Army Regimental System is in the midst of a massive reform effort that will be completed in 2013. The purpose of these reforms is to create a more flexible and fluid organization capable of rapid and robust responses to the variety of military threats confronting the United States in the world at the present time.

A major component of the current reforms is the switch of basic maneuver units from divisions to brigades. When the reforms are complete, they will yield an increase in the number of combat brigades in the Regular Army from 33 to 48, with similar increases in National Guard and Reserve forces. Divisions will retain their various lineages, but headquarters' staff will be more interchangeable and able to command any brigade, not just those that carry their divisional lineage. How these changes will affect the regimental structure and lineage remains unclear at the current time.

Conclusion

Since the creation of the Continental Army, the regiment has served as a significant organizational component of the nation's fighting force. The U.S. Army

Regimental System provided the army with a great deal of flexibility in the period following the conclusion of the Cold War. Clearly, the new reforms currently under way underscore the necessity of further changes to respond to the current threat environment.

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See also Airborne Units; American Revolution; Army, Department of; Army, U.S.; Civil War, American; Combined Arms; Company; Infantry; Military Organization, Army; World War I; World War II

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RELIGION AND WAR

Attention to the relationship between religion and war has increased considerably since the end of the Cold War and the attacks on September 11, 2001. The precise nature of the relationship continues to be debated, yet in each case, they cannot be properly understood without reference to their object. Both religion and war are means to different ends, spiritual and political. The examples of the Crusades and the Jihad are frequently cited as self-evident examples that religious belief fosters adversarial attitudes leading invariably to violent conflict.

Before proceeding with an examination of the role of religion as a cause or cure for violence, it is necessary to establish that religion, as such, should not be understood as an unchanging or transhistorical phenomenon. To argue that religion causes war first assumes that religion can be understood as a stable feature throughout time, even when abstracted from its expressions in different creeds and societies. Such a view privileges a psychological understanding of religious belief that is unhelpfully narrow and fails to provide a credible explanation for the immediate causes of war, variants in religious doctrine, or

a faith's ability to hold sway over those engaging in war. As scripture scholars have noted, communities play active roles in sustaining and interpreting the meaning of sacred texts and beliefs for succeeding generations. This proviso calls into question the existence of an inherent inclination toward violence in religious belief, while acknowledging that religion has often been used to further the political goals of war by providing the veneer of moral loftiness. Instead, the connection between religious belief and the conduct of war is more often expressed in the development of laws governing war, and regrettably, by its occasional appropriation for purely propagandistic reasons. This entry examines this tangential relationship by looking at how different religions defined their theological positions on war, and how these developments have affected diplomacy and modern warfare.

War, What Is It Good For?

Carl von Clausewitz, one of the most influential war theorists, defined war as an extension of international politics. Clausewitz insisted that the political object is the primary concern of the overall military strategy, determining the appropriate force, targets, and point of resolution. Ordinarily, nations go to war when political purposes cannot be effectively achieved otherwise, and the war ends with a treaty that redefines the political relationship between those nations that is proportionate to the military advantage of one side over the other. When religious purposes adulterate the immediate political ends of war, the military objectives become less clear. If war derives its form from the policies it seeks to promote, and if religious objectives narrow the range of acceptable compromise, then the introduction of religious motivations would significantly impair the possibilities for peace and prolong conflict. Since religious goals are understood in spiritual, eternal, and often imperceptible terms, their intrusion into debates on war policy often leads to unforeseen consequences, such as neglect of the customary laws of war and difficulties limiting the proportionate use of force in war. Once the political center is lost, Clausewitz insisted, there is nothing to prevent conflicts from escalating into wars of annihilation. For these reasons, wars that employ religious propaganda tend to be more destructive and difficult to resolve.

Violence in Monotheistic Religions

Religion is purported to lead to conflict when the logic of an exclusive truth claim, held collectively by a religious community, encounters its contradiction in the doctrines of a rival community. The God of Moses proclaimed, "Do not follow other gods, the gods of the peoples around you; for the Lord your God, who is among you, is a jealous God" (Deuteronomy 6:14–15). The exclusive truth claims made by monotheistic religions seem to suggest that believers in a single God would be more inclined to make war than those belonging to nonmonotheistic religions. The argument is not uncommon. The historical examples of the destruction of Jericho by the Israelites and the early expansion of Islam and the Christian Crusades are often cited as wars inspired by a single, "jealous" God. What is often implied in the generic argument that religion breeds violence is the unspoken assumption that these religions are monotheistic and, as such, seek the suppression of rival faiths more so than polytheists or nontheists. Yet without reference to the content of different religious creeds, this claim has difficulty accounting for monotheistic religions that do not actively seek converts, as in Judaism, Orthodox Christianity, and the mystics of nearly all faiths. Furthermore, if the logic of monotheism compels believers to promote a universal deity, a God for believers and unbelievers alike, then it must also admit the many positive contributions implicit in the theology of a universal creator. The view that all peoples share a common destiny and dignity is uniquely supplied by the premises of monotheism. The answer to the question "Who is my neighbor?" Augustine (1998) explains, extends beyond those who hold the Christian faith:

Since we do not know the future we should regard everyone as our neighbor, not only because of the condition of human mortality, by which we arrive in this world to share the common lot, but also on account of our hope of that inheritance, for we do not know what someone who just now was nothing may turn out to be.

In Islam, the potential for conversion and the presence of a common destiny is expressed in the legal protections given to the ignorant, the *Jahiliyyah*, and the privileged place of other monotheists, the *al-Kitab*. Contrary to their psychosocial depiction as uncompromising zealots, monotheists are actually more

prone to engage in theological debate and dialogue than their coreligionists, often resulting in greater understanding and respect between rival faiths.

War in Christian Thought

The early Christians considered war to be the responsibility of the Roman Empire, which occupied nearly every context where wars were fought from Europe and Africa to the Middle East. The early Church Father Tertullian commented on war within the context of idolatry and forbade military service, citing Christ's admonition to Peter that those who live by the sword should die by it. Tertullian understood the Church as wholly separate from the political and territorial ambitions of the empire. "Shall he [the Christian soldier] carry a flag too, hostile to Christ?" (Tertullian Ante Nicene Father, Vol. 3, p. 100). For the early Christians, military service in the Roman Empire was the equivalent of serving

Caesar as a "second master," whose iconography, religious rites, and purposes were foreign to the spiritual aims of the persecuted Church.

As Christianity matured within the context of empire following its toleration in 313 CE, the attitude changed from political withdrawal to active engagement with the existing social order. Augustine of Hippo observed the merits of Roman philosophical and legal traditions to further the Christian cause, and his comments on just war represent the first attempt to express Christian doctrines into distinctly Roman formulations. Augustine transformed the classical understanding of statecraft to incorporate the Christian ideal of ordered tranquility, wherein personal sanctity could be preserved with greater ease. Augustine's *City of God*, written at the end of his life and the end of the empire, supplies one of the earliest Christian visions of a just and peaceful society on earth, and his just war theory should be viewed in that context. The Augustinian vision of society



The Battle of Ascalon during the First Crusade.

Source: Engraved by C. W. Sharpe in 1881. Courtesy of the Library of Congress.

replaces the vicious pursuit of glory with the happiness of ordered tranquility—a position he was forced to defend against accusations that it was antithetical to the success of the empire. The Augustinian position on just war, however, was not strictly defensive but would excuse wars if they furthered the cause of peace, as in the case of helping virtuous people overcome a tyrannical dictator (*City of God*, book iv, chap. 15). This early formulation of a humanitarian war, fought in the interest of the enemy, is morally incumbent on nations with the means to intervene, provided their intentions remain free of vice.

At the center of the Christian formulation of the just war is the alleviation of guilt due to killing in war. If wars were authorized by a legitimate authority, fought for a just cause with proportionate means, then guilt for the sin of murder would not be incurred. After the fall of the Roman Empire, Europe descended into a state of continuous warfare and political instability for centuries. In an effort to cope with this, the Church further regulated war and violence with respect to the individual conscience, a move that effectively distributed the blame for war to all of its participants. The chivalric codes forbid violence on church property and holy days and excommunicated princes who too readily disturbed the peace of Christian order. After William the Conqueror invaded England (1066) with papal permission, ecclesiastical canons prevented his men from entering a church until they had been absolved for shedding blood. These canons underscored the unavoidable evils associated with all wars and assumed that most wars were fought with impure intentions, even those fought under the papal flag.

These codes reveal the survival of conflicting Christian teachings regarding war. On the one hand, war is always an evil to be shunned, but so long as Christians live in a world where violence is unavoidable, they are obliged to temper it by insisting that wars are fought only to achieve peace and restore justice. The pacifist vein of Christian thought survives to the present in the numerous denominations that eschew all forms of violence and in the nearly unbroken run of papal condemnations of war over the past century. With the notable exceptions of the Second World War (1939–1945) and the War in Afghanistan (2001–), Christian churches have become increasingly critical of war over the past century, as the means of war became increasingly destructive.

Since the end of the Second World War, Christian just war theory has undergone a significant renaissance. The invention of nuclear weapons and the formation of permanent multinational organizations such as the United Nations and North Atlantic Treaty Organization introduced several new problems with prevailing definitions of proportionate force, legitimate authority, and just-cause conditions. The range of opinion on the War in Iraq (2003–2011) demonstrated a willingness to significantly revise the principles of just war theory by some to accommodate the possibility of “preventive” war. Despite the vocal efforts of the Catholic scholar George Weigel and others, the Catholic Church under John Paul II and Benedict XVI condemned the Anglo-American military intervention in Iraq in 2003, along with a majority of leaders from other Christian denominations. As an evolving tradition, just war theory remains committed to the principles introduced by its first Christian advocates: a commitment to evaluating the moral intentions of those seeking war and ensuring that the political objectives of war further the aims of an ordered peace.

War in the Islamic Tradition

As in the case of the just war tradition, Islamic commentaries on war must be selected from a variety of sources whose principal purpose is to promote religious, social, and political order. Since the majority of the military campaigns undertaken by the Prophet Mohammed occurred in the last 10 years of his life, after the initial Quranic revelations, the Quran provides an incomplete account of the Islamic doctrine on war. The tradition of sayings and deeds of the Prophet Mohammed in the Hadith correspond to and supplement the Quran’s teaching on jihad and appropriate conduct in war.

Jihad is a term that has entered into the common vocabulary of many non-Muslims without a high degree of understanding. It is commonly understood as “holy war,” or a religiously sanctioned offensive struggle for the purpose of conversion or subjection to the Islamic legal structures of sharia (“right path”) and *fiqh* (jurisprudence). The traditional usage of the term is more varied. Jihad literally means “struggle” or “a striving in the path of Allah.” The spiritual variation is most clearly developed in the Sufi tradition, where jihad is defined as

an interior struggle against the inordinate passions that would lead the soul away from the fulfillment of its religious duties in the Five Pillars and is often referred to as the “Greater Jihad.” The wars fought under the direction of the Prophet Mohammed after 622 CE began a period of expansion lasting several centuries. Many of these wars were considered offensive jihads insofar as they aided in the spread of the prophetic message of Islam throughout the Middle East, North Africa, and southern Europe. Jihad acts to reorient the otherwise strictly political objectives of war toward a supernatural end by incorporating the aims of war into the Greater Jihad that seeks to purify sin through moral action. In most cases, jihad works to place limits rather than grant license in the conduct of war by questioning the legitimacy of the cause for war and by ensuring that basic moral rules are followed. In contrast to conventional wars (*harb*), the jihad is an opportunity for religious honor and merit for those who fight and a source of shame for men who do not. For this reason, the jihad must follow the precepts of the Islamic moral law to avoid becoming a source of corruption and hypocrisy. Wars must end once the enemy or infidel makes an overture for peace, agrees to convert, or accepts payment of the *jizya*—a tax paid by non-Muslims living under Islamic rule in exchange for protection and certain legal rights. The *jizya* was not unlike the feudal tax system implemented in Europe and the Byzantine Empire in the same period and demonstrates a willingness on the part of the *mujahideen* (those who fight in jihad) to accept a political solution to a “holy war.”

Thus far, the concept of jihad has been explained in the context of Islam’s early expansion, when a caliph or imam exercises an authoritative call to jihad that is binding on the entire Muslim community or *umma*. The ease of identifying the legitimate voice of the *umma* diminished in the centuries that followed the death of Mohammed and with it, the collective and binding obligation of the offensive jihad. The basis of authority since the rule of the Four Righteous Caliphs (632–661 CE) has thought to reside collectively between Muslim clerics and the consensus view of most Muslims. Since consensus is most easily reached in defensive rather than offensive wars, most jihads since the initial Islamic conquests (622–750 CE) have taken the form of defensive wars against foreign invasion.

Political Islam and “Islamism”

After the end of the First World War (1914–1918), the former territories of the Ottoman Empire (1299–1923) came under the administration of the mandate system of the League of Nations, which sought to reconstitute the region according to the nation-state model of Western Europe. This was done in large part because of the independent emergence of Arab, Persian, Palestinian, and Armenian nationalism. During the war, the British, French, and Russians supported and exploited these nationalist movements to further destabilize the Ottoman Empire, an ally of the Central Powers. While the nation-state model prevailed in the Middle East, with the support of the League of Nations and later, the United Nations, the alternative view of a pan-Islamic empire under Arab leadership had not been altogether extinguished. The Islamist view gained ascendancy in the 1940s, with groups including the Muslim Brotherhood acting as shadow governments in Egypt, threatening its secular-nationalist leadership. The Islamists argue that Islam is able to provide both religious and political government in the Middle East and has, through most of the 20th century, targeted nationalist leaders who, in their view, constitute the chief obstacles to the establishment of a pan-Islamic empire. Acts of violence, terrorism, and martyrdom are intended to provoke and awaken the *umma* to their political oppression by their government and their moral oppression by the values of the West. Osama bin Laden was marginally successful in shifting the emphasis away from secular rulers, the “henchmen” as he described them, against the United States and Western governments that supported these secular regimes. The intellectual influences of bin Laden and Ayman Zawahiri, the current leader of al Qaeda, were unmistakably derived from the rhetoric of Islamism. Nonetheless, the ideology of global jihad represents a deviation not only from Islam but also from the political aims of Islamism, whose primary aim is the replacement of secular nationalism with Sharia law and clerical leadership.

The War on Terrorism and al Qaeda

The counterterrorism strategy of the U.S. government has come to dominate American foreign policy over the past 10 years. During the Clinton administration (1993–2001), the U.S. policy regarding terrorism fell under the category of international crime prevention. According to the 9/11 Commission, the success of

the Federal Bureau of Investigation in apprehending those responsible for the World Trade Center bombing in 1993 had the unfortunate result of confirming the readiness of counterterrorist measures already in place, prompting few reforms to the existing strategy. Since suicide bombing was not a tactic employed in 1993 or in the Bojinka plot (1995), where a dozen bombs were sent on planes from Asia to the United States, existing security measures that relied on terrorists' sense of self-preservation remained in place. Counterterrorism measures were woefully unprepared for religiously motivated acts of terrorism, suggesting an unwillingness to understand or interfere in religious traditions opposed to American foreign policy. Following the attacks on September 11, 2001, the Bush administration's National Strategy for Combating Terrorism (NSCT; 2003) explained that the United States was not at war with Islam, but engaged in a "War on Terror." The strategic objectives of the National Strategy for Combating Terrorism not only focused on degrading the global reach of terrorists but also brought attention to the underlying causes of terrorism. U.S. policymakers understood the root cause of terrorism to be political alienation, a condition that could be remedied by promoting democracy and "winning the war of ideas." The latter aim of the strategy is elaborated in subsequent versions of the National Strategy for Combating Terrorism to mean promoting moderate Islam and supporting the veins of Islamic thought that condemned the tactics and ideology of al Qaeda. Since the death of Osama bin Laden in 2011, even greater attention has been devoted to degrading al Qaeda's capacity to inspire individual acts of terrorism. Al Qaeda's ability to plan and carry out a terrorist attack had been significantly impaired, but the potency of its message continues to inspire individual acts of terrorism. To counteract these efforts, the U.S. strategy has sought to disrupt al Qaeda's ability to spread its message and to neutralize the potency of wedge issues cited by bin Laden that would further enrage Muslims to attack the United States. To this end, the United States has demonstrated a willingness to participate in the theological debates of Islam to further its own national security interests.

Conclusion

Samuel Huntington, one of the most influential political scientists of the past century, suggested in

his influential essay, "The Clash of Civilizations," that the ideological polarity between communism and capitalism had given way to "civilizational" allegiances between the nations of the world. Five out of seven of Huntington's civilizations are classified in religious terms: Islamic, Hindu, Slavic-Orthodox, Confucian, and the Christian West. The remaining two include Latin America and the Japanese, whose civilizational identities are deeply indebted to Catholicism and Shintoism, respectively. The Cold War (1945–1991), Huntington explained, suppressed the antagonism between the civilizations, compelling nations to align themselves between the capitalist "West" and the communist "East." Huntington's theory was employed to explain the sudden eruption of violence in the Balkans, resulting in the breakup of Yugoslavia beginning in 1989. The dissolution of tensions between East and West exposed "civilizational" and ethnic hostilities between Muslims and Orthodox Christians living in this multinational state. Huntington considered religiously divided states to be particularly prone to political unrest in the years that followed the collapse of the Soviet Union. The Cold War only suspended the divisions between the culturally asymmetrical "Islamic World" and the West, and while the United States and the mujahideen had once been allied against the Soviets in Afghanistan (1979–1989), the two civilizations to which they belonged could not sustain their cooperation without a common enemy. It is undoubtedly the case that religion plays a more prominent role in American foreign policy today than it did even a decade ago, but it was a policy shift brought about by the events of 9/11 and the experience of fighting the "War on Terror." Long-standing avoidance of religious questions in the West were born out of the unique historical experiences of the Protestant Reformation and the Enlightenment—experiences and perspectives not shared by the rest of the world. When Tony Blair was asked about his faith in an interview in 2003, a representative of British government tritely quipped "We don't do God." Yet the fact remains that most of the world's population is religious. Failure to evaluate the claims of religious faith as ideology has proven untenable as secular ideologies cease to hold sway in many parts of the world with religions rising to replace them. In the history of the United States, there are numerous instances when commanders sought the advice and counsel of military chaplains to better

understand the motivations of their enemy. A similar pooling of scholarly resources has occurred since the attacks on 9/11. As the war on al Qaeda draws to a close, leaving its members with only the ability to inspire independent and small-scale acts of terrorism against the United States and its allies, it is essential that policymakers understand and challenge the religious ideologies that threaten global security in the post–Cold War era.

Carson Aden Wilkie

See also al Qaeda; Chaplains; Global War on Terrorism; Just War Tradition; Middle East Conflict; Terrorism; War in Afghanistan

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RESEARCH AND DEVELOPMENT

Research and development has been and remains a key focus of both the U.S. government and the military. As a world leader in military technology—to say nothing of nonmilitary technology—the U.S. research and development (R&D) infrastructure is one of the finest in the world. Supported on every level from government contracts to industrial production to corporate think tanks and American innovators, the system of R&D in the United States leads the world in technology innovation. Modern militaries rely heavily on advanced R&D; the U.S. military continues this historical trend. Since World War II, the U.S. military can be characterized by its high-technology to compensate for fewer numbers. The U.S. military historically relies on technology rather than manpower.

Research is the search for new solutions to existing problems. Research can be further divided into *pure* and *applied*. Pure research is often unguided exploration of possible technologies without a specific direction. A current example is battlefield microwave technology, which may or may not pay off in actual weapons systems. However, pure research often yields spin-off technology that is useful for military or commercial uses; in this case, microwave ovens and microwave radar. Applied research is investigation into specific battlefield problems, with the intention of providing answers. Applied research is the more common of the two, where scientists and researchers try to find solutions to existing problems. Examples include counterimprovised explosive device technologies, hypersonics, fuels research, and ballistics. Development is simply putting successful research into production for use in the field. This entry examines the functions and activities of R&D as they pertain to the U.S. government and military.

Research

U.S. R&D began in earnest during World War II, with conscious efforts toward high-technology weapons systems married to American industrial capacity. During the war, the United States was geographically

isolated from battlefields in Europe and the Pacific (with the exception of the U.S. territories attacked at Pearl Harbor, Hawaii) and, thus, was able to maximize industrial output for the war in complete safety. In addition, the United States was able to build increasingly better military hardware for use in both theaters, thanks in part to the abundance of government contracts and intellectual capacity both in the United States and from abroad. The Manhattan Project represented the pinnacle of R&D during the war, a project in which scientists and engineers from the United States and Britain worked together in a secure location in Los Alamos, New Mexico, and by the end of the war developed two successful types of atomic weapons. First tested in July 1945, two were dropped on Japan in August, helping force that country's surrender. The highly secret project was also incredibly expensive, and combined important facets of military R&D: high cost and security. It's also significant that the Allied governments (in this case, the U.S. and British governments) funded a project that was merely a possibility; no one knew for sure that it would work beyond the theoretical. Thus, the dual importance of the *research*—to determine the feasibility—and the *development* is evident in the production of the first atomic weapons.

In the immediate post-World War II era, the United States led the world in technology R&D. In the wake of the most devastating war in human history, and with the lead in military technology, the president (then Harry S. Truman) decided to commit resources to R&D in order to maintain American predominance in technological development. This led to the birth of the U.S. military-industrial complex, the coupling of government spending, industrial production (including R&D), and military systems' development and use. A vital part of both our economy and society, it is also often maligned for its influence in American government.

President Franklin D. Roosevelt oversaw the creation of the first two dedicated American R&D organizations during World War II—the National Defense Research Committee, founded in 1940, and the Office of Scientific Research and Development, founded in 1941. Vannevar Bush headed the famous and influential Office of Scientific Research and Development, which had been instrumental to government-military-industry coordination since World War I. Each organization represented a government-sponsored entity focused on the development of high-technology

weapons systems during war; each was granted vast amounts of intellectual and financial capital and was not hindered by strict government oversight. Massive resources and flexibility facilitated incredible advances in technology but, at the same time, set a dangerous precedent for the relationship between government and industry. Wartime industries transitioned into postwar peace with the confidence that high-paying government contracts would be awarded with minimal government oversight. The companies that survived military downsizing at the end of the war were able to continue military production without government restrictions, often leading to less than transparent business practices. With the expansions of the defense budget in the 1950s and 1960s and increased military spending, bad business and financial practices inside the military-industrial complex became commonplace.

At the end of the war, the U.S. Army Air Forces—which did not gain independence until 1947—spun off Project RAND (for R&D), initially managed by the Douglas Aircraft Company. In 1948, RAND became an independent consultant for the U.S. government and other international clients. Symptomatic of other think tanks, RAND combines academics, businesspeople, and former and current military personnel for varying types of analytical research. Often the client (frequently the government) will approach the think tank with an issue and ask for analysis of a topic or problem. Most often, the organization is tasked with directed analysis. Rarely are these think tanks in the business of development; instead, they focus on research. RAND, which to this day provides excellent research and analysis to the U.S. government, currently offers both classified and open-source information on a wide variety of topics. For instance, RAND is currently a leader in China-related analysis.

The American university system exemplifies another source of military research. Connections between the government and universities go back to World War II, when scientists and engineers were approached to help with research issues. After the war, the government instituted the G.I. Bill, which sent servicemen and -women to school. This accomplished two goals: (1) demobilized servicemen could get an education and (2) the overall educational level of the population increased. Universities continue as a research source to this day. Universities like Massachusetts Institute of Technology and

California Institute of Technology are well known as centers for government research, but a tremendous number of universities compete for government funding for both classified and unclassified research dollars. The funding is often so lucrative that the universities rely on government contracts not only for specific projects but also for general operating costs.

Not all government research can be conducted in the relatively open arena of American universities, however. The government has also set up a number of research laboratories, usually staffed by civilian contractors, to conduct sensitive and high-technology research. The government money creates lucrative jobs for research scientists and makes the research field attractive for graduate studies in a number of fields. The Jet Propulsion Laboratory (affiliated with California Institute of Technology), the National Institute of Allergy and Infectious Diseases, and the Los Alamos National Laboratory—the largest such organization—represent a few of the many government research labs. Of the dozens of government research labs, the Los Alamos National Laboratory is a model for government-sponsored research. The 15,000 employees, with an annual budget of more than \$2 billion, research weapons systems for the military, space applications, and medical technology. Los Alamos National Laboratory is one of only two government labs where nuclear weapons design continues in this country.

Research in these spheres comes at the behest of the government, complete with lucrative taxpayer dollars. Often, the government will present a problem or issue for analysis, and research facilities will commit intellectual resources to solve the problem, often in a number of different ways. These collections of doctors, engineers, scientists, physicists, and others work directly for the government, or indirectly through their own universities, to analyze and solve big questions. Once questions are answered, the next phase begins.

Development

The development side of the equation is inextricably linked to research. When a workable solution emerges, the government will approach industry to build the solution. Frequently, there is a competition opened to construct multiple prototypes (e.g., airplanes or small arms), but often the government will ask a single company to develop a specific

technology. To return to a previous example, when the Manhattan Project was under way, the government did not consult a specific company to develop the bomb once the theoretical work had been completed. Instead, the government constructed the industry and gathered the materials, which were brought to Los Alamos, so that the bombs could be built there. Currently, the government has a number of manufacturers that are preferred contractual clients. Companies such as Boeing and Lockheed Martin supply airframes and missile technology for the air force; the Electric Boat Corporation—part of General Dynamics, located in Connecticut—is the sole supplier of nuclear submarines for the navy. However, in the 21st century, a large portion of military technology will be revolutionary; the government will again begin to farm out contracts to smaller and more diverse manufacturers. One leading example is software design, which is being contracted by large companies like Microsoft but is also being procured from independent computer companies and code writers. Another fascinating example is the future of unmanned aerial vehicles; the government has taken an interest in radio control enthusiasts for tactical (small) unmanned aerial vehicles and their component technology. As other technologies emerge, a wide variety of corporations and individuals will be involved in the military's procurement process.

One continuing issue in the development of the military's technology is supply. It is not enough to have one or two models; the military needs multiples, often thousands. Even the largest—and most expensive—systems, like the nuclear aircraft carrier, come in multiples (currently 12). Aircraft are ordered by the dozens; when the army adopted the Beretta 92 sidearm pistol (military designation M9) in the late 1980s, it bought more than 500,000. The issue dominating the development phase of R&D is manufacturing capacity. The government must consider if a company bidding on a potential contract will be able to produce the numbers needed for the military as a whole. Questions such as infrastructure, employee base (and reliability), security measures and secrecy, and materials supply all become issues during development. Furthermore, government oversight is a reciprocal consideration for companies who desire the lucrative contracts; they must be willing to accept a certain amount of structure and supervision; more as the secrecy level rises.

R&D is an integral part of modern military development. To have continual strategic advantage, modern militaries focus on cutting-edge R&D. In the United States, this takes the form of both pure and applied research and an interconnected system of development industries for the production of military hardware. To stay ahead of actual and potential threats, the United States devotes tremendous amounts of resources, brainpower, and industrial effort toward R&D to maintain a high-technology force, prepared for present-day and future conflict. And, it is a continual process; technological evolution is an ongoing process. The country that puts forward the most effort and funding will maintain the competitive advantage on the 21st-century battlefield.

S. Mike Pavelec

See also Boeing; Lockheed Martin; Logistics; Northrop Grumman; RAND Corporation; Unmanned Aerial Vehicles; Weapons, Nuclear

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RESERVE, AIR FORCE

The Air Force Reserve is component of the U.S. Air Force, along with the Regular Air Force and the Air



A row of U.S. Air Force Reserve A-10 Thunderbolt II aircraft parked on the flight line at Bagram Airfield, Afghanistan, during Operation Enduring Freedom.

Source: Staff Sergeant Ricky A. Bloom, U.S. Air Force.

National Guard. Together, the Air Force Reserve and the Air National Guard constitute the reserve components of the air force. The differences between the two reserve components are slight, mainly in that members of the Air National Guard have an additional liability for service under state authorities, whereas members of the Air Force Reserve do not. The Air Force Reserve is a Major Command of the U.S. Air Force. In the first decade of the 21st century, the reserve components of all services were increasingly seen as operational reserves rather than strategic reserves. In practice, this means that reserve forces are used as part of normal operations and are not considered for use only in major wars. This entry traces the history of the U.S. Air Force Reserve and discusses its organization, operations, and roles.

Air Force Reserve Command has more than 74,000 officers and enlisted personnel in 37 wings

with their own aircraft, as well as seven associate units, which share aircraft with an active-duty unit. The Air Force Reserve provides slightly more than 10% of the air force's available personnel. Each wing is charged with a core mission that is accomplished through the collaboration of a variety of specifically tasked squadrons. Reserve wings report to one of three numbered air forces, which in turn report to Headquarters, Air Force Reserve Command.

Air Force Reserve units perform a vast array of services as part of the total air force, including medical services and medical evacuation, establishing and operating aerial ports, civil engineering, security, intelligence, communications, mobility support, logistics, and transportation operations. The Air Force Reserve has more than 440 aircraft assigned to it, most of which are the same type found in Regular Air Force units, such as the massive



As the crew chief (*right*) stows safety pins from the weapons pylons, Lieutenant Colonel Gart “Batman” Batinich, 466th Fighter Squadron, pilot, checks the GBU-12 500-pound bombs with CCG MAU-169 laser guidance systems as he preflights his F-16C before the mission. This was the first time Air Force Reserve Command fighter pilots would fly Operation Enduring Freedom strike missions into Afghanistan from Al Udeid Air Base, Qatar.

Source: Master Sergeant Dave Nolan, U.S. Air Force.

C-5 Galaxy, as well as the C-17 Globemaster III for transport; the KC-10 Extender and the KC 135 Stratotanker for aerial refueling missions; fighter aircraft, such as the F-16 Falcon and the F-22 Raptor; and the A-10A/O Thunderbolt II for ground attack missions. In addition, the Air Force Reserve inventory includes multiple variations of the venerable C-130, including some ski-equipped for polar operations, others equipped for weather reconnaissance, and some equipped for fighting forest fires.

Members of the Air Force Reserve serve in one of several statuses, the largest of which is the Unit Program. The Unit Program consists of manned units that normally perform duty on 1 weekend a month and for 2 weeks in the summer, although the actual requirements are usually larger. Another status is that of individual mobilization augmentee, which includes reserve airmen who are assigned to active air force units. Individual mobilization augmentees have lesser commitments in peacetime, usually 24 days spread over the course of a year, but can be recalled in times of war or other emergency. Other reservists serve on limited tours with active-duty units, usually at higher levels of command, to fulfill critical positions. A substantial minority of members of the Air Force Reserve serve on either Active Guard and Reserve status, which gives them essentially the same status and benefits of members of the Regular Air Force, or as Air Reserve Technicians, in which members of a reserve unit hold a civilian job in the unit when not mobilized.

Members of the Air Force Reserve belong to the Ready Reserve, the Standby Reserve, the Individual Ready Reserve, or the Retired Reserve. The Ready Reserve, consisting mainly of members in the Unit Program, contains roughly 74,000 reservists subject to recall to active duty in time of war or national emergency. These reservists are liable for deployment worldwide within 72 hours. The Standby Reserve includes reservists with a temporary disability that makes them unable to perform military duties, or whose civilian jobs are considered vital to national defense. Member of the Individual Ready Reserve are former members of any component—Regular Air Force, Air National Guard, or Air Force Reserve—with a remaining service obligation. They are civilians but are theoretically still qualified in their specialty and can be recalled to active service in

the event of a national emergency. The last category, the Retired Reserve, consists of former airmen, whether regular, guard, or reserve, who receive pay after retiring from the air force. The Retired Reserve also includes “gray area retirees,” former members of the reserve or Air National Guard who left service after completing 20 years of service but who have not yet reached 60 years of age, when they start drawing a pension.

History

The Air Force Reserve evolved out of aviation elements of the Army’s Organized Reserve, the precursor to the modern Army Reserve, of the 1930s. Just prior to World War II, all reserve components were called to active service, and as a practical matter, no reserve existed. When the air force was established as a separate and coequal branch of the U.S. military on July 26, 1947, no provision for a reserve existed. The air force desired a fully federally controlled reserve, and not an air element in the National Guard, but the National Security Act of 1947, which created the independent air force, also created the Air National Guard. Noting the existence of hundreds of thousands of former members of the wartime Army Air Forces not in the Air National Guard but with an interest in serving in a reserve status, Congress passed legislation for the establishment of the Air Force Reserve on April 14, 1948. As with the army, the air force would have two reserve components.

The Air Force Reserve originally had 25 wings, equipped mostly with equipment left over from World War II. Despite President Harry S. Truman’s Executive Order 10007 in 1948, which required all branches of the military to create a robust reserve system, the Air Force Reserve had an ill-defined mission, obsolete equipment, and uneven training. The Regular Air Force saw future warfare as consisting mainly of strategic warfare, using manned bombers to drop nuclear weapons on the Soviet Union. In such a scenario, war would be fought in hours or at most days, with no time to recall or employ the reserve components. During the Korean War, the air force called up about 147,000 reservists, serving periods from 1 to 3 years on active duty. Most reserve units of the time were either airlift or rescue units. Of the 20 units

called to active duty, five remained intact, while the others were broken up and their members used as individual replacements.

The Korean War showed the air force that future missions would be more than using bombers to drop nuclear weapons on the USSR. Although the reserve components were unsuited for that mission, they could fill most other roles in the air force. Dissatisfaction over the employment of the reserve in Korea led the air force to develop a more integrated plan for using the reserve in the future. Most significant was the air defense runway alert program, which began employing the reserve components for real-world peacetime missions. This integration of the reserve components foreshadowed the Total Force Policy that the air force used with great success in the 1990s, by structuring the entire air force in such a way that reserve and Air National Guard units were integral parts of the air force.

Cold War

During the Vietnam War, the Air Force Reserve performed real-world missions in support of air force operations worldwide. Reserve wings began performing troop transport missions during their weekend drills and 2-week annual training. In 1968, the Department of the Air Force redesignated the Headquarters, Air Force Reserve, as a field operating agency. The Air Force Reserve participated in operations after Vietnam, with 630 reservists serving in the Middle East in 1973, and ferrying civilians from Grenada in 1983. The Air Force Reserve gained new missions in aerial refueling, weather reconnaissance, and tactical fighters, in addition to its traditional role in transport. The air force began to equip the reserve with first-line equipment rather than issuing obsolete material formerly used by the Regular Air Force. In the 1970s, most large cargo aircraft used for airlift belonged to regular units, but reserve crews flew them. During the 1980s, more aircraft were assigned to the reserve, including aerial refuelers such as the KC-10s, and the ground attack A-10s, and in 1984, F-16s fighters.

Persian Gulf War

At the start of Operation Desert Shield/Desert Storm in August 1990, the Air Force Reserve consisted of 21 wings, with 335 squadrons, of which 58

were flying squadrons. Some 22% of personnel in the Air Force Reserve volunteered individually for active service, which caused problems later when reserve units were activated and found to be short of personnel. The first Air Force Reserve units to deploy were aerial port units that began operations in Saudi Arabia on August 8. By August 20, more than 15,000 Air Force reservists were performing duty in support of Desert Shield. Despite the diversity in capabilities in the reserve, the force was still heavy in airlift and refueling units. By the time that conflict ended, units from the Air Force Reserve had flown 239,000 hours, moved 310,000 passengers, delivered 560,000 tons of cargo, and brought almost 10 million gallons of fuel into the theater. Tactical aircraft of the Air Force Reserve flew more than 3,200 sorties, while A-10s made 1,000 sorties. A total of almost 23,500 Air Force Reservists served in the war.

Following the end of the Gulf War, elements of the Air Force Reserve became involved in humanitarian relief missions, such as Operation Provide Comfort, which assisted the Kurds. Air Force Reserve tankers and fighters helped enforce the no-fly zone over Bosnia in 1993. In recognition of its increased participation in ongoing missions, in February 1997, Congress made the Air Force Reserve Command the ninth Major Command of the U.S. Air Force, with headquarters at Robins Air Force Base, Georgia. Reserve units later became heavily involved in the federal responses to Hurricanes Katrina and Rita, which hit the Gulf Coast of the United States in 2005. Air Force Reserve units delivered 3,300 tons of relief supplies, and the 910th Airlift wing sprayed insecticides on more than 2.8 million acres of affected areas to prevent an outbreak of insect-borne diseases following the storms.

Global War on Terrorism

As a response to the attacks of September 11, 2001, President George W. Bush ordered 13,000 members of the air reserve and air guard to active duty for up to 2 years. In the days immediately after the attacks, reserve F-16s, supported by KC-135 tankers and airborne warning and control systems, flew air cover missions over American cities. On October 19, a reserve MC-130E Combat Talon became the first U.S. fixed-wing aircraft to enter the skies over

Afghanistan. Reserve F-16s, already in the region for Operation Southern Watch, began combat operations as part of Operation Enduring Freedom, which sought to remove the Taliban from control of Afghanistan. Air Force Reserve units provided B-52 strikes and close air support. Reserve C-17s airdropped emergency food supplies to Afghan civilians. The air force relied heavily on its reserve components to maintain its two “air bridges” across the Atlantic and the Pacific.

During Operation Iraqi Freedom, the war to overthrow Baathist rule of Iraq that began in March 2003, Air Force Reserve and Air National Guard pilots flew almost continuous missions in F-16s and A-10s. Reserve crews flew 40% of all B-52 strikes during the initial phase of the war. Reservists also participated in missions using unmanned aerial vehicles. By 2009, reservists performed more than 86,000 sorties by fighters, 418,000 mobility sorties, and 116,000 air refueling sorties. Reservists have also played a major role in aeromedical evacuations of sick and injured troops from the war zones to Ramstein Air Base, Germany. More than half of the personnel in the 791st Expeditionary Aeromedical Evacuation Squadron were reservists. By 2007, 55,000 patients had been moved. More than 90,000 Air Force reservists have provided support to the war since 2001, with more than 30,000 Air Force reservists serving mobilization tours.

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See also Air Force, Department of; Air Force, U.S.; Air National Guard; Reserve, Army

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RESERVE, ARMY

The Army Reserve is a component of the U.S. Army, along with the Regular Army and the Army National Guard. Together, the Army Reserve and the Army National Guard constitute the reserve components of the army. The differences between the two reserve components are slight, mainly in that members of the Army National Guard have an additional liability for service under state authorities, whereas members of the Army Reserve do not. Also, the Army National Guard has more combat arms units—infantry, armor, and special forces—whereas the Army Reserve contains almost entirely combat support and combat service support units. This entry discusses the organization, history, and roles of the Army Reserve.

Members of the Army Reserve serve in one of several statuses, the largest of which is the Troop Program Units (TPUs). TPUs consist of units that normally perform duty 1 weekend a month and from 2 weeks to 29 days annually. Another status is that of Individual Mobilization Augmentee (IMA), IMAs are assigned an annual period of 2 weeks for training in high-level headquarters where they would serve if mobilized. Active guard and reserve soldiers belong to the Army Reserve but are on a full-time status and have the same benefits and legal status as members of the Regular Army. Most active guard and reserve soldiers perform the full-time administrative duties required by a reserve unit while it is not in a mobilized status.

In 2010, the strength of the Army Reserve was about 205,000 soldiers, not counting retirees. Reserve soldiers belong to the Ready Reserve, the Standby Reserve, the Individual Ready Reserve (IRR), or the Retired Reserve. Reservists in the Ready Reserve, consisting mainly of members of TPUs, are subject to recall to active duty in time of war or national emergency. The Standby Reserve includes reservists with a temporary disability that makes them unable to perform military duties or whose civilian jobs are considered vital to national defense. Member of the IRR are former members of any component—Regular Army, Army National Guard, or Army Reserve—who have a remaining service obligation. They are civilians but are theoretically still qualified in their specialty and can be recalled to active service in the event of a national emergency. The last category, the

Retired Reserve, consists of approximately 715,000 former soldiers from any component who receive pay after retiring from the army. The Retired Reserve also includes “gray area retirees,” former members of the reserve or Army National Guard who left service after completing 20 years of service but have not yet reached 60 years of age, when they start drawing retirement. The U.S. Army Reserve Command (USARC) is responsible for TPU soldiers, while the U.S. Army Reserve Personnel Command manages IRR and IMA soldiers.

The Army Reserve contains 45% of the army’s combat service support units and 30% of its combat support units. As part of the Total Force Policy adopted in the 1970s, some necessary support functions of the army were shifted to the reserve and National Guard, making mobilization of at least some of the reserve components necessary in any protracted conflict. As a result, the Army Reserve has only one combat line unit and two attack helicopter battalions but contains 100% of the army’s railway units, 100% of its enemy prisoners-of-war brigades, 100% of its training and exercise divisions, 100% of the army’s bridging assets, 97% of its civil affairs units, 86% of its psychological operations units, 70% of its medical care units, and 62% of its chemical and biological defense capability, half of all mortuary affairs units, as well as aviation, logistics, engineer, and signal units.

The Chief, Army Reserve, is the advisor to the army chief of staff on Army Reserve issues and also holds the position of commander of the USARC. USARC is based in Atlanta, Georgia. The USARC commands all continental U.S. Army Reserve units. The Army Reserve operates 1,200 Army Reserve Centers throughout the nation. The Army Reserve maintains one Command and two Reserve Support Commands outside the continental United States.

History

The Army Reserve began in 1908 with the establishment of the Officers Reserve Corps and Enlisted Reserve Corps. Few men joined, and not until after the First World War did a wholly federally controlled reserve of the army come into existence. Between the World Wars, the Organized Reserve, as it was dubbed, consisted of cadre units with leadership only. Members were not paid for weekly evening training meetings but only for their 2 weeks of

training in the summer, and no retirement system existed. The Organized Reserve was called to active service in the fall of 1940 for a year for training. Reserve units absorbed the largest portion of the men brought on active duty under Selective Service, while other selectees went to regular and National Guard units. After the attack on Pearl Harbor on December 7, 1941, everyone on active duty was ordered to remain as long as needed.

At the end of the Second World War, the army revamped the reserve, creating manned units as well as pay and retirement systems. The reserve functioned as a strategic reserve, only to be mobilized for major military events, primarily envisioned as a war with the Soviet Union. However, shortages in the active military led to a large, although not total, mobilization of the reserve for the Korean War. Of some 600,000 reservists on the rolls in 1950, around 240,000 were called up during the war, either as individuals or as part of one of 971 units that were mobilized. The Organized Reserve was officially renamed the Army Reserve in 1952.

Vietnam War

For political and global strategic reasons, the Army Reserve remained unmobilized during most of the Vietnam War. The army fought the war mostly using its peacetime structure of regular soldiers in units augmented with draftees. However, the bulk of the company grade officers, lieutenants, and captains who fought in Vietnam held reserve commissions but served on active duty. In response to the Tet Offensive in early 1968, and increased tensions with North Korea over the seizure of the USS *Pueblo* on January 23, 1968, the Joint Chiefs of Staff requested 54,000 men from the various reserve components to backfill the Strategic Reserve, with most of them slated to serve on active duty in the United States or in Europe, rather than be deployed to Vietnam. On January 25, 1968, President Lyndon Johnson ordered a limited mobilization of the Army Reserve. Politics and budget concerns trimmed the number of Army reservists mobilized to 5,869 soldiers from 42 Army Reserve units, of which 35 units went to Vietnam. While complaints from mobilized Army reservists tended to be fewer than from air force and navy reservists similarly called to active service, complaints did occur, and some members of Congress sought to delay their deployment.

The overall impact of the reserve units on the course of the war was minimal. At their peak, Army Reserve soldiers totaled less than 5% of all American soldiers in Vietnam. Likewise, only a small fraction of reserve soldiers mobilized for the war in Vietnam, either for deployment to Vietnam or to provide backfill in the strategic reserve. The shortcomings of the mobilization of some Army Reserve units in 1968 later influenced the reform of the Army Reserve in the 1970s.

After the end of the draft in 1973, the Army Reserve lost much of its strength, as reservists who joined to avoid the draft left in droves. Concurrent with the ending of the draft was the implementation of the Total Force Policy. Under Total Force, the Guard and reserve were more fully integrated with the active force. In the 1990s, most of the reserve combat arms units remaining were disbanded or converted to support functions. The Army Reserve became composed of almost all Combat Support and Combat Service Support units.

Persian Gulf War

More than 63,000 reservists from 647 units served during Operation Desert Shield/Operation Desert Storm. In addition, more than 1,500 IMAs and 5,500 reservists in the IRR mobilized, while another 1,000 came from the Retired Reserve. Units and members served in theater, and backfilled in Germany and the United States. Following the war, the Army Reserve underwent substantial reorganization. In 1992, the USARC became operational and assumed command and control of most units in the Army Reserve.

Roughly 100 reservists, mostly in the 711th Adjutant General Company (Provisional), deployed to Somalia in 1993 under Operation Restore Hope. Additionally, civil affairs and public affairs units also served in the operation, until all U.S. forces were withdrawn in March 1994. The following year the 20 Army Reserve Commands were reorganized into 10 Regional Support Commands, which were in turn redesignated Regional Readiness Commands in 2003. In 1995, President Bill Clinton issued a Selected Reserve Call-up, allowing for the mobilization of reservists for Operation Joint Endeavor, which was created to support the Dayton Peace Accords in Bosnia. Throughout the remainder of the decade, reserve units would participate in operations

responding to floods in North Dakota, a dam break in New Hampshire, a typhoon in Guam, and in 1999, thousands of reservists assisted in the recovery efforts after Hurricane Mitch ravaged Central America.

Global War on Terrorism

Three days after the attacks of September 11, 2001, President George W. Bush ordered a partial mobilization of the reserve; although by that time, about 2,300 reservists were already serving in response to the attacks. The first USAR unit to respond was the 311th Quartermaster Company (Mortuary Affairs) from Aguadilla, Puerto Rico. The unit was at the Pentagon within 72 hours of the attack, although official orders were not issued for over a week. The 311th Quartermaster Company established a temporary morgue and began searching for human remains. Within 3 months, more than 9,000 reservists were on active duty under the mobilization. Of these, 384 were from TPUs, while the remaining reservists were IMAs or from the IRR. About 2,300 reservists in 90 units supported Operation Enduring Freedom, which toppled the Taliban government in Afghanistan and sought to break up al Qaeda forces training there. Most of these reservists were in civil affairs, military intelligence, public affairs, and medical units. As the war expanded, reservists served with several Central Asian allies of the United States, as well as in the Philippines and at Guantanamo Bay, Cuba.

During Operation Iraqi Freedom, the invasion of Iraq that began on March 20, 2003, reservists were included in the frontline troops, especially units such as the 459th Engineer Company, whose bridging assets were crucial for river crossings. After the announcement that major combat operations had ceased on May 1, 2003, reserve units and individual soldiers continued to serve in Iraq and in all theaters of the war. Reserve units took on roles never imagined just a few years earlier, as when the 98th Division (Institutional Training), which had been created to augment initial and advanced training for new recruits in the U.S. Army, deployed to Iraq to assist in training the new Iraqi army. By 2009, more than 167,000 U.S. Army reservists had been mobilized for the war, and of that number, more than 40,000 had been mobilized at least a second time. By December

2007, 153 U.S. Army reservists had been killed in the wars, while another 1,230 had been wounded in action.

Current State of the Army Reserve

From the beginnings of the Army Reserve until the mid-1990s, the Army Reserve mobilized nine times. In the years since 1995, soldiers from the reserve have deployed for 10 operations. Reservists have been in a continuous state of mobilization for over a decade, with an average of around 9,300 reserve soldiers mobilized each year. This has led to a major shift in thinking about the role of the reserve components, from a strategic reserve to be used only in major wars to an operational reserve. Units and members rotate through periods of mobilization to perform real-world missions as part of the total force, alternating with periods of nonmobilization. In the years 2007 to 2009, the Army Reserve largely realigned so that larger units were organized by function rather than geographically. For example, all engineering units in the reserve became part of either the 412th Engineer Command, in Vicksburg, Mississippi, or the 416th Engineer Command, in Darien, Illinois. Likewise, training commands are now organized by the level of training they conduct rather than by the area of the country covered. The Army Reserve in 2009 operated on 5.5% of the army's total budget, yet it provided half of the combat support functions.

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See also National Guard, Army; Reserve, Air Force; Reserve, Marine Corps; Reserve, Navy

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RESERVE, MARINE CORPS

The U.S. Marine Corps Reserve was officially established on August 29, 1916, as part of the Naval Appropriations Act. Intended to increase American naval preparedness and place the Marine Corps on a firmer footing as an independent branch, the act provided for the wartime expansion of the Marine Corps in the event of national emergency. Marine auxiliaries were to be composed of several elements, including a Fleet Marine Corps Reserve, a Marine Corps Reserve, a Volunteer Marine Reserve, and a Marine Corps Flying Reserve.

With the exception of Vietnam, the Marine Corps Reserve has played a significant role in every major American conflict of the 20th century. In World War I, reserves constituted a significant number of the nearly 32,000 marine officers and enlisted men who served overseas in the American Expeditionary Force and naval service. In World War II, a majority of the nearly half million marines who served were affiliated with the reserve. This constituted somewhere between 68% and 70% of all active-duty marines. However, reservists were not mobilized or put into service as members of reserve units; they were integrated with active-duty marines throughout the war, and no distinction between the two was made. The Marine Corps participated in nearly every significant engagement in the Pacific, suffering 19,733 killed and 67,202 wounded over the course of the war. Of the 79 marines who received the Medal of Honor during World War II, 44 were Marine Corps reservists.

In Korea, the Marine Corps Reserve once again constituted the bulk of overall marine forces. As in World War II, reserve forces were integrated with regular forces. Elements of the reserve, including both ground and air elements, played a major role in the fighting and distinguished themselves in operations such as the amphibious landing at Inchon and the Chosin Reservoir campaign. Due to their large presence within the overall marine forces, reservists sustained a significant portion of the more than 28,000 marine casualties suffered between 1950 and 1953. Combat awards for reservists who served in Korea included 13 Medals of Honor, 50 Navy Crosses, and more than 400 Silver Stars. During the Vietnam War, marine reserves, along with the reserve components of the other services, were not

mobilized. This was largely due to the political calculations of President Lyndon B. Johnson's administration. However, many individual Marine reservists volunteered for active-duty service in Vietnam.

The 1991 Persian Gulf War saw the largest mobilization of the reserves since Korea, with more than 25,000 Marine reservists deployed throughout Southwest Asia, the Pacific, and the United States. The Marine Reserve activated almost all its combat elements, including its infantry and armored and support units, which were sent in support of Marine Expeditionary Forces deployed in Operation Desert Shield and Operation Desert Storm. Reservists constituted roughly 15% of all in-theater marines.

The current organizational structure of the Marine Corps Reserve was created during the 1960s, when the Organized Marine Corps Reserve became part of the Fleet Marine Force. It comprises a ground combat element (the 4th Marine Division), an aviation combat element (the 4th Marine Aircraft Wing), a logistics combat element (the 4th Marine Logistics Group), and a mobilization administration element (the Marine Corps Individual Reserve Support Activity). In 1977, the headquarters of the 4th Marine Division and the 4th Marine Aircraft Wing were consolidated and later unified in 1992 as the Marine Reserve Force, the largest command in the Marine Corps. In 1994, it was renamed the Marine Forces Reserve (MARFORRES).

MARFORRES has four subordinate commands. The 4th Marine Division is the ground combat arm of the reserve. It comprises nine infantry battalions, three each from the 23rd, the 24th, and the 25th Marine Regiments. It also includes artillery, combat engineer, reconnaissance, tank, assault amphibian, light armored reconnaissance, and antiterrorism battalions. The 4th Marines Logistics Group is the reserve's combat support branch. It consists of nine battalions, including maintenance, supply, engineer support, landing support, motor transport, communications, medical, and dental battalions. The 4th Marine Aircraft Wing includes two aircraft groups and two support groups. The Marine Corps Individual Reserve Support Activity is an administrative authority that oversees the Individual Ready Reserve, which consists of individuals who are no longer affiliated with active or reserve units, but who are still under military obligation, and who may be recalled to active service during wartime and times of national crisis.

The bulk of MARFORRES personnel are members of the Ready Reserve, which includes the Selected Marine Corps Reserve, the Active Reserve, Individual Mobilization Augmentees, and the Individual Ready Reserve. Marines from the Selected Marine Corps Reserve are assigned to individual reserve units stationed throughout the United States. Marines from the Active Reserve serve in a variety of full-time reserve billets and provide critically needed duties such as recruitment and administration of personnel. Marines of the Individual Mobilization Augmentees conduct their reserve training with active-duty units. Marines from the Individual Ready Reserve are former regular and reserve personnel who can be recalled to active duty during wartime and in times of national crisis. All Marine reservists, regardless of individual billet, receive the same training and education as active-duty marines.

Following the events of September 11, 2001, MARFORRES served in a variety of combat, contingency, humanitarian, and disaster relief operations throughout the globe. They did this under the auspices of the Department of Defense, the United Nations, and the North Atlantic Treaty Organization. Most prominently, they fulfilled both combat and support roles in Iraq and Afghanistan during Operation Iraqi Freedom and Operation Enduring Freedom. Between September 2001 and March 2009, more than 52,306 reserve Marines were activated, with most (98%) of them deployed to U.S. Central Command's area of operations. The number of Marine reservists operating in Iraq and Afghanistan fluctuated between 2002 and 2010; however, MARFORRES retained a significant presence in both Operation Iraqi Freedom and Operation Enduring Freedom. In 2008, the peak year for the number of U.S. forces serving in Southwest and Central Asia, the Marine Reserves constituted 13% of total Marine Corps forces in-theater. In 2005, the Marine Corps Reserve had the largest number of reservists (10%) serving more than 2 years in support of operations in Iraq, Afghanistan, and elsewhere.

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RESERVE, NAVY

The Navy Reserve is the reserve component of the U.S. Navy. This entry discusses the history, mission, and roles of the U.S. Navy Reserve.

Early History

According to the official account of the history and mission of the U.S. Navy Reserve, the roots of the U.S. Naval Reserve can be traced to the use of privateers during the American Revolution. Specifically, the Naval Reserve is said to have begun on June 12, 1775, when the citizens of Machias, Maine, seized the schooner *Unity* and utilized it to engage the British warship HMS *Margaretta*. Building on this early victory, the American Revolutionaries continued to use privateering against Great Britain. In the end, this form of naval warfare represented a principal means used by Americans to achieve independence. Even after the formation of the official Continental Navy, privateers remained a separate force that provided support for the navy, with the result that the line between the fledgling Naval Reserve and the Continental Navy was often blurred. For example, the ship crews of John Paul Jones, one of the most famous naval commanders of the American Revolution, seamlessly moved between being a part of the Continental Navy and privateering, the primary difference between these two spheres being how sailors received their pay and orders. The Continental Navy was under federal ruling; the privateers worked for themselves and received prize money from the American government and opposing British forces. In general, privateers during the American Revolution had very few laws governing their actions.

In the War of 1812, Congress decided to utilize the privateers once again, though with more oversight. This congressional control included issuance of commissions in addition to specific guidelines regarding

behavior at sea. After a year of success in capturing British prizes, Privateer Captain Joshua Barney rejoined the U.S. Navy as a captain and coordinated barges and boats to blockade the Chesapeake Bay as the so-called Chesapeake Bay Flotilla. This action while daring failed to prevent British naval vessels from reaching Washington, D.C., or sailing further up the Chesapeake. Scuttling his vessel to avoid capture, Barney fought with distinction with other sailors on land in the Battle of Blandensburg that prevented the British from seizing Baltimore.

Shortly following the outbreak of the Civil War, President Abraham Lincoln called the navy to defend the Mississippi River against the threat of the Confederacy. The Naval Reservists formed a key part of that force and substantially contributed to the ultimate Union victory. By the end of the war, the Naval Reserves had made their mark: Six naval enlisted men received the Medal of Honor for their support of the *Monitor's* actions against the ironclad CSS *Albermarle*.

After the Civil War, Congress worked toward further professionalization of the naval reserve forces. Senator Washington C. Whitthorne created a bill calling for organizing the “State’s Navy” or naval militias—organization that had already been loosely formed. Even as the process of confirming this bill was under way in 1890, Captain Alfred Thayer Mahan called for modernization of the navy and new organization for its “reserve forces” in his influential book *The Influence of Sea Power Upon History*. The “Naval Reserve” then consisted of an odd mixture of the old privateers and the new state naval militias, and Mahan proposed a more organized and focused naval fighting strategy that embraced both regular and reserve forces. More states subsequently created organized militias, and in 1894, the secretary of the navy gave the militias ships that were no longer needed by the navy.

The Naval Reservists, who still lacked an official title or federal governance, were called on once again in 1898 when America declared war on Spain. A month after the declaration of war, Congress called for an Auxiliary Naval Force that included 4,224 naval militia men to fight against Spain. The war was short-lived, and by 1899, the auxiliary force was disbanded.

Congress, recognizing both the importance of the extra manpower the reservists provided and the need for organization of many different state naval

militias, created in 1911 the Office of Naval Militia. Subsequent passage of the Naval Militia Act in 1914 gave the president power to call the naval militias to service in case of an emergency. Also, for the first time since 1812 Congress looked at the benefits that the naval reservists received and ordered that pay, transportation, and subsistence be provided for enlisted men and pay and mileage for officers. By June 1914, there were 7,728 personnel in the naval militias, consisting of 596 officers and 7,132 enlisted men from a total of 21 states. The institutionalization process culminated with the official establishment of the U.S. Naval Reserve through the Naval Appropriations Act on March 3, 1915. World War I was thus the first major conflict that the Naval Reserve entered into as an official federal organization.

The Official Naval Reserve

The amendment to the National Defense Act on June 3, 1916, created six classes within the U.S. Naval Reserve Force, including the Naval Reserve Force Flying Corp (building on an Aeronautical Reserve established in February 1915), the National Naval Volunteers, and the Marine Corp Reserves. An order by the secretary of the navy Josephus Daniels on March 19, 1917, authorized women to join the Naval Reserves, and the first woman enlisted was Chief Petty Officer Loretta Walsh.

The entry of the United States into World War I led to a surge in reserve enlistment. By December 1, 1917, roughly 60,000 Naval Reservists had been mobilized, and the numbers continued to swell. By the end of World War I in 1918, the Naval Reserves had 290,000 members, including 26,000 in Naval Aviation. As a result of this growth, the government once again reorganized the Naval Reserve. The Naval Reserve Act in 1925 created three new classes: (1) the Fleet Naval Reserve, (2) the Merchant Marine Reserve, and (3) the Volunteer Reserve. In 1926, the Naval Reserve Officer Training Corp was established in six colleges: (1) Harvard, (2) Yale, (3) Georgia Institute of Technology, (4) University of Washington, (5) University of California, and (6) Northwestern University. More than 1,000 students enrolled within the first year.

World War II began in 1939, and by 1941, any Naval Reservist who had not been mobilized was called to active duty. The Naval Reserve served as

active duty until the end of the war in 1945. More than 30,000 reservists were called to active duty at the beginning of the Vietnam War, and an average of 30,000 reservists remained on active duty until the end of that conflict in 1975. Many firsts for the Naval Reserve occurred during this time frame: In 1971, the first fully integrated crew of active-duty personnel and reservists served a 3-month deployment on the USS *Gearing* (DD 710). More than 21,000 Naval Reservists served in Operations Desert Shield and Desert Storm, and reservists also took part in operations in Haiti and the former Yugoslavia in the 1990s.

Distinctive Traditions

In some significant ways, the Naval Reserve differs from its equivalents in other military branches. Traditionally, the navy demonstrated a marked reluctance to use reservists, reflecting the overwhelming dominance of United States Naval Academy graduates in positions of leadership—this trend has begun to change in recent years, however. Also, in contrast to other branches, the navy's peacetime presence has traditionally been much closer to its wartime form, reducing the need for reservists during times of conflict. Finally, when called to service, Naval Reservists do not usually serve as part of an exclusively reserve unit but are placed in individual assignments.

Today's Navy Reserve

The Naval Reserve has served in some capacity in every conflict since the American Revolution. As of 2012, the Navy Reserve has approximately 65,000 members, organized into three modern divisions: (1) Ready Reserve, (2) Stand by Reserve, and (3) Retired Reserve inactive. Modern navy reservists receive a monthly income, health care coverage, and retirement incentives. With all of the changes and transformations that have occurred to create the Navy Reserve known today, its mission remains essentially the same: to provide capabilities and manpower to support the U.S. Navy.

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See also History, Naval: Approaches to; Military Organization, Navy; Navy, Department of; Navy, U.S.; Navy League; Navy Nurse Corps; ROTC; ROTC, Jr.

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RETIREMENT

Retirement benefits in the military differ from those in the civilian world not only in terms of their relative generosity but also in terms of the functions they perform. Retirement plans in the civilian sector are typically understood to be a form of deferred compensation—one that allows companies to recruit and retain a reliable and experienced work force, to defer some cash payments for wages and salaries, and to reward loyal employees for their work. Military retirement plans fulfill these functions as well. However, unlike in the civilian world, the military retirement system also plays a vital role in regulating the composition of the force, incentivizing long-term service for a core of experienced officers and noncommissioned officers, and at the same time offering a “separation incentive” so that the armed forces do not become top-heavy with older service members.

Historical Development of Military Retirement Systems

Retirement benefits as such were comparatively rare in the ancient and medieval world. Although the largest and most powerful states typically did have some sort of system for rewarding soldiers who performed well in battle or engaged in extended military careers, the early rewards often came in the form of plots of land or shares of plunder. In citizen armies organized along militia lines—for example, those of the early Greek city-states—citizen-soldiers served at their own expense and were expected to be able to support themselves in old age. Soldiers who fought on a mercenary basis were also largely expected to fend for themselves at the end of their careers. In countries with militaries organized along feudal lines, or that possessed dedicated warrior castes—the armies of early-medieval Europe or China, for example—retirement benefits were not

considered necessary. In these countries, feudal landholdings served both as military compensation and as an ongoing source of economic support until the end of the landholder's life.

Systematic retirement benefits appeared with the rise of professional armies. Career soldiers in the Roman Imperial army were given land grants and monetary pensions to support their postsoldiering years, and the Roman system eventually evolved to support these benefits with a dedicated stream of tax revenue. However, provision for short-term soldiers, or for those serving in armies less thoroughly professionalized than the Roman army, could be considerably less generous. The earliest pensions were often awarded solely to individuals who were disabled in battle, or to the widows and orphans of soldiers killed in battle, as was the case in ancient Athens. Many veterans of early-modern European armies were sent to monasteries to subsist on religious charity or were granted nothing more than an official license to beg. As a result, many older soldiers refused to retire until it was absolutely necessary, remaining in the ranks until they were physically unable to serve. Others, forced into civilian life without any retirement provision, became bandits or petty thieves.

Retirement benefits became more widespread and systematic as the modern nation-state became the dominant form of international organization. In 1674, Louis XIV of France founded the *Hôtel des Invalides*, which not only pioneered early social provision for military veterans but also had the ancillary benefit of helping regulate their behavior. He also established a regular pension system and other forms of social provision for aged and disabled veterans, as did other states like Prussia and England. As the modern nation-state became increasingly democratic, provisions for military retirement became more generous, reflecting the increasingly close relationship between soldiers and the states they served.

Retirement Benefits in U.S. Armed Forces

The current system for members of the U.S. armed forces who reach retirement age is far more generous than the retirement plans offered by many companies in the civilian sector, and it arguably offers some of the best military retirement benefits anywhere in the world. The United States allows individuals to retire after 20 years of active service,

regardless of age, and offers retirement payments on a noncontributory defined-benefit basis. In addition to cash payments, military retirees receive a variety of nonmonetary benefits, including heavily subsidized medical care, shopping privileges at military commissaries and exchanges, and the right to use military recreation facilities. Dependents of military retirees—spouses and minor children—also may receive monetary and nonmonetary benefits after the retiree's death.

American military personnel become eligible to receive retirement benefits after a minimum of 20 years of service. Those who retire after longer periods of service may be eligible for more generous cash payments, but those who serve less than 20 years receive no retirement benefits at all, except for those who are medically retired. Active-duty retirees can begin receiving their retirement payments immediately on leaving the service. The typical enlisted retiree from the U.S. armed forces is 42 years of age and has completed 21 years in military service, and the typical officer retiree is around 46 years old and has completed roughly 23 years of service. (Reservists, in contrast, may not collect payments until they reach 60 years of age.) Individuals who are medically retired are allowed to receive retirement benefits irrespective of age or the length of time spent on active duty. Retirement pay in the U.S. military is legally and administratively considered to be reduced pay for reduced service and is handled by the Department of Defense rather than the Department of Veterans Affairs. Military retirees, except those who have been medically retired, remain on an inactive reserve list and can be called up for duty in the event of a war or a national emergency. In practice, however, call-ups of military retirees are rare, and call-ups in peacetime or after 5 years of retirement are virtually nonexistent. The exact amount of retirement pay varies according to a variety of factors, the most important of which are the individual's length of service, his or her basic pay at the time of retirement, and his or her date of entry into the U.S. armed forces. Because basic pay itself varies by rank and length of service, these are also important indirect factors in the amount of retirement pay.

There are three basic systems of retirement pay currently in effect for the U.S. armed forces: the Final Pay system, the High-3 system, and the Redux or Two-Tier system.

Final Pay System

The Final Pay system only applies to service members and retirees who entered military service prior to September 8, 1980. For these individuals, retirement benefits are determined by multiplying basic pay at the time of retirement (called the *computation base*) by a retirement multiplier ($2.5\% \times \text{Number of years of service}$). Under the Final Pay system, retirees who have served 20 years receive 50% of their basic pay as a retirement benefit, and individuals who have served more than 20 years receive payments that are correspondingly larger—approximately 63% of the computation base for retirees with 25 years of service and 75% of the computation base for those with 30 years of service.

High-3 System

Personnel who entered the military after September 8, 1980, but before August 1, 1986, are governed by the High-3 System. Under the High-3 system, the computation base is the mean of the top 3 years of one's base salary, rather than the final base salary as in the Final Pay system. All other calculations are the same.

Redux or Two-Tier System

Individuals who entered service on or after August 1, 1986, which includes the bulk of the current force, can choose between the High-3 system and a third system, commonly called the *Redux* or *Two-Tier* system. Individuals who retire under Redux receive a \$30,000 bonus after 15 years of service. After leaving the service, and before reaching the age of 62, they receive retirement payments that are somewhat smaller than payments under the High-3 system, although the difference is less pronounced for retirees whose length of service approaches 30 years. Payments for retirees older than 62, or who have completed 30 years of service, are approximately equal to payments for retirees under the High-3 System. Although the Redux retirement system has been heavily criticized—and was ultimately made optional as a result of this criticism—the major advantage of the Redux system is the \$30,000 bonus that service members may take relatively early in their lives. (An individual who enters the service at age 19, for example, would receive the bonus before age 35.) For individuals with sufficient business or investment knowledge,

or who are able to complete 30-year careers, this bonus can be a valuable retirement asset. Individuals who leave before they complete 30 years of service, or who do not invest the bonus, may find the Redux option to be less financially advantageous.

Medical Retirement

Individuals who are medically retired may choose to receive payments calculated one of two ways: (1) under the applicable nondisability retirement option or (2) by multiplying the individual's base pay by his or her rated disability percentage.

Reserve Personnel

The retirement system for reservists shares many characteristics with the active-duty retirement system. As with active-duty personnel, reserve personnel can earn retirement benefits with 20 years of service, and benefits for reservists are calculated with either the High-3 or Final Pay system. There are, however, some important differences. Reservists are ineligible for retirement under the Redux system, and reserve personnel begin receiving benefits at age 60, rather than immediately on leaving the service, as active-duty personnel do. In addition, qualifying years in the reserves are defined differently than in the active service, depending not just on time served but on a complex points system that accounts for the reservist's level of activity. Finally, it is important to note that reserve retirement benefits are roughly proportional to reserve salaries and that retirement payments for reservists—though generous for the limited time commitment required during peacetime training—are not financially comparable with active-duty retirement payments.

The key difference between the way that active-duty and reserve retirement benefits are calculated is that a qualifying year in the reserve component is defined as a calendar year in which service member earns at least 50 retirement points. These points can be earned in several different ways: (a) by completing a period of reserve training (a "drill"), (b) by spending time on active duty for training or deployment purposes, (c) by completing authorized military correspondence courses, or (d) by volunteering for military funeral details. The number of points earned is crucial in establishing both the quantity of time spent in qualifying duty and the total of "equivalent years of service" for computing retiree compensation.

Current Issues in U.S. Military Retirement

Military retirement benefits are a significant portion of the U.S. defense budget, and many critics argue that current levels of retirement benefits are unsustainable over the long term. They note that military retirement benefits are in many ways more generous than those in the civilian sector and that retirees often collect retirement benefits for longer than the time that they spend on active duty. (In the United States, roughly 2 million individuals collect retirement pay, and millions more collect some type of benefit, from an annual expenditure of roughly 50 billion dollars per year.) In addition, these critics suggest that the current retirement system offers little provision for service members who are separated after 10 or 15 years of service. However, proposed change to the military retirement system faces close scrutiny from members of Congress, veterans' groups, and current service members, as well as analysts who point out the important personnel management role played by the current retirement system.

Alfred A. Saucedo

See also Benefits, Military; Pay, Military

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ROTC

The Reserve Officers' Training Corps (ROTC) program offers college students scholarships and stipends in exchange for their service as officers in the American military. ROTC began in 1916 as part

of the pre-World War I Preparedness movement; it then underwent fundamental changes at the start of the Cold War. Once a program designed to give young men a basic introduction to military service so that they might be able to serve in the military in the event of war or other national crisis, ROTC became instead an essential source of active-duty officers for the growing Cold War military. Two years of ROTC were required for men at most universities that hosted the program, but the expense of training thousands of men who would not complete the 4 years required for a commission led to the program becoming voluntary in the early 1960s. ROTC also disestablished units at many liberal arts colleges that were too small to justify the costs. This entry discusses the history and makeup of ROTC, before and after the formation of the all-volunteer force (AVF).

ROTC and the Vietnam War

ROTC's advocates have argued that the program exposes future American officers to a civilian education, thus preventing the American officer corps from developing into a separate caste within American society. They have also claimed that ROTC cadets took a wider variety of courses and received a better education than their peers from the service academies. Critics, especially during the Vietnam War period, have argued that ROTC's discipline, use of weapons, and professional curriculum have no place within the civilian university system. The most radical anti-ROTC protestors claimed that ROTC made universities complicit in training killers for an immoral war in Vietnam. Thus, ROTC units become targets for campus protests at the height of the antiwar movement of the 1960s and 1970s.

The Vietnam War period brought changes to ROTC, but these changes should not be overstated. Most university administrators, students, and faculty supported ROTC's presence as a voluntary program on college campuses, even though many of those same people also opposed the war itself. For many members of the faculty, ROTC offered a critical way for civilian faculty to influence the subjects that future officers studied. Simply removing ROTC from campus and turning the education of officers exclusively to the military struck them as extremely unwise. Students generally opposed mandatory ROTC and disliked the appearance of weapons on

campus, but they supported ROTC's continuance as a career option for those who chose it. The Vietnam War thus led to significant reform to ROTC, but the vast majority of people in positions of power within the military and higher education continued to support the existence of the program.

The Vietnam War and associated campus protests led to curricular and structural reforms to the program, but the real impetus for ROTC change came from the end of the draft and the beginning of the AVF. During the era of the draft, many men had used ROTC to control the timing and nature of their military service. As long as a young man remained enrolled in school and ROTC, he could defer his military service. Thus, young men in the 1960s often signed up for ROTC hoping that the war in Vietnam might end before they graduated. Others signed up for the navy or the air force ROTC programs to avoid being drafted as an enlisted man in the army. ROTC saw immediate and steep drops in enrollments in 1969 when the Selective Service System ended student exemptions and assigned each man a random number. Thereafter men with high draft numbers left the program in droves because they had no need of ROTC to protect them from military service.

ROTC and the All-Volunteer Armed Forces

The AVF's implementation in 1973 meant that young men would thereafter only join ROTC as pure volunteers rather than as refugees from conscription. Consequently, ROTC enrollments fell once again. Army ROTC enrollments plummeted from 141,495 in the academic year 1967–1968 to just 38,228 in the academic year 1974–1975. In the same period, air force ROTC enrollments fell from 44,987 to 15,993, and navy ROTC enrollments fell from 9,443 to 6,546. These drops threatened the viability of ROTC programs nationwide and led to calls for the military to abandon the program altogether in favor of off-campus Officer Training Schools and Officer Candidate Programs.

ROTC's problems mirrored those of the AVF more generally. Without the Damoclean sword of conscription hanging over their heads, too few young men volunteered for military service. ROTC's fate was tied to the larger AVF, which began to see a revival in the late 1970s and early 1980s as the military improved the pay, benefits, and living conditions

of military service. American society also showed a new respect for military service as a profession as the passions of the Vietnam War era began to recede. A new generation of college students, more career focused and less impassioned by the war, also made ROTC's place on campus more comfortable. For their part, ROTC units reduced the military-style discipline, the on-campus marches and parades, and even the haircut requirements to make their students stand out less from their non-ROTC peers. In this vein, the University of Connecticut successfully petitioned the army to remove an ROTC commander in the mid-1990s for, strangely enough, allowing classes to be run "like a boot camp."

ROTC's curriculum changed as well. The military moved purely professional courses like weapons training and map reading to off-campus summer programs. On many campuses, students substituted for those courses civilian classes on subjects like political theory, non-Western culture, and literature. Many campuses also ended the teaching of subjects like military history by ROTC instructors, demanding instead that students take those classes from civilian professors. ROTC programs often came under the authority of one of a university's colleges, thus subjecting them to curriculum review and a closer scrutiny over the qualifications of their faculty. As a result, the number of ROTC instructors with master's degrees rose sharply. By the 1980s, a master's degree became a requirement for an assignment as an ROTC instructor.

ROTC also reached out to groups of students it had previously marginalized. The most important groups were the same people who were making the AVF work: African Americans, Hispanics, and women. ROTC offered people from these groups access to the officer corps that had previously been difficult for them to attain. The armed services opened new ROTC units at historically Black colleges and universities and made great efforts to assign African American officers to ROTC units at schools with growing minority populations. They also reached out to women, who were showing an unanticipated interest in the AVF and military service more generally. In the late 1970s, the military recognized this interest by disbanding the separate female auxiliaries (the Women's Army Corps, the Woman in the Air Force, and the Woman Accepted for Volunteer Emergency Service) and integrating women more fully into the military's noncombat arms. By 1980,

more than 4,000 women were in ROTC programs nationwide, and the numbers continued to grow. Today, one in five ROTC cadets is a female.

ROTC also made an effort to attract more working-class students, in large part because middle-class students were showing little interest in military service. The services closed many of their units in the Ivy League and at liberal arts colleges in favor of branch campuses of public universities in the South and Midwest. Between 1968 and 1974, the services closed 88 ROTC units, almost half of them in the Northeast. At the same time, they opened 80 new units, 45 of which were in the South. As the costs of college grew, ROTC became more attractive to men and women who saw the program as a way to afford higher education. A 2-year ROTC program aimed at attracting men and women who had transferred from the growing number of American junior colleges. Working-class students, women, and African Americans also made up increasingly large percentages of university populations nationwide. Thus, ROTC was following the general trend in higher education.

These changes solved ROTC's enrollment problems. From the academic year 1975–1976 to 1980–1981, total ROTC enrollments steadily increased from 65,968 to 99,659. Enrollments continued to rise through the 1980s as the Reagan administration increased expenditures on the military and as the reputation of the military continued to recover from the Vietnam era. Additionally, college tuition and costs rose sharply during the decade, making ROTC more attractive for young men and women who sought financial aid options other than loans. The armed services also advertised and marketed ROTC as a means for gaining access to high-paying jobs after the mandatory military service period (usually 3–5 years, depending on the program) was over.

Current Trends

As a result, ROTC recovered from the depths of the problems it had faced in the late 1960s and early 1970s. Army ROTC now accounts for 60% of newly commissioned army officers and more than half of the total army officer corps. Air Force ROTC provides a little less than half of the officers for that service. The navy, which has always focused less on ROTC than the other services, nevertheless accesses one in five of its officers from ROTC. ROTC today is found on 273 campuses and has cross-enrollment

agreements with 1,100 more. These agreements allow students from non-ROTC host schools to take ROTC training at nearby host schools.

Although ROTC has avoided large-scale campus protests since the end of the Vietnam era, it has not been immune from controversy. Critics of the Department of Defense's "Don't Ask, Don't Tell" policy argued that barring openly gay men and women from serving in the military (and by extension in ROTC programs) violates the equal opportunity policies of civilian colleges and universities. Most schools dealt with this problem by forging compromises whereby university policies apply to ROTC cadets as long as they remain students. On graduation, of course, the newly commissioned officers were subject to the Uniform Code of Military Justice. These compromises helped ROTC retain its presence on most campuses, diffusing the isolated protests that appeared on some campuses in the mid-1990s.

More recently, ROTC programs have avoided the kinds of antiwar protests that were common during the Vietnam period. Although some critics continue to argue that the civilian university system should not assist in the training of officers for wars, student protest against ROTC has been virtually nonexistent. In large part, the absence of protest can be explained by the lower level of societal protest against the wars in Iraq and Afghanistan, but ROTC is also a different program than it was in the 1960s. Now part of a volunteer military, it only bears a connection to war for those who actively choose to enroll in it. The age of the "draft-motivated volunteer" who, paradoxically, enrolled in ROTC to *avoid* being sent to war is now over.

The highly visible rise to prominence of a number of ROTC-trained officers has helped remove the second-class stigma once associated with the program inside the armed services. Foremost among these senior officers was ROTC graduate Colin Powell, but the rise to senior rank of others like Air Force Chief of Staff General Richard Myers and Army Chief of Staff General George W. Casey have been important as well. ROTC is today a recognized and established part of both the military's officer accession programs and the daily life of many college campuses.

Michael S. Neiberg

See also All-Volunteer Force; Commissioned Officers; Diversity; "Don't Ask, Don't Tell"; Powell, Colin;

Recruiting on College Campuses; Training, Army Officers; Training, Naval Officers; Vietnam War

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ROTC, Jr.

In high schools across the United States, young student cadets fill the ranks of the Junior Reserve Officers' Training Corps (JROTC). Despite their stated virtues, the growth of these JROTC programs, sponsored by the U.S. Army, Navy, Marine Corps, and Air Force, have triggered a polarized debate over military recruitment of America's middle school and high school students. This entry describes the evolution of the Junior Reserve Officers' Training Corps and the debate over the efficacy and proliferation of thousands of JROTC programs in schools across the United States.

Legislative Foundation

First conceived in 1911 by Army Lieutenant Edgar A. Steevers, the JROTC program officially began in 1916 as a means to increase military readiness during World War I. The National Defense Act of 1916 authorized army ROTC for colleges and university as well as army JROTC for high schools. The law also dedicated defense funds for uniforms, equipment, and salaries for instructors. The National Defense Cadet Corps also emerged as an alternative without federal funding. After World War II,

Defense Secretary Robert S. McNamara cut the floundering JROTC's budget in 1963 only to have Congress revive the program in the ROTC Vitalization Act of 1964. The legislation officially opened JROTCs and ROTCs to the U.S. Navy, Marine Corps, Air Force, and Coast Guard and began to replace active-duty instructors with retirees.

Under law, JROTC programs are intended "to instill in students in United States secondary educational institutions the values of citizenship, service to the United States, and personal responsibility and a sense of accomplishment" (<http://www.cadetcom.mand.army.mil/jrotc-history.aspx>). Additionally, Title 10 of the U.S. Code, Section 2031, further outlines JROTC's basic structure and operations. The federal government subsidizes uniforms, equipment, and textbooks and shares 50% of the instructors' salaries with local school districts. Each instructor receives a salary equivalent to active-duty pay. Students who successfully complete the 3- to 4-year JROTC programs earn the privilege of enlisting at slightly higher pay grades. Each service branch has designed its own unique curriculum around this framework.

JROTC Growth and Opposition

Offered as an elective in more than 3,000 schools across the United States, JROTC programs boast unique, service-specific curriculum with a unifying emphasis on discipline and leadership. Each service's JROTC offers a range of specialties and activities from marksmanship teams, orienteering, and rocketry to coursework on military, aviation, or naval sciences. Every JROTC program focuses on self-discipline and leadership developed through coursework, physical fitness, and opportunities in the corps' hierarchy for cadets to lead their peers. Moreover, some JROTC cadets have the opportunity to participate in regional and national competitions on marksmanship teams, color guards, and drill squads. Many cadets also participate in organized trips to overnight and summer camps as well as historical, political, and military sites both in the United States and abroad. Outside of school, the programs devote numerous hours to community service projects ranging from food banks and Habitat for Humanity to the Marine Corps's Toys for Tots. Although JROTC has no service obligation, cadets interested in pursuing a military career or college have scholarship opportunities for future studies.

Throughout the 1990s, JROTC programs flourished across the country and particularly in urban public school districts. Proponents argued that JROTC programs could provide stability and direction for inner-city youth who may otherwise find themselves mixed up with gangs and drugs. By 2005, the number of JROTC programs had more than doubled from 1,493 in 1990 to 3,184 in high schools, with the cadet population exploding from 216,000 to more than 500,000 in the same period. As units' caps increased, growth ultimately hinged on Defense Department funding, even though funding had grown from \$65 million per year in 1990 to \$293 million in 2005. In 2012, the nationwide JROTC programs received more than \$391 million, including \$73 million for personnel. That same year, Chicago, like many other urban school districts, had become a JROTC stronghold with 44 high school programs, including 7 military academies and 12 other Middle School Cadet Corps programs. Dramatic demand for the program not only resulted in waiting lists but also a struggle to find qualified instructors.

As JROTC began to boom in the 1990s, opposition to its growth also increased. Antiwar organizations, including the Central Committee for Conscientious Objectors and Veterans for Peace, oppose JROTC over concerns about curriculum quality, the glorification of war, and dubious recruiting practices. Although Title 32 of the Code of Federal Regulations, Section 542.5, restricts direct recruitment by JROTC programs, it also charges the programs with raising awareness for military careers. In 2000, the Joint Chiefs of Staff defended increased JROTC budgets before the House of Representatives' Armed Services Committee. Their testimony indicated that between 30% and 50% of JROTC cadets continue into the military either through college ROTC or by enlistment after graduation. Further opposition surrounds Middle School Cadet Corps who enroll as early as sixth grade and Section 9528 of the No Child Left Behind Act of 2001, which provided the military with access to high school student information that culminated in a recruiting database of 30 million names.

JROTC's Future

As JROTC continues to grow, both supporters and opponents will watch in anticipation of its future

successes and failures. Decades of the unprecedented growth of JROTC still await a verdict on how successfully it has contributed to the mission of uplifting troubled inner-city youths. The justification of the costs to local school districts will hinge on this promise as well as JROTC's future as a viable alternative to more traditional extracurricular activities. Despite their differences, all sides will undoubtedly hope for a brighter future for all students seeking the American Dream.

Alex S. Kasper

See also Recruitment, Enlisted; Recruitment, Officer; ROTC

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RULES OF ENGAGEMENT

Rules of engagement (ROE) are guidelines to help commanders minimize unnecessary collateral damage while protecting their inherent right of self-defense during operations. Theater and operational ROE are derived from standing ROE issued by the Joint Chiefs of Staff and limitations described by the National Command Authority. The mission, enemy threat, and host nation constraints also contribute to development of the ROE. Once approved, ROE are printed and issued to subordinate commands. In most cases, every soldier carries a copy. The basic tenets of ROE are that they should be easy to read and understand and that they must clearly indicate the circumstances under which soldiers may use deadly force to defend themselves and achieve mission success. This entry looks at the evolution of ROE in the U.S. military and current debates.

Background of Rules of Engagement

ROE are based on the laws of land warfare but vary by mission and location. The U.S. military

began to emphasize the need for understanding and training in the ROE following the Vietnam War. Ground troops increasingly had difficulty identifying an elusive enemy as the war dragged on, and war crimes like My Lai created the perception that soldiers lacked rules for interacting with civilians during operations. The Defense Department developed doctrinal laws of warfare based on The Hague and Geneva Conventions. The U.S. military issued standard ROE to provide guidance for all operations both inside and outside the continental United States, which are a distilled version of that doctrine. By 1991, judge advocates were firmly entrenched as staff advisors to senior commanders and war planners to provide expertise in the laws of war and to draft ROE for specific theaters.

The intent of all ROE is to provide clear guidance to soldiers, but there is an inherent tension between the two goals of ROE. Rules that are too lax can result in unnecessary collateral damage, including civilian deaths. An example is the case of James Mowris, a soldier who served in Somalia in 1993. During a patrol, his platoon searched a small village and found several munitions. The platoon questioned a villager and several minutes later two men ran away from the village. The platoon chased the men, and a short time later, Mowris shot and killed one of them. The ROE Mowris operated under were vague and covered five typed pages. Soldiers of all ranks during the investigation admitted that the ROE were unclear to them.

Conversely, rules that are too strict can limit soldier initiative and cause damage to friendly forces. The 1983 Beirut barracks bombing resulted in the deaths of 241 marines and sailors. Marine sentries failed to engage a truck that smashed through the fence surrounding their compound. The truck crashed into a barracks building and detonated a large amount of explosives. The failure of the sentries to engage the truck prior to detonation resulted from confusion about the ROE. Each marine carried two ROE cards that conflicted with the compound commander's orders for force protection posture. The ROE required sentries to carry loaded magazines, while the force protection orders required personnel on the compound to carry unloaded magazines. As a result, the sentries had unloaded weapons and were unable to engage the truck.



Surviving marines help lift wounded Morris Dorsey out of the rubble after a Mercedes truck loaded with explosives plowed into the headquarters building where they were all still sleeping at 6 a.m., October 1, 1983.

Source: Photo by Peter Jordan//Time Life Pictures/Getty Images.

ROE are not limited to ground operations. The constraints inherent in ROE also affect air operations. While ROE are based on the laws of land warfare, political considerations might also influence their level of restriction. Pilots in Operation Rolling Thunder during the Vietnam War operated under strict ROE that prevented them from bombing some targets even though the law of land warfare recognized them as legitimate targets. The restrictions resulted from the political desire to keep the war limited and prevent direct intervention from China or the Soviet Union. Conversely, pilots operated under less restrictive ROE during the 1991 Persian Gulf War and were immensely successful in engaging

their selected targets. Their success was due in part to greater political will derived from the legitimacy of a multinational coalition but was also due to the level of education and training with ROE and the involvement of legal specialists in drafting them.

Rules of Engagement in the 21st Century

ROE continue to be an important issue in the current counterinsurgency wars because of the inherent tension between its two primary goals. In 2009, General Stanley McChrystal ignited a sharp debate over ROE when he announced more restrictive rules after assuming responsibility for the war in Afghanistan. Critics argued that this decision endangered American soldiers, while proponents argued that the new rules would help meet strategic objectives by reducing the amount of noncombatant deaths and property damage. General David Petraeus stoked the fires of debate when he assumed responsibility for the war in 2010 and announced he would not change the previous policy.

Incidents like the abuse of prisoners at Abu Ghraib and the killing of Iraqi civilians by U.S. troops in Haditha highlight the continued need for clear, easily understood ROE. To prevent incidents like these, the military now integrates ROE into all levels of training. Officers receive classroom briefings from military lawyers on the laws of land warfare prior to deploying, while soldiers receive briefings specific to the theater of operations and geared toward tactical operations. From this basis, both officers and enlisted personnel are trained on ROE through tactical problems. Units face a variety of tactical situations that require a working knowledge of ROE. Observers evaluate unit performance and lead discussion in after-action reviews. In this way, soldiers integrate ROE into everyday operations in a meaningful way.

The U.S. military has a cultural aversion to limiting initiative on the battlefield, which acts against ROE becoming overly restrictive. The instant information age, however, has pushed many commanders toward more restrictive measures. Any incident that occurs on the battlefield can be broadcast around the world within hours and instantly shape public perception. Public perception influences policy, which, in turn, has a direct effect on military operations. Therefore, commanders are pressured to adopt more restrictive ROE to avoid unwanted negative attention. An investigation is usually conducted after



Military police from 10th Mountain 10th MP Company 2nd Platoon conduct a presence patrol in the area around Orgun-E. These patrols reduce the likelihood of the Taliban establishing an area of operation in this vicinity. Sergeant C. J. Krueser, Squad Leader, and Sergeant Darian Tobias, B Team Leader, take notes as the Platoon Leader addresses the platoon prior to the patrol. He is going over the route, ROE, and other information to ensure that his platoon is ready for the mission.

Source: Photo by Staff Sergeant General Kyle Davis, 55th Signal Company (Combat Camera).

any ROE incident to determine if the rules need to be changed. It is likely that this debate will continue to pervade military and political discussion as the U.S. military believes that low-intensity conflict will dominate operations in the decades to come.

David Glenn Williams

See also Abu Ghraib; Geneva Conventions; Hague Conventions; Laws of War; Lebanon, U.S. Intervention in (1982); My Lai Massacre; Somalia Intervention; Vietnam War; War in Afghanistan

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RUMSFELD, DONALD

Donald Rumsfeld (b. 1932) served as the youngest secretary of defense (1975–1977) and also the oldest (2001–2006). His first tenure, under President Gerald R. Ford, was uneventful; his second, under President George W. Bush, proved to rank along with that of Robert McNamara (1961–1968) as the most vilified of any secretary of defense. This entry examines the career and policies of Donald Rumsfeld.

Rumsfeld attended Princeton University, where his relentless drive found its outlet in the wrestling team. He was a naval aviator (1954–1957), seeing

no combat. He came to Washington as a congressional aide, winning his own seat in Congress in 1962 from a solidly Republican district in the Chicago suburbs. In 1969, he left Congress to become a senior aide to President Richard M. Nixon, gaining cabinet rank while avoiding the scandals of the era. After a year as ambassador to the North Atlantic Treaty Organization, he was recalled by his old House colleague President Gerald Ford to be White House chief of staff (1974–1975), then secretary of defense. His most difficult challenge was rebuilding a military dispirited by the fiasco in Vietnam and anxious about the end of the draft. He worried that the Soviets were surpassing the United States in nuclear weaponry, so he sought to undermine the détente policy of Ford and Secretary of State Henry Kissinger. Rumsfeld's logic was to assume the worst-case scenario, not the most likely scenario, and react accordingly; in dealing with Iraq in 2003, he reversed course and assumed a best-case scenario.

After Ford's defeat in 1976, Rumsfeld became a highly successful chief executive of a major drug company and then moved to electronics where his firm pioneered high-definition television technology. All the while, Rumsfeld served on numerous national policy committees, and he seriously considered running for president. He could raise money and organize, but he lacked name recognition, charisma, and a distinctive political base.

In his second tour at the Pentagon, Rumsfeld became a media star thanks to his accessibility to reporters looking for colorful sound bites; public opinion responded enthusiastically to his wit and his determination to radically reform military readiness. Rumsfeld brought in his own team of neo-conservative civilians, led by Deputy Secretary Paul Wolfowitz and Under Secretary for Defense Policy Douglas Feith. They ignored the advice of the generals, who grew angrier and angrier. The secretary's response was to build his own base of support in Congress and the White House, where his close friend Vice President Dick Cheney had a powerful voice in setting policy. The attacks on September 11, 2001, provided them with the excuse that the strategic environment had radically changed. America's enemy was now terrorism, not a powerful nation-state, and a new approach was urgently needed regardless of the resistance of reactionaries still rooted in the Cold War against the Soviet Union. Rumsfeld rejected the "Powell Doctrine" that called

for overwhelming force shaped by explicit political goals and a specific exit strategy. He promulgated the "Rumsfeld Doctrine" with a reliance on high technology, special operations, and a quite small but highly maneuverable ground force. Looking for more bang for the buck, his inspiration came not from military history but from his own business experience. He told the nation in 2002, "We must promote a more entrepreneurial approach: one that encourages people to be proactive, not reactive, and to behave less like bureaucrats and more like venture capitalists" (Devji, 2008, p. 150). The career military officers had a very different set of loyalties that were internally motivated and could not be reprogrammed by outside politicians or ideologues.

General Eric Shinseki, the army chief of staff, told Congress that the army needed far more troops to pacify Iraq in 2003 than Rumsfeld would allow. Arguing that the army was stretched too thin, he rejected Rumsfeld's plan to demobilize two divisions and, instead, asked for two more divisions to carry out its assignments, and told Congress the army needed the Crusader artillery system. Shinseki was proven right, but he was ignored on Iraq, and the Crusader was canceled. While Rumsfeld did not make tactical decisions about Iraq, his civilian team single-handedly made all the strategic decisions as well as critical manpower allocations. Generals anonymously drew unflattering comparisons with McNamara and his whiz kids who mismanaged the Vietnam War.

Rumsfeld's most serious mistakes involved the rejection of the military's estimates of the force levels needed after the overthrow of Saddam Hussein and his misjudgment of the probability of a large-scale Sunni insurgency with Iranian involvement. Furthermore, his disbanding of the Iraqi army created a vacuum that insurgents rushed to fill. The result was that American, Iraqi, and Allied forces were badly mauled for years; public opinion turned sour, the media became hostile, and the allies turned away. Rumsfeld refused to listen to the generals and the State Department, even after stunning surprises in Iraq and Afghanistan that belied the premises of his strategy. The generals resisted, but he flooded the Pentagon with 100 e-mails a day, while his energetic, loyal civilian staff meticulously checked to see that his policies were enforced. In areas where the military was overstretched, Rumsfeld hired scores of private contractors, such as Blackwater, to provide

bodyguards, security for installations, and training for Iraq's fledgling army and police. The training was far too little, too late, as Iraq seemed unable to handle its own internal security.

Rumsfeld never lost the support of Bush and Cheney and clung to his course even as he lost his base in public opinion. He lost out in Congress as Democrats made the war a major campaign issue in 2006, and especially as Senator John McCain demanded a new policy that would rely on a "surge" of much larger numbers of infantry in Iraq. Rumsfeld was forced from office as Republicans lost control of Congress in 2006. The surge was then implemented by his successor Robert Gates, and it proved successful. In a broader perspective, the Rumsfeld Doctrine was the military dimension of a new approach to the Middle East—one that replaced the goal of stability with the notion of transforming the region into modern democracies of the sort that do not go to war with one another. That dream of democracy in the Middle East faded out along with Rumsfeld's reputation.

Richard Jensen

See also Defense, Department of; Defense, Secretary of; Global War on Terrorism; Iraq War (2003); Powell, Colin; President as Commander in Chief; War in Afghanistan

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RUSSIA

The Russian Federation spans the Eurasian land-mass with the Ural Mountains accepted as the dividing line between Europe and Asia. The capital

of Russia is Moscow. The country's population, which has been showing a steady decline, in July 2009 was estimated at 140,041,247, the 10th most populous country in the world. Formally considered a federal democracy with a parliamentary-style legislature headed by a prime minister and a president as head of state, in reality the Russian Federation has been in an extended era of uncertain political and economic transition from a Marxist socialist dictatorship toward a democratic market economy without showing signs of imminent success in either the political or economic realms. This entry discusses Russia's armed forces and military personnel, civil-military relations, and border issues.

Armed Forces

The president is the commander in chief of the armed forces, but the minister of defense oversees the day-to-day running of the armed forces. The leadership of the ministry of defense consists of the minister, three first-deputy ministers, six deputy ministers, and a chief military inspector. It is the norm for all of these positions to be held by uniformed officers. The General Staff manages operational control of the six services of the armed forces: (1) the ground forces, (2) the navy, (3) the air force, (4) the space forces, (5) the airborne troops, and (6) the strategic rocket forces. The ground forces are divided into the four branches of (1) motorized rifle troops, (2) tank troops, (3) artillery and rocket forces, and (4) army aviation. In 2006, they numbered 321,000 officers and soldiers, organized into 29 divisions. The army is equipped with 22,000 tanks, 26,000 armored fighting vehicles, 20,000 artillery pieces, and 1,700 helicopters, not all of which it can man. In comparison, the U.S. Army has 547,000 personnel and 10 divisions.

The Russian navy is less than half the size of the ground forces and contains nuclear submarines, aircraft carriers, and surface ships armed with guided missiles. It is divided into six organizational entities: (1) the Northern Fleet, (2) the Black Sea Fleet, (3) the Baltic Fleet, and (4) the Caspian Flotilla, (5) naval aviation, and (6) naval infantry. It is currently in the midst of an ambitious rebuilding program that focuses on almost completely replacing and upgrading the surface fleet and reducing the submarine forces.



RSF cruiser *Moskva*.

Source: North Atlantic Treaty Organization Photo, Alan Burns.

The Russian air force is divided into three branches: (1) long-range aviation, (2) military transport aviation, and (3) tactical aviation/air defense. After more than a decade of stagnation, aviation research and development are now back on track and hope to deliver new models of fighters and bombers in the coming years, though economic problems could significantly delay the process.

After the collapse of the USSR, the Soviet space program was assigned to the ministry of defense as a separate branch. In addition to research and exploration of space, the space forces have both offensive and defensive military missions—to provide satellite guidance of cruise missiles launched against enemies and to provide early warning when enemy missiles are launched against Russia. It also operates surveillance satellites to gather intelligence on Russia's foes and communications and global positioning satellites for the armed forces and government.

The airborne forces, which include airborne divisions and *Spetsnaz* (commando-type) units, operate as a separate branch of the armed forces. A much smaller

branch than the ground forces, they are intended for special operations against foreign armies, governments, and to counter foreign and domestic terrorists.

The strategic rocket forces branch is divided into (1) the strategic missiles forces, (2) the military space forces, and (3) the space missile defense forces. The missile forces are further subdivided into those employing (1) ground-based intercontinental ballistic missiles, (2) intermediate-range missiles, and (3) medium-range nuclear missiles. The posture of Russia's nuclear force has officially been declared to be defensive and deterrent.

Military Personnel

The armed forces are manned by a mixed manning system—that of conscription and voluntary enlistment. Russian males register for the draft at age 17 and can then be conscripted between the ages of 18 and 27. The current period of service obligation is 1 year on active duty and then a reserve obligation until age 50. In 2006, 30% of Russian servicemen were volunteers serving under contract, and the armed forces hope to eventually increase that percentage to 70%, concentrating the volunteers in the airborne divisions and naval infantry regiments. To attract volunteers for the contract system, the armed forces plan on raising pay, living standards, and benefits for families of service personnel. Hazing is still a problem in the Russian army, a holdover from Soviet days, and it is seen as being responsible for the reluctance of many men to serve and the active seeking out of deferments and exemptions by a significant portion of the draft pool. Currently, because of the liberal nature of conscription laws, 90% of eligible males avoid service, which has been used as justification to enhance recruiting through the voluntary contract system. The declining birth rate also poses long-term problems for maintaining the forces. Women are accepted for service on a volunteer basis.

In 2009, the Russian armed forces were the fifth largest in the world, numbering 1.037 million men and women compared with the U.S. armed forces, which were second largest in the world with 1.325 million personnel. The Russian armed forces claim to possess 2.4 million reservists; however, there is no organized reserve force. The reserves comprise former servicemen subject to recall in time of national emergency. There are also no corresponding forces equivalent to the U.S. Army National Guard, the



RFS frigate *Pytlivii* and cruiser *Moskva*.

Source: North Atlantic Treaty Organization Photo, Alan Burns.

Navy and Marine Corps Reserves, and the Air National Guard. Quick and efficient mobilization in time of crisis will therefore remain problematic, as it has been since czarist times.

Civil-Military Relations

In 2006, Russia's defense spending amounted to the equivalent of \$40.3 billion, which was 4.3% of Russia's gross domestic product. Russia ranked 30th in the world in expenditures in 2005. In comparison, the defense spending of United States in 2009 was 4.06% of the gross domestic product, and it ranked first in the world in total dollar value of spending. Given Russia's anemic economy, based primarily in the export of commodities, particularly oil and natural gas, and bleak prospects for significant growth in the near future, the budgetary means available to the Russian armed forces suggest that its ambitious

rearmament plans will take much longer than publicly announced.

Civil-military relations vastly improved with the appointment of Vladimir Putin to succeed Boris Yeltsin as Russian president in 2000. Putin reversed the decline in military budgets, promised a reinvigoration of the armed forces, and adopted a hard-nosed diplomatic position against the West, all of which pleased the military. He worked to improve the public image of the armed forces and reinstituted military parades through Red Square. The president appoints the minister of defense, thereby guaranteeing a cooperative and compliant relationship. Putin has also personally ingratiated himself with the General Staff and leading military figures.

Russia's armed forces are geared to engage in armed conflict on various levels, including local wars on and within its borders, regional wars in conjunction with and against several neighboring states, and

large-scale wars of international coalitions. They plan to be capable of conducting two local conflicts simultaneously. The military is also prepared to participate in international peacekeeping operations. The armed forces are also expected to play a role in Russia's Global War on Terrorism. The armed forces' primary responsibilities in the Global War on Terrorism are to safeguard Russia's weapons of mass destruction, all Ministry of Defense property and facilities, and navigation and air traffic and to engage in counterterror operations. The Ministry of Defense is also called on to support and coordinate counterterror operations with other federal agencies, to conduct counterterrorism intelligence operations, and to disseminate intelligence to other government counterterrorism units.

Borders

The potential flash points for conflict between the Russian Federation and its neighbors or international competitors are many; however, the likelihood that any would erupt into significant military action is low. There are border issues between Russia and nearly all of its northern and western neighbors, and Russia seeks to maintain economic and diplomatic dominance over all the states newly established after the collapse of the Soviet Union—areas it refers to as the “near abroad.” All of these states have sizable ethnic Russian populations who look to Russia for protection. The Baltic States are dissatisfied with their borders based on population distribution. When boundaries were drawn in the 1990s, many of their inhabitants were left in Russia. While the Finnish government professes satisfaction with its borders, many Finns seek to revise the borders imposed on them in 1940 and again in 1944, which created exclaves of Karelians in the south and other Finns on the eastern border. Ukraine's insistence on keeping traditionally Russian territory, including Crimea and the major naval base of Sevastopol granted to it in the 1950s, presents the largest obstacle to friendly relations. Russia is psychologically unprepared to accept permanent loss of these territories with their predominantly Russian populations and the strategic base of Sevastopol, traditional home of the Black Sea Fleet. The boundary between Ukraine and Russia through the Kerch Strait and Sea of Azov has still not been settled. Ukraine has inflamed the situation by seeking North Atlantic Treaty Organization (NATO) membership, which has been denied to it

so far. Friction still exists between Japan and Russia over the Kurile Islands taken by the USSR in 1945. Russia's relations with the states of the Caucasus are fraught with manipulation and intimidation. The two wars with Chechnya have left intense bitterness among Chechens and fueled Islamist terror groups, as has the continued presence of Russian troops. Russia seeks to destabilize Georgia and exploit ethnic tensions in north and south Ossetia and has employed military forces there to help their Ossetian “allies,” against Georgia. Like Ukraine, Georgia seeks NATO membership as a shield against Russian aggression and to forestall compromise with disaffected minorities who look to Russia for aid. Russia has consistently taken the side of Serbia against the United Nations, the European Union, and NATO with regard to Balkan territorial revisions and economic sanctions. The West's expansion of NATO into Eastern Europe, specifically Poland, Lithuania, Latvia, and Estonia, all of whom fear Russian intervention, is seen as provocative by the Russians. The Bering Strait maritime boundary between the United States and Russia is still unresolved, as the Duma has failed to ratify an accord proffered in 1990. Russia's provocative and groundless claims to the Arctic have alarmed the Nordic countries, Canada, and the United States. Under Putin, first as president and then prime minister, Russian foreign policy has been generally anti-Western and confrontational mostly as a sop to wounded Russian pride, but not aggressive to the point of risking war with NATO.

Future Prospects

The prospects for the Russian Federation to become more than a regional power in the next 10 years are very dim. Nevertheless, Russia, which has embarked on an ambitious, if not overly ambitious, plan of rearmament of all its services and branches, maintains a goal of reestablishing its global power. The collapse of the USSR wrought havoc with recruitment and retention of personnel and brought research and development of new weapons systems to a halt. With the end of the pro-Western Yeltsin era in 2000 and the ascendance of Putin, and the price of oil rising in the early 2000s, Russia was able to conceive of revitalizing its decrepit and decaying armed forces. Billions of rubles have been poured into the armed forces, especially in research and development of weapon systems; however, results have not yet materialized

in little other than prototypes of new tanks, missiles, aircraft, and warships. With the worldwide drop in oil prices in 2008 and the onset of a global recession, Russia's ability to fund a resurgent armed force as planned is in serious jeopardy. Before the recession, Russia's economy lacked vitality, and there is no basis for expecting any to be created when the global economic crisis wanes. While necessarily speculative, it seems clear that despite the confrontational nature of its diplomacy, Russia does not want war with the West, and obviously is not prepared for armed conflict. Limited objective skirmishes in the Caucasus are still possible, but as long as cool heads prevail, there is little potential for sparking wider conflict.

Roger Roi Reese

See also Army, U.S.; Asia; Central Asia; Conscription; Hazing; Military Organization, Army; North Atlantic Treaty Organization; Peacekeeping; Terrorism; Weapons, Nuclear; Women

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RWANDAN GENOCIDE

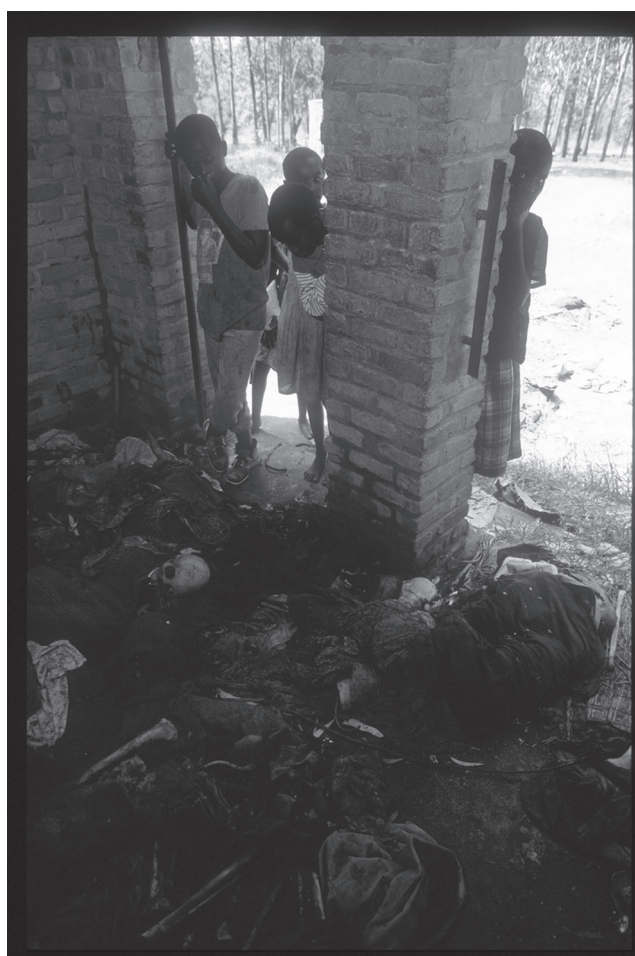
In 1994, at least 100,000 Hutus murdered approximately 800,000 Tutsis and 50,000 Hutus in the poor and compact nation of Rwanda. The genocide, whose

roots lie mythically in perceived ancient identities and modern ideas of nationalism and domination, wiped out the infrastructure of the nation, created a massive refugee crisis, and left millions of Rwandans suffering horrible physical injuries and emotional trauma. Prosecuting those responsible for committing the genocide, assisting victims with myriad needs, and building a stable and peaceful nation have been mammoth tasks for the government of Rwanda. With foreign financial support, the government of President Paul Kagame launched a unique way of rebuilding the shattered country by using an existing cultural problem-solving ritual: *gacaca*. This entry examines the clash between the Hutus and Tutsis, the events and people of the Rwandan genocide, and attempts to recover from the genocide.

Background to the Genocide

Any analysis of the Rwandan genocide must explain the history of complex relationships between Tutsi and Hutu stretching over five centuries and complicated by the exploitative and manipulative colonization policies of Germany and Belgium. Metanarratives that explain the origins of the Hutu and Tutsi peoples and justified the political domination of the former over the latter became mutually reinforcing and created a charged, polarized environment that made genocide possible. For reasons ranging from a selfish need to hang onto power, a desire to unify the Hutu people in the face of intra-elite factionalism and economic deprivation, and a desire to eliminate an alleged Tutsi “fifth column,” the Rwandan government under President Juvenal Habyarimana employed the extremist ideals of a “Hutu Power” movement dedicated to mobilizing Hutu peasants for genocidal participation. At its core, Hutu Power viewed the present as prologue to the repetition of the past in two critical ways. First, the Tutsis of the rebel Rwandan Patriotic Front had invaded the nation's northern provinces in 1990 just as their cattle-herding ancestors had supposedly done 500 years earlier. Second, in both cases, Hutu Power advocates argued, the Tutsi foreigners' goal was to subjugate the indigenous Hutu by (re) establishing a centralized aristocracy of Tutsi lords and Hutu serfs. Blasted through radio and television transmissions, Hutu Power justified and inspired the mass murder, rape, and mutilation of Tutsis as a desperate plan for self-preservation. By appealing to the foreign origins of the Tutsi, Hutu Power advocates

ironically borrowed from their former German and Belgium colonizers a biblical passage that explained Tutsi inferiority. The “Hamitic Myth,” extrapolated from the book of Genesis, depicted Tutsis as offshoots of Noah’s cursed son Ham who had migrated from northern Africa to Rwanda in the 15th century. On their arrival, Hutu Power proclaimed, the Tutsis used cattle as economic leverage to subjugate the Hutus, create an authoritarian monarchy, and rule as Belgium’s exploitative puppets. The Hutus, in this narrative, successfully revolted and supposedly freed all Rwandan Hutus from domination by the Belgians and the Tutsis in 1962, but that freedom was under siege once again.



A group of local children peer in at the debris and dead bodies on September 16, 1994, at a church in Ntarama, Rwanda. The bodies of 400 Tutsis murdered by Hutu militiamen were found in the church at Ntarama by an Australian-led UN team.

Source: Photo by Scott Peterson/Liaison.

The ideals of Hutu Power would have had little influence outside of a small circle of extremists if the economic and political conditions in 1994 had not already created a climate of fear and anxiety in the Rwandan countryside. The late 1980s saw a collapse in coffee prices, growing unemployment of educated youth, rising population density that the arable land could not sustain, and a demand by the World Bank for economic “structural readjustment.” Adding to these economic pressures on the one-party state was growing elite fragmentation and an expanding civil war. The first postindependence government of Gregoire Kayibanda drew support and patronage from the south, but a military coup in 1973 by Habyarimana, reoriented the internal axis of power to the north and northwest. As southern Hutus increasingly chafed at their marginalization from power, Habyarimana’s allies believed that a unifying theme such as Hutu Power could restore Hutu cohesion while keeping themselves in positions of privilege. By most accounts, preparations for the genocide began just after the 1990 invasion. They included the formation and indoctrination of disaffected Hutu youth into militias and the holding of large Hutu Power rallies that paired local and visiting national political leaders. The effectiveness of these preparations was easy to see, as between 1990 and 1993, four massacres of Tutsis took place in Kibilira, Bugogwe, Bugesera, and Gisenyi. The April 1994 assassination of President Habyarimana, who by signing the Arusha Accords (a tentative peace deal with the Rwandan Patriotic Front, or RPF, a year earlier) had betrayed the Hutu Power cause, allowed Hutu extremists within his government to mobilize shadowy death squads and expand local massacres into organized national genocide. Over a period of 100 days, perhaps, 100,000 Hutus committed murder, rape, mutilation, and arson in an attempt to maintain a tenuous grip on power. Their attempt at a “Final Solution” to the Tutsi problem ended only with military defeat at the hands of the RPF and its occupation of the nation. Millions of Hutus, some of whom had committed genocidal acts, most of whom feared being killed in revenge, fled to neighboring countries. Another humanitarian crisis thus began.

The International Criminal Tribunal for Rwanda

The foregoing sketch makes clear the historically based, nihilistic, and populist nature of the Rwandan

genocide. No avenues for obtaining justice or restitution remained, as the Rwandan judiciary, along with the entire state apparatus, had crumbled and vanished. The Ministry of Justice itself lacked a telephone, a typewriter, and even windowpanes. Into this legal vacuum stepped the United Nations, whose Security Council members had acted during the genocide with willful neglect. To implement the Arusha Accords, the Security Council created the United Nations Assistance Mission in Rwanda. Its small strength of 2,500 lightly armed soldiers, its limited mandate that excluded the use of force, and the refusal of UN Director of UN Peacekeeping Operations Kofi Annan to allow the mission's Lieutenant General Romeo Dallaire to confiscate weapons caches from Hutu Power militias rendered its soldiers helpless to stop the genocide. After 10 Belgian soldiers were massacred by the militias as the genocide began, most nations withdrew their UN Assistance Mission in Rwanda contingents, leaving Dallaire with only 300 soldiers who nonetheless bravely saved many from a brutal fate. To rectify this sorry record, in 1994 the Security Council created the International Criminal Tribunal for Rwanda to try the leaders of the genocide, but the court soon ran into serious problems.

The difficulties encountered by the International Criminal Tribunal for Rwanda mainly emanated from logistical problems and inadequate administrative oversight. The court's remote location in Arusha, Tanzania; a lack of secure and reliable communications facilities; and administrative corruption hampered the panel's effectiveness from the very beginning. The court endured critical shortages of equipment, such as photocopiers, vehicles, and computer equipment. The first trial did not begin until January 1997, or 26 months after the Security Council had authorized the court's formation. Yet even after the trials began, complaints abounded about inappropriate judicial conduct, especially toward rape victims. A lack of resources and security for witnesses who traveled to Arusha to testify, the hiring of court personnel who themselves were suspected of committing genocide, and the extortion of defendants by court-appointed counsel only exacerbated the situation. The International Criminal Tribunal for Rwanda continues to try the most serious of suspects, having undertaken 77 prosecutions, 35 of which have thus far ended with a guilty verdict with appeals exhausted.

While international lawyers struggled to adjudicate cases of the leading genocidaires, the new

RPF-dominated government of Rwanda worked to consolidate its control over the country. Under Kagame's leadership, issues of security, reconstruction, and economic development came to the fore. More than 2 million Hutu refugees had fled to neighboring countries, creating a humanitarian crisis, conflicts with Tutsis and other groups who lived in Zaire in particular, and a threat to Rwandans living in border areas. Defeated Hutu militia leaders took over parts of the refugee camps, turning them into training centers for a possible invasion of Rwanda. Fortunately, within 3 years of the genocide, hundreds of thousands of those who had fled had returned peacefully to the land of their birth. The new Rwandan Patriotic Army, formed out of the RPF, supervised this difficult process, though Kagame raised regional tensions by invading Zaire to strike back at Hutu militias and aid ally Laurent Kabila in his successful drive to oust Mobutu Sese Seko as ruler.

Within the country, the genocide had produced devastation. Orphans roamed the countryside, while many surviving widows who were raped developed acquired immunodeficiency syndrome. Clean water was scarce, food supplies disrupted, electric power nonexistent, communications technology destroyed, hospitals looted, a government in flight, and upward of a million people dead or dying. Gross domestic product fell by 40% as a result of the genocide. The RPF-led government accepted foreign assistance from the United States and western European countries as well as a host of nongovernmental organizations that provided humanitarian assistance. Seeking to create a more balanced economy in a land where 90% of the population had farmed and that lacked natural resources, the regime welcomed foreign investment in a nascent mining sector to access deposits of cassiterite (used to manufacture tin) and coltan (used in consumer electronics). The Kagame government also quickly privatized the manufacturing sector, allowing enterprises to emerge that produced beer, cigarettes, soap, cement, and roofing materials. Gross domestic product rebounded in the years after the genocide, growing by 9% in 1995 and 13% in 1996.

Indigenous Judicial Remedies: The Gacaca Process

The gacaca process attempted to combine victim involvement, offender accountability, and the discovery of truth in order to remember the past *and*

develop a basis for coexistence. Beginning with Organic Law 40/2000 (passed by the Rwandan parliament in January 2001) and a pilot project created in June 2002, the Rwandan government approved the creation of local gacaca councils to judge most of the 120,000 individuals languishing in prison. The structures, numbering about 9,000 and presided over by 255,000 elected village elders, have deep, aboriginal roots within Rwanda's history as mechanisms to resolve local interpersonal and property disputes.

Each council, consisting of 19 noted persons of integrity, received cases that had gone through two preliminary steps. First, local general assemblies consisting of all adults in a given area compiled lists of victims and offenders. Second, each offender was placed in one of four categories according to the relative seriousness of his or her offense: Genocide planners and leaders were tried by Rwanda's formal judicial system, but those who participated in killing, inflicting nonfatal bodily injury, and property damage were called before gacaca councils at the prefecture, commune, and cellule levels, respectively. Those found guilty could appeal to higher level councils. The maximum available punishment was life imprisonment. Half of all prison sentences were spent performing community service. All who were convicted had to also pay into a national compensation fund for genocide survivors. Property crime offenders had to pay restitution directly to the victim.

The gacaca process is a cross between a truth commission and a court. Each council solicited the active participation of genocide survivors, who could ask questions of alleged offenders to discover what happened to themselves and their loved ones. Gacaca meetings were open to the public, and since they were held in local and accessible locations (often outside; *gacaca* means "grass"), Rwandan leaders hoped that they could serve as catalysts for national truth telling and reconciliation. This optimism is predicated on the assumption that offenders, having to stand before friends, relatives, and neighbors, will confess and ask for forgiveness. As an extra incentive to confess, prison sentences were halved for those who admitted guilt. Thousands of alleged genocidaires have subsequently confessed, though often the veracity of completeness of such accounts is questioned by survivors. More than 90,000 have been sentenced to community service in either work camps or local projects.

This informal, grassroots system of justice is not without its critics. Victims' groups charge that witnesses have been intimidated, bribed, beaten, and killed by relatives and friends of those accused. Some elected judges have been accused of participating in the genocide to varying degrees. Amnesty International and the Human Rights Watch have raised concerns about the due process rights of those accused, especially since most village elders chosen to lead gacaca councils lack formal judicial experience. Suspects do not have a right to consult lawyers. With thousands of geographically scattered councils in existence, achieving consistency in judging and sentencing was difficult. These criticisms and challenges notwithstanding, a simple lack of alternatives due to the gap between available financial and legal resources and the complexity of the task at hand, if nothing else, drove Rwanda's political leaders to embrace the gacaca process. The Rwandan government announced that the gacaca courts would continue until December 2009, with more than 1.6 million cases having been heard in all.

Gacaca cannot automatically repair the broken social relationships, provide satisfaction to victims through reparations and restitution, or create an accurate record of the dead, raped, and injured. It cannot, nor is it meant to, spark economic prosperity or create democracy in a troubled nation. Given the extreme alternatives of doing nothing or holding summary executions of alleged offenders, one might view gacaca as the best hope for doing *something* to benefit victims, promote reconciliation, and hold offenders accountable.

The future of Rwanda holds promise, especially if the government can chart a more democratic path. In 2011, Kagame won a second term as president with more than 93% of the vote, and international observers criticized the inability of opposition political parties to mount credible challenges. The media faced restrictions on propagating stories that might incite "divisions" within the population, which in practice had a chilling effect on reporters who criticized government policies. Domestic human rights groups exist, such as the Promotion and Defense of Human Rights and the League for Human Rights in the Great Lakes Region, though they and other nongovernmental organizations have faced registration impediments that could potentially endanger their existence. While there is little political violence, and the 2011 elections were peaceful, the lack of

truly open political debate and the fear of governmental repression prevent the emergence of a fully free democracy.

Economically, Rwanda has recovered well from the dark months of the mid-1990s, as the growth rate has remained at 7% to 8% a year since 2003 and inflation has stayed low. For the first time since the genocide, in 2010, Rwanda was self-sufficient in food production, though a majority of the population lives below the poverty line as subsistence farmers. Once the problems of energy shortages and poor transportation infrastructure are managed, the industrial and service sectors could develop more fully, as they already constitute more than half of the nation's gross domestic product. Kagame aggressively markets Rwanda to foreign investors. He self-identifies as a technocrat trying to leverage an increasingly educated people and stable investment climate while concurrently reducing his country's dependence on foreign aid and providing a safety net to the masses of poor citizens. Foreign investment mushroomed from \$32 million in 2003 to \$541 million in 2009, providing jobs and creating a cadre of indigenous skilled managers.

Almost 20 years after the horrific mass murders, Rwanda is a nation with an authoritarian political structure, a growing free market economy, and, at least on the surface, domestic tranquility.

Rowland Brucken

See also Africa, Sub-Saharan; Genocide; Peacekeeping; United Nations

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SAUDI ARABIA

Located in the Arabian Peninsula, the Kingdom of Saudi Arabia was established in 1932 by Abd al Aziz, the leader of Al Saud (House of Saud) and a Wahhabi imam. The country is home to Mecca and Medina, the two holiest places for followers of Islam, and the Saudi ruling family gains legitimacy from safeguarding them. Saudi Arabia shares its borders with Jordan, Iraq, and Kuwait in the north; Bahrain, Qatar, and United Arab Emirates in the east; and Oman and Yemen in the south. The capital is Riyadh. As of 2010, the estimated population is 28.7 million, of which 5.6 million are foreign nationals. Saudi Arabia has 25% of the world's oil reserves, and it is the world's dominant oil exporter; thus, it is the leading actor in the Organization of the Petroleum Exporting Countries and the international oil sector. This entry discusses the government, economy, and armed forces of Saudi Arabia.

Government and the Economy

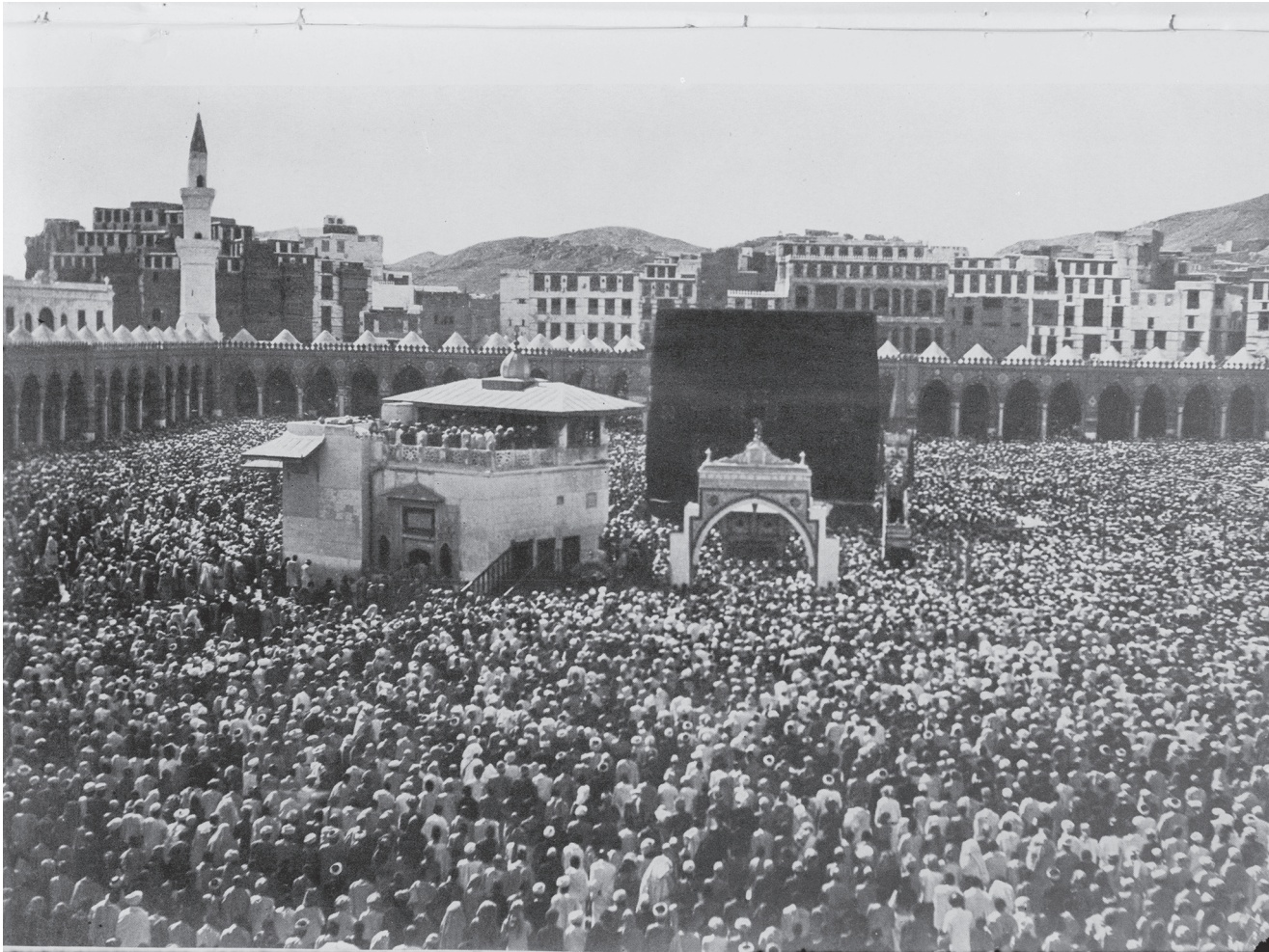
Saudi Arabia has been ruled by an absolute monarchy since its foundation. The king has the power of the legislative, executive, and judiciary and acts as the prime minister and presides over the Council of Ministers. Although the monarchy and the royal family dominate the political arena, ulemas (Islamic religious leaders) have been given significant power over government policies, as in Iran. However, Saudi Arabia made some changes in its governance structures. Notable changes include holding democratic elections at the municipal level in 2005—though

only men were allowed to vote, which is subject to change, in line with a 2011 announcement that promises to give women the right to vote in municipal elections—and the establishment in 2006 of the Bay'ah Council (Allegiance Council) for overseeing and regulating the succession of Saudi kings.

The Saudi economy remains highly dependent on oil production and exports. The Saudi Arabian Oil Company (Saudi Aramco), nationalized in 1988, has vital control of the country's most important resources. Consequently, Saudi Arabia's revenues are highly dependent on oil prices in the international markets. There have been attempts to diversify the Saudi economy, initiated by a royal decree in 1999. However, despite the support of the government, growth in non-oil industries has been slow. Development of the private sector has been hindered because of the vested interest of the royal family in the economy. In 2000, a new law was passed to encourage foreign investment in Saudi Arabia, which allowed foreign ownership of Saudi property, licensed projects, and reduced taxes on company profits by up to 30%. However, foreign ownership is not allowed in upstream oil, pipelines, media and publishing, insurance, telecommunications, defense and security, health services, and wholesale and retail trade. In 2005, Saudi Arabia joined the World Trade Organization. However, unemployment and unfair distribution of wealth remain significant problems for the country.

Armed Forces

Saudi military forces consist of the Royal Saudi Land Forces, the Royal Saudi Air Force, the Royal Saudi Navy, the Royal Saudi Air Defense, the Industrial



Mecca, ca. 1910. Bird's-eye view of Kaaba crowded with pilgrims.

Source: From the Matson Collection. Courtesy of the Library of Congress.

Security Force, the Royal Saudi Arabian National Guard, and paramilitary forces. As of 2010, Saudi military forces had 233,500 active personnel. The breakdown of active personnel in the respective services is as follows: army 75,000; navy 13,500; air force 20,000; air defense 16,000; Industrial Security Force 9,000; and National Guard 100,000. In addition, paramilitary forces have 15,500 personnel. The Industrial Security Force was established following the failed al Qaeda attack on the world's largest oil processing plant at Abqaiq in February 2006.

The Saudi army consists of three armored brigades, five mechanized brigades, one airborne brigade, one artillery brigade, one aviation command consisting of one attack helicopter brigade and one helicopter brigade, and one Royal Guard regiment. Notable equipment of the army includes M1-A2 Abrams and AMX-30 main battle tanks, AMX-10P

and M-2 Bradley armored infantry fighting vehicles, AH-64 Apache attack helicopters, and S-70A-1 Desert Hawk and UH-60A Black Hawk transport helicopters.

The Royal Saudi Navy consists of two fleets: Eastern Fleet (headquarters at Jubail) and Western Fleet (headquarters at Jeddah). In 2010, the navy consisted of seven principal surface combatants, 30 patrol and coastal combatants, seven mine warfare and countermeasure vessels, eight amphibious vessels, and five logistic and support vessels. Naval aviation has 46 helicopters, 12 of which can be armed with Exocet antiship missiles. Also, the navy has 3,000 marines.

The Royal Saudi Air Force is composed of five fighter squadrons, seven fighter ground attack squadrons, one airborne early-warning and command squadron, three transport squadrons, six



Military and civilian Muslims working with the International Security Assistance Force attend prayers during Eid al-Adha at Camp Safra in Helmand province, Afghanistan, November 16, 2010. The holiday follows hajj, the annual Islamic pilgrimage to Mecca in Saudi Arabia, and marks Abraham's willingness to sacrifice his son for God.

Source: Royal Air Force photo by Sergeant Martin Downs (released).

training squadrons, and two transport helicopter squadrons. Most notable are F-15C/D/S, Tornado AVD/GR1A/IDS, Eurofighter Typhoon, and E-3A Sentry.

Saudi Arabia has the highest defense spending within the region. Between 1989 and 2010, the defense budget of Saudi Arabia fluctuated between 16 billion and 42 billion in constant 2009 USD. Its defense budget, in the aforementioned period, was between USD 8 billion and USD 14 billion. Saudi Arabia depends largely on foreign suppliers for its arms and military technology. The United States is the main supplier of arms to Saudi Arabia, followed by the United Kingdom, France, Switzerland, Canada, Italy, Belgium, Germany, Brazil, China, Turkey, South Africa, Austria, and Pakistan. Defense procurement and management are mostly dependent on the leadership, rather than on devised institutional planning. Thus, Saudi defense procurement at times was done without the proper consideration of workforce management, operations and maintenance, and sustainability, which creates more operational problems for the military than it resolves. Because of the workforce problems and lack of

trained personnel, Saudi Arabia depends on foreign personnel, mostly U.S. military personnel and security firms, for maintenance of the weapons systems, military advice, and training.

Legacy of the Persian Gulf War

Saudi Arabia allowed stationing of foreign troops following Iraq's invasion of Kuwait in 1990. Saudi Arabia remained a key ally of the United States during the Persian Gulf War, and Saudi troops participated in the liberation of Kuwait. The United States kept a presence of 5,000 soldiers in Saudi Arabia for Operation Southern Watch. The number of U.S. military personnel rose to approximately 20,000 after the Iraq War. However, the presence of U.S. troops in Saudi Arabia spurred reactions from Saudi society, and as a result, Saudi Arabians joined al Qaeda in large numbers; thus, al Qaeda started to target Saudi Arabia. In 2005, the United States withdrew most of its personnel from Saudi Arabia, leaving personnel only for the administrative and command purposes of the U.S. Central Command.

Çağlar Kurç

See also al Qaeda; Iran; Iraq; Israel; Middle East Conflict; Persian Gulf War; U.S. Central Command

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SCHELLING, THOMAS

Thomas Schelling is a Nobel Prize-winning economist, best known for his groundbreaking work applying game theory to questions of nuclear strategy and national security. This entry looks at the career and writings of Thomas Schelling, focusing on his views on game theory and his contributions to military strategy.

Schelling was born on April 14, 1921, in Oakland, California. He received a BA from the University of California, Berkeley, in 1944 and completed his PhD in economics at Harvard University in 1951. In 1953, Schelling became associate professor of economics at Yale University, where he spent the next 5 years. During this period, he began working as an adjunct fellow with the RAND Corporation, and in 1958, he left Yale to spend a year at RAND as a full-time researcher. His tenure at RAND proved extremely influential as he developed a general theory of strategy that could be applied to current problems of national security. In 1959, he returned to academia at Harvard University with a joint appointment in the Department of Economics and the Center for International Affairs. Throughout the late 1950s, Schelling produced a number of papers on bargaining and strategy that would form the basis of his most famous work, *The Strategy of Conflict*, published in 1960.

Schelling argued that the existing game theory, which emphasized zero-sum games (conflict scenarios where one player wins all and the other loses all), did not fully take into account more complex situations where players used bargaining techniques such as threats, promises, and even cooperation to achieve their objectives. He applied his modified game theory to a range of problems faced by the U.S.

military and national security community during the Cold War, including brinkmanship, deterrence, and the arms race.

In the late 1950s, the increasing nuclear parity between the United States and the Soviet Union called into question America's Cold War strategy, specifically the reliance on nuclear deterrence and massive retaliation. The Soviets' successful test of the world's first intercontinental ballistic missile and launch of the satellite *Sputnik* in the fall of 1957 made it clear to American strategists that the United States was increasingly vulnerable to a surprise attack. In *The Strategy of Conflict*, Schelling argued that since both the United States and the Soviet Union had already built up massive arsenals of nuclear weapons, stability could only be achieved by maintaining the ability of both sides to retaliate in the event of a nuclear attack. Therefore, any arms control measures had to promote stability, which Schelling defined as a "balance of deterrence."

Schelling's idea of nuclear stability presented a dilemma for military strategists: If neither side could deliver a lethal first strike and if massive retaliation meant mutual suicide, how could nuclear weapons be used as a deterrent to more conventional Soviet aggression? Schelling's answer to this problem lay in his concept of uncertain retaliation, or, as he put it in *The Strategy of Conflict*, "The Threat That Leaves Something to Chance." He argued in favor of putting pressure on the Russians through the use of graduated force and increasing threats targeting civilians. These measures, Schelling asserted, would deter Soviet aggression, because they would make the Soviets believe that the United States was capable of escalating conflict to the point of using nuclear weapons. This strategy of consciously using force to appear irrational in order to force one's opponent into backing down is one of Schelling's best known theories, and his ideas would have a direct impact on U.S. foreign policy in Vietnam in the early 1960s.

In 1961, Assistant Secretary of Defense Paul Nitze offered Schelling a job as an arms control deputy. Schelling declined the offer but recommended a colleague, John McNaughton. Schelling assured the reluctant McNaughton that he would bring him up to speed on arms control and strategy. By 1964, McNaughton had succeeded Nitze as assistant secretary of defense. That spring,

President Lyndon B. Johnson was considering military strikes against North Vietnam, and the plan of “graduated action” prepared by McNaughton and Secretary of Defense Robert McNamara essentially put Schelling’s theories of uncertain retaliation into practice. By the end of the year, following the Gulf of Tonkin incident and a mortar attack on a U.S. air base, the United States was ready to execute McNaughton’s plan. How to successfully use force in order to make the North Vietnamese back down was a dilemma, however. McNaughton contacted Schelling, and together they brainstormed the possibilities. Schelling argued that any campaign against the North Vietnamese should last no more than a few weeks; if it had not succeeded by then, it never would. However, he and McNaughton could not formulate an answer to the basic question of how to use force to make the North Vietnamese stop their aggression. Nevertheless, the bombing campaign known as Operation Rolling Thunder was launched on March 2, 1965. It had little to no effect on the North Vietnamese, who continued their aggressive moves. The Johnson administration, rather than heeding Schelling’s warning to withdraw, escalated the war, which continued for the next 10 years.

Throughout the 1960s, Schelling continued to publish on weapons policy and strategy, culminating in his 1966 work *Arms and Influence*. By the end of the decade, however, he had soured on U.S. government policy. In the spring of 1970, after the United States invaded Cambodia, Schelling led a group of Harvard professors to meet with Henry Kissinger, President Richard Nixon’s national security advisor. They openly broke with the administration and declared their opposition to U.S. policy; this action ended Schelling’s connection with the government. In the 1970s and 1980s, Schelling turned his attention to domestic issues, such as substance abuse, racial segregation, and global warming. In 1990, he left Harvard and accepted a position as distinguished professor of economics at the University of Maryland. In 2005, Schelling was awarded the Nobel Prize in Economics “for having enhanced our understanding of conflict and cooperation through game-theory analysis.” The Nobel Committee stated that Schelling’s “insights have proven to be of great relevance for conflict resolution and efforts to avoid war” (http://nobelprize.org/nobel_prizes/economics/laureates/2005/press.html). Currently, Schelling

continues to publish and speak primarily on arms control, terrorism, and climate change.

Megan Barnhart Sethi

See also Deterrence; RAND Corporation; Strategy, Nuclear; Vietnam War

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SCHOOL OF THE AMERICAS

The School of the Americas (SOA) was established in 1946 as the Latin American Training Center at Fort Gulick, Panama. Opened during the Cold War, its purpose was to train Latin American soldiers to fight against communist insurrection. The SOA is notorious for training several of the soldiers who took part in atrocities during the 1980s and 1990s in countries such as El Salvador and Argentina. In 2000, the SOA technically ceased to exist; in its place was established the Western Hemisphere Institute for Security Cooperation (WHINSEC) in 2001, on the same campus with the same overall goals but with a new and publicly stated emphasis on respecting human rights. This entry examines the history as well as the present-day condition of this controversial military educational establishment.

History and Controversy

As the Latin American Training Center, the school’s initial purpose was to train Latin American soldiers against communist insurrection. The students who

trained at the institution were both U.S. and Latin American personnel; Caribbean personnel were added in 1949. Its main purpose became to train these militaries to be effective against insurgency. In 1963, the Alliance for Progress, a program supported by President John F. Kennedy, enlarged the institution into the SOA.

The educational and training programs of the SOA touched on leadership, weapons, technical support, and other military-related skills. By the 1980s, the institution was helping create diplomatic tension between the United States and its southern neighbors. In 1984, after the signing of the Panama Canal Treaty, the SOA was forced to move its campus to the United States, and it settled in Fort Benning, Georgia.

In 1989, six Jesuit priests were shot and killed in El Salvador, and the majority of the soldiers associated with the shootings were found to have attended the SOA. The next year, demonstrations by Catholic protestors started and continued annually, with calls to close the institution resounding from various sectors of society against various human rights abuses committed by graduates of the SOA. Furthermore, in 1992, informational manuals containing instructions on torture tactics used as part of the SOA curriculum were leaked and published in the media, leading to more calls to shut down the school. Most of the literature on the SOA covers these human rights violations by the institution's graduates, and organizations such as the School of the Americas Watch and Amnesty International solely focus on this aspect of the SOA. In 2000, Congress missed closing the school down by just a few votes, but plans were nonetheless made to transition away from the existing program. At that point, nearly 70,000 students had passed through the doors of the SOA from over 20 countries. Most of the students were from Colombia, Peru, Bolivia, Honduras, and El Salvador, although a significant number came from other countries as well.

In its place, the WHINSEC was established in 2001. The institution utilizes the same campus as the SOA and has much the same curriculum, although the administration now emphasizes human rights and democracy. The focus is on what the school can create instead of what it can suppress.

New Mission and Administration

The new institution's stated mission relied on the principles set forth in the charter of the Organization

of American States, which emphasize peace and democracy, including the eradication of poverty and the drawing back of conventional weapons. The WHINSEC publicly dedicated itself to transparency among the Organization of American States nations and respect for democracy and human rights. Its stated purpose of providing education and training to Latin American and Caribbean military personnel was supported by Congress and signed into law by President Bill Clinton.

The school is supervised and managed by the secretary of the army, who is overseen by the Department of Defense. The institution falls under the army's Training and Doctrine Command (TRADOC), which is part of the Combined Arms Center at Fort Leavenworth, Kansas. The TRADOC and its subordinate organizations are required to provide training support packages for all military-related courses at the institution. The commanders of the U.S. Southern and Northern Commands (NORTHCOM and SOUTHCOM) participate in the selection and review of the curriculum because the school supports these entities.

A 14-member Board of Visitors was federally chartered within the law that established the new WHINSEC to oversee and report on the entire operation. The Board of Visitors is composed of representatives of the State Department, NORTHCOM, SOUTHCOM, and TRADOC, and also six civilian members appointed by the secretary of defense. These civilian members represent business, academic, religious, and human rights communities. This new addition to the administration of the institution ensures that the operations of the school can be independently observed and annually reviewed and that outside recommendations can be offered to the administrative staff.

In 2010, WHINSEC's budget was \$14 million.

Faculty, Student Body, and Curriculum

The SOA employs instructors from the U.S. military, U.S. foreign service, and international civilian instructors. The institution also invites outside professors, lawyers, and guest speakers to instruct the student body. Instructors native to Latin America and the Caribbean constitute 30% to 60% of the teaching faculty in order to be able to relate to the student body culturally and to bring hands-on experience and knowledge to the table. The current student body averages anywhere from 900 to 1,400 soldiers



Latin American students enrolled in the patrol craft officer course at the U.S. Navy Small Craft Instruction and Technical Training School extract students from the Western Hemisphere Institute for Security Cooperation during a field training exercise at the Stennis Space Center in Mississippi, March 6, 2009. The U.S. Navy Small Craft Instruction and Technical Training School provides partner-nation security forces with the highest level of riverine and littoral craft operations and maintenance technical training, while the Western Hemisphere Institute for Security Cooperation focuses on providing professional education and training to eligible persons of the nations of the Western Hemisphere within the context of the democratic principles set forth in the charter of the Organization of American States.

Source: Department of Defense photo by Francisco Melara, U.S. Navy (released).

per year. The majority of the classes are in Spanish, although there is an English-language-version professional development course for Caribbean personnel.

WHINSEC's curriculum consists of more than 20 courses, which mostly coincide with the courses given at the SOA. These include courses on leadership, military operations, and counterdrug operations, and even a law course. New courses include an inspector general class and a course on training. The focus on combat in these courses has led WHINSEC to experience protests continuing from the SOA years.

The Future of the SOA/WHINSEC

Plagued by a controversial history of human rights abuses and further burdened by a disturbing present, together with other U.S. institutions that sprang

up during the new war on terrorism, the future of the SOA/WHINSEC is uncertain. Advocates of the school emphasize the fact that the majority of its graduates have not been implicated in any human rights abuses and that some who were had only taken minor courses at the institution. However, oppositional groups assert that the SOA has done irreparable damage and continues to spread violent ideas that constitute a danger to freedom and democracy.

M. V. Bowks de la Rosa

See also Caribbean; Central America; Colombia; Counterinsurgency; Human Rights; Organization of American States; South America; U.S. Southern Command



Aerial of Fort Monroe, built on the tip of Virginia's southeastern peninsula, home of the U.S. Army's Training and Doctrine Command (TRADOC). Fort Monroe is located in the city of Hampton, close to Norfolk, Virginia Beach, Yorktown, Newport News, and Williamsburg.

Source: Photo by Wes Anderson, Department of Defense Imagery.

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SCIENCE APPLICATIONS INTERNATIONAL

SAIC (formerly the Science Applications International Corporation) was founded as a private company in 1969 by J. Robert Beyster and a small group of

scientists in La Jolla, California. It offers a wide range of products and services in several industries, including national security, geospatial, cyber security, infrastructure, energy and environment, and health. The company went public in 2006. It has approximately 45,000 employees and averages more than \$10 billion in revenue annually. This entry discusses the history of SAIC and describes its products and projects, focusing on SAIC's defense technology.

SAIC is headquartered in Fairfax County, Virginia, and does extensive business with the U.S. Department of Defense and the U.S. Department of Homeland Security, as well as with various agencies within the U.S. intelligence community. It has had several former secretaries of defense and other high-ranking government executives on its board. SAIC has about a dozen subsidiaries, including a joint venture with the Bechtel Corporation, the largest engineering firm in the United States. SAIC and Boeing collaborate on modernization projects for the U.S. Army with regard to brigade combat teams.

One of SAIC's earliest defense-related projects was its 1991 participation in the dubious Stargate Project, a government-sponsored set of endeavors to ascertain whether there was any scientific basis for (and intelligence applications of) so-called psychic powers, such as precognition, clairvoyance, and remote viewing.

In 1999, SAIC commissioned and released a report on possible anthrax-related terrorist attacks executed using letters delivered by the U.S. Post Office. The report specifics were criticized for giving a blueprint to terrorists on how to successfully deploy an anthrax attack, including the maximum amount of material that could be sent in letters without arousing suspicion.

The National Security Agency in 2002 awarded SAIC a role in the agency's highly controversial Trailblazer Project, which was intended to secretly analyze computer network data. SAIC's role was to lead a consortium in producing a demonstration platform for the intelligence technology. A former SAIC employee, William Black, oversaw the project for the National Security Agency.

SAIC owns business lines in six different areas of defense technology:

1. *Weapons guidance:* SAIC manufactures unique guidance products and control systems that use the Global Positioning System and inertial navigation

techniques to precisely deliver airborne and ground-based munitions. Artillery shells can be directed using SAIC's technology to provide maximum accuracy and ensure minimal collateral damage, thus decreasing waste and increasing the variety of attackable targets. The SAIC guidance design uses real-time information to adapt to changes in meteorological conditions. Because SAIC guidance systems can be retrofitted to dumb munitions, formerly obsolete weapons can be repurposed for use in various challenging terrains and conditions.

2. *Mine Resistant Ambush Protected (MRAP) vehicles:* Vehicles need special armor to withstand attacks from improvised explosive devices and mines. SAIC manufactures MRAP vehicles with a unique, V-shaped hull that is said to better deflect explosive impacts. These vehicles perform several functions, including troop transport, convoy lead, ambulance service, and ordnance disposal. More than 300 different MRAP vehicle designs are under research and development at SAIC.

3. *Biometrics:* SAIC provides technology for the recognition and identification of individuals. Using a three-part strategy of fingerprint, face, and iris recognition, SAIC has produced more than 3,500 BATs (Biometrics Automated Toolsets) for the Department of Defense. These units interface with a database of more than 1.2 million individuals for use in recognizing enemy combatants, insurgents, and terrorists in U.S. combat operation areas. SAIC also uses voice recognition technology to enhance its touchless capabilities in warfighter aircraft employed by the U.S. Central Command. Additionally, SAIC works with the Coast Guard to test biometric devices that identify and catalog sea-based illegal immigrants in an effort to thwart terrorist infiltration into the United States. SAIC and the Coast Guard began collaborating on the Transportation Worker Identification Credential pilot program in September 2008. The program uses fingerprint and photo biometrics to track the movements of transportation workers into the United States.

4. *Modeling and simulation:* SAIC is a leading researcher in the area of computer-generated forces (CGF), which are computer simulations of combat that reliably reflect human factors. Typically, CGF exercises involve a small group of humans interacting with hundreds or thousands of simulated battlefield

entities for purposes of training and analysis. Importantly, similar SAIC technology (called the Automated Exercise Assessment System), is used to train homeland security responders for various types of attacks and disasters without expensive in-the-field exercises.

5. *Robotics*: SAIC participates in the Defense Advanced Research Projects Agency (DARPA) Grand and Urban Challenge races, which spur the development of driverless vehicles. The Defense Department has expressed interest in such vehicles as a way to remove human drivers from dangerous operations. SAIC's unmanned, lighter-than-air Skybus airships provide persistent surveillance and reconnaissance capabilities over battlefield terrain. These airships can remain on station for several days and have a low noise, thermal, and radar signature.

6. *Signal processing*: These are technologies involving advanced signal and image processing. SAIC works with the U.S. Navy to test and deploy its signal-processing software for the protection of friendly submarines and detection of hostile submarines. Advanced sonar software provided by SAIC is used to detect other submarines even when the host ship is maneuvering. SAIC also develops adaptive processing algorithms for airborne surveillance of weak, challenging signals. This software filters out strong signals to pick up low-power ground targets in difficult terrain.

SAIC has had at least two contracts with the Defense Department since 2003 to perform psychological operations in Iraq.

SourceWatch reports that in March 2003, SAIC received a no-bid contract from the Defense Department's Defense Contracting Command to establish the Iraqi Media Network, a U.S.-funded news and entertainment network that consists of television, radio, and newspaper assets in Iraq. The Iraqi Media Network was subsequently criticized by various journalists for acting as a propaganda tool for the Coalition Provisional Authority, which ruled Iraq at the time.

According to the *Washington Post*, SAIC and another firm were removed in 2006 from a \$300 million U.S. military contract pertaining to psychological operations to influence international opinion regarding the war in Iraq. SAIC had spent the

previous year "developing prototypes for radio and television spots intended for use in Iraq and in other nations where the United States is combating terrorism." A military spokesman cited inefficiency as the reason for terminating SAIC's contract.

Eric Bank

See also Coalition Provisional Authority; Contractors, Private; Logistics; Media Relations, Military; Propaganda

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SEALs, NAVY

Among the fittest, most highly trained, most versatile, most motivated, and most formidable of American special operations forces are the U.S. Navy SEALs. As the acronym conveys, the important characteristic that distinguishes SEALs from all other military forces is that they are maritime special forces that, while characteristically striking from and returning to the sea, effectively operate in all three elements: Sea, Air, and Land. This entry describes the training, organization, and operations of Navy SEALs.

Trained by the Naval Special Warfare Command (NAVSPECWARCOM), the naval component of the U.S. Special Operations Command (USSOCOM), SEALs are organized into small teams that specialize in reconnaissance and direct combat action, but they are also adept in antiterrorism, unconventional warfare, foreign internal defense, security assistance,

information warfare, counterdrug operations, hydrographic mapping, and personnel recovery. While relatively small in number (2,450 on active duty), SEALs are quick-reaction forces that maintain a continuous overseas presence in support of geographic combatant commands and national command authorities.

The major operational components of NAVSPECWARCOM are Naval Special Warfare Groups 1 and 3, based at San Diego (Coronado), and Groups 2 and 4, based at Norfolk (Little Creek). These components deploy SEAL Teams (1, 3, 5, 7 and 2, 4, 8, 10, respectively), SEAL Delivery Vehicle Teams, and Special Boat Teams worldwide. In addition to the 2,450 SEALs and 600 Special Warfare

Combatant-craft Crewmen (SWCC) on active duty, Naval Special Warfare assets include 1,200 reservists (325 SEALs, 125 SWCC, and 775 support personnel).

Historical Evolution

According to their official history, Naval Special Warfare operators can trace their origins to Scouts and Raiders, Naval Combat Demolition Teams, Office of Strategic Services Operational Swimmers, Underwater Demolition Teams (UDTs), and Motor Torpedo Squadrons of World War II. These operational assets were rapidly demobilized after the war. For example, the 34 existing UDTs were reduced to



U.S. Navy Special Warfare Combatant-craft Crewmen assigned to Special Boat Team 22 conduct live-fire drills on the riverine training range at the John C. Stennis Space Center in Mississippi, March 4, 2009. Sailors assigned to Special Boat Team 22 operate special operations riverine crafts and are assigned to Naval Special Warfare Group 4, the only U.S. special operations command dedicated to operating in riverine environments.

Source: Department of Defense photo by Mass Communication Specialist 2nd Class R. J. Stratchko, U.S. Navy (released).

four, two based on each U.S. coast, with complements of seven officers and 45 enlisted men in each team.

UDTs were reactivated during the Korean War as part of the Special Operations Group. They conducted demolition raids against North Korean infrastructure assets and were instrumental to the success of the Inchon amphibious landing and mine clearing in Wansan Harbor.

While the establishment of the U.S. Army's "Green Berets" was perhaps the most conspicuous response to President John F. Kennedy's initiative to build up American unconventional military forces during the early 1960s, the U.S. Navy stood up SEAL Teams 1 and 2 in January 1962, composed exclusively of UDT personnel.

The new SEALs were assigned the mission of conducting counter guerrilla and clandestine operations

in riverine and maritime environments—a mission soon to be in demand during the Vietnam War. The UDTs also saw combat in Vietnam. The last SEALs left Vietnam in March 1973.

In May 1983, all UDTs were redesignated as SEAL Teams or Swimmer Delivery Vehicle Teams. The Swimmer Delivery Vehicle Teams were subsequently renamed SEAL Delivery Vehicle Teams. This was soon followed by the establishment of NAVSPECWARCOM on April 16, 1987. Special Boat Teams have joined SEAL Teams and Special Delivery Vehicle Teams as organizational elements of NAVSPECWARCOM. SEALs can be deployed ("inserted") into action by both surface and subsurface craft, as well as by fixed-wing and rotary-wing aircraft. A unique capability—the Maritime Combat Craft Aerial Delivery System—involves parachuting



U.S. Navy SEAL candidates with Basic Underwater Demolition/SEAL Class 287 participate in a night gear exchange on April 20, 2011, during training at the Naval Amphibious Base Coronado, California. During a night gear exchange, students enter the water wearing masks that have been completely blackened and trade dive gear.

Source: Department of Defense photo by Mass Communication Specialist 2nd Class Kyle D. Gahlau, U.S. Navy (released).

combat craft from airborne transport aircraft. SEALs also have at their disposal “ground-mobility platforms”—specially designed and equipped vehicles, some armored and weaponized, for land operations. In fact, every member of a SEAL Team completes an intensive, 4-week, tactical ground-mobility training course, in which they learn the limitations of vehicles, basic maintenance, and tactical driving skills.

Basic and Advanced Training

Because of the extraordinary challenges and dangers inherent in their operations, Navy SEALs are put through what many military analysts believe to be the toughest training in the world. The intense physical and mental conditioning it takes to become a SEAL begins with Basic Underwater Demolition/SEAL training at the Naval Special Warfare Center on Coronado Island, California. The attrition rate is high, even among the hardest candidates. Successful candidates not only must withstand the highly demanding 6-month basic training course, but they also must succeed in 3 weeks of parachute training and a 15-week advanced training period prior to becoming a SEAL. Only then can the “graduate” pin on the Trident Insignia of all SEAL operators.

Meanwhile, SWCC go through separate, but similar, specialized training programs that emphasize special operations in the maritime environment. SWCC are trained extensively in craft and weapons tactics, techniques, and procedures. Focusing on clandestine infiltration and exfiltration of SEALs and other special operations forces, they provide dedicated, rapid mobility in shallow water, where larger ships cannot operate. Like SEALs, SWCC must be physically fit, highly motivated, combat focused, and effective in highly stressful situations.

Recent Operations

Immediately following the attacks on America on September 11, 2001, Naval Special Warfare forces put operators on the ground in Afghanistan. The first U.S. military flag officer to set foot in Afghanistan was a Navy SEAL in charge of all special operations for Central Command. In addition, a Navy SEAL captain commanded the Combined Joint Special Operations Task Force South, which included U.S. Navy, U.S. Army, U.S. Air Force, and allied special operations forces. Naval Special Warfare

forces continue to operate in Afghanistan in reconnaissance, direct action, antiterrorist, and related missions.

Naval Special Warfare personnel also played a significant role in Operation Iraqi Freedom, dedicating to Iraq the largest number of SEALs and SWCC in their history. They were instrumental in securing the southern oil infrastructure and offshore oil and gas terminals in the early phases of the campaign. They have captured high-value targets, worked to protect Iraqi elections from disruption, and established a foreign internal defense program for training and advising Iraqi forces.

Earlier SEAL operations in the Persian Gulf region included participation in Earnest Will (1987–1990) and Desert Shield/Desert Storm (1990–1991). Additionally, SEALs have conducted operations in Somalia, Bosnia, Haiti, and Liberia that have variously included extraction of U.S. citizens, disaster assistance, and piracy suppression.

In 2011 to 2012, the characteristically low-profile SEALs were the object of widespread public attention when it was announced that a so-called SEAL Team 6 had spearheaded the assault in Abbottabad, Pakistan, that killed Osama bin Laden on May 1, 2011. SEAL Team 6 reportedly consists of the “elite of the elite”—chosen from other SEAL teams and more intensively trained. In a negative turn of events, it was subsequently reported in August 2011 that members of SEAL Team 6 had been killed in the catastrophic shoot-down of a rescue helicopter by Taliban fighters in Afghanistan.

More recently, in January 2012, it was widely reported that SEAL Team 6 had rescued two non-governmental organization officials who had been kidnapped and held for months for ransom in Somalia—an American, Jessica Buchanan, and her Danish coworker, Poul Hagen Thisted.

Until these recent allusions to SEAL Team 6, little or no notice had been taken of this elite and highly secretive special operations unit. While it is more commonly known by its former name, SEAL Team 6 no longer officially exists. Its current official designation is U.S. Naval Special Warfare Development Group (NAVSPECWARDEVGRU), also referred to as “DEVGRU.”

Based out of Dam Neck Annex of Naval Air Station Oceana in Virginia Beach, the origins of DEVGRU can be traced back to the aftermath of Operation Eagle Claw, the failed 1980



White House: The National Security Team of President Barack Obama monitoring in real time the mission against Osama bin Laden, May 1, 2011.

Source: Official White House photo by Pete Souza.

operation ordered by President Jimmy Carter to rescue American hostages at the U.S. Embassy in Tehran, Iran. Dedicated to enhancing the navy's counterterrorism and extraction capabilities, the new unit soon came to be called SEAL Team 6. Several sources indicate that the name was chosen to confuse Soviet intelligence as to the actual number of SEAL teams in existence—there were only two others then.

In the late 1980s, the highly classified organization seems to have been reconfigured and assigned its new, and currently official, name (NAVSPECWARDEVGRU). Despite its official name change, Team 6's original name remains in use, albeit little referenced until recently. Indeed, the name itself is said to have long been classified.

William L. Dowdy

See also Counterinsurgency; Covert Actions, Military; Global War on Terrorism; Guerrilla Warfare; Iraq Insurgency (2003–2011); Iraq War (2003); U.S. Central Command; War in Afghanistan; Warfare, Amphibious

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Website

Naval Special Warfare Command: <http://www.navsoc.navy.mil>

SEXUALLY TRANSMITTED DISEASES

Sexually transmitted diseases (STDs) include gonorrhea, syphilis, chlamydia, human papillomavirus (HPV), herpes simplex virus, and HIV/AIDS. These are considered infectious diseases and share the characteristic of being transmitted principally or exclusively through sexual contact. This entry discusses the problem of STDs among U.S. military personnel and the U.S. military's efforts to screen for and treat STDs.

In the past, STDs have posed a major medical problem for all military organizations in the world, resulting in loss of time, military effectiveness, and even life. From World War I to World War II, the U.S. military attempted to control STDs through education, combined with scare tactics, with negligible impact. Prophylaxis proved more useful. Since the advent of effective medical treatments, such as the use of penicillin during World War II, STDs have declined as a major issue of military effectiveness. Morbidity due to STDs declined so markedly that they were dropped from the Military Disease Research Program. Nevertheless, because American military personnel are stationed all over the world, they come into contact with settings where STDs can easily be contracted. These diseases still pose considerable medical risks for those affected, but except for AIDS, the STDs rarely result in loss of time or combat readiness.

Gonorrhea (caused by *Neisseria gonorrhea*) and syphilis (caused by the spirochete *Treponema pallidum*) were both widespread in the U.S. population in the 19th century and created major medical problems for the U.S. military until the 1940s. During World War I, no infected soldiers were shipped overseas. Military officials supported efforts to promote chastity in the American Expeditionary Force. This may have helped contain the infection rate, though the army also sponsored and promoted chemical prophylaxis, which included washing the penis soon after intercourse and injecting protargol into the penis. The infection rate in the American Expeditionary Force remained at a relatively low 3.4%. Nevertheless, the U.S. Army lost

approximately 7 million person-days in less than 2 years of war due to these two venereal diseases.

In World War II, military personnel who were infected but whose disease was contained due to treatment were shipped overseas after the first year of the war. The War Department attempted a massive educational campaign combined with distribution of condoms—about 50 million condoms were used by the military each month of the war. Treatment regimens had improved by World War II, which minimized loss of time from these diseases. Both diseases were effectively contained with the use of penicillin after 1943. The first large trial using penicillin to treat gonorrhea was conducted by the U.S. Army and achieved a cure rate of 92.5%. Among recruits, syphilis was present in 4.5 out of 100 men until 1942. The use of penicillin essentially eliminated syphilis as a medical concern.

Even though gonorrhea cases still appeared in significant numbers (300 cases per 1,000 person-years) in the Vietnam War, syphilis cases were rarely reported. Today, rates of syphilis are so low that the services do not screen for it. Drug-resistant strains of gonorrhea, which became evident during the Vietnam War, remain a concern for military medicine. The strains of gonorrhea contracted in Southeast Asia required increasing doses of penicillin, from 1.2 million units of injected penicillin in the 1960s to 4.8 million units by the mid-1970s. The treatment of gonorrhea in the 21st century continues to be effective and uses a class of injectable antibiotics called the cephalosporins. Contemporary gonorrhea infection rates in the U.S. military match those of similar age and gender groups in the general U.S. population, about 5 cases per 1,000 person-years.

With the exception of HIV/AIDS, STDs do not generally prove fatal and today result in much less loss of time and military effectiveness. Infection with an STD (other than AIDS) does not preclude induction into the U.S. military. Nevertheless, chlamydia, herpes simplex virus, and HPV appear in high rates among military personnel. These still pose medical problems and create risks for members of the services, and they can adversely affect the long-term health of those infected.

Chlamydia (*Chlamydia trachomatis*) is the most common STD in the U.S. population and also in the American military. Chlamydia is asymptomatic, so screening is recommended. Studies have shown a prevalence of 9.2% among new female army recruits

and of more than 7% among army women in general. A 1996 study showed rates in the military to be three to six times the frequency in the corresponding state and national populations. The current policy of the Department of the Navy is to screen all sexually active female personnel aged 25 and younger as part of their regular annual checkups and to screen older women who may be at risk for chlamydia infection. Infection is treated with oral medication (tetracycline and its derivatives). Concurrent infection with gonorrhea is common, and both diseases can be treated effectively without loss of time or military effectiveness.

HPV results in venereal warts (*Condyloma acuminata*). These can become painful, and treatment consists of removal of the warts. HPV can also lead to an increased risk of cervical cancer. Use of the vaccine Gardasil is considered safe, but this is most effective when administered to girls who are below the age of 14 and who are not sexually active. It is not routinely administered to women in the military.

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See also HIV/AIDS; Medicine, Military

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SHOCK AND AWE OFFENSIVE

Shock and awe offensive is a term that was popularized in March 2003, when it was used to describe the aerial bombing campaign that preceded the U.S. invasion of Iraq. The term was coined by Harlan K. Ullman and James P. Wade in their 1996 book *Shock and Awe: Achieving Rapid Dominance*.

Ullman and Wade argued in 1996 that the United States had a dominant position in the world due to its military capability. Military capability would allow the United States to achieve “rapid dominance” over its adversaries in war. The idea was that weapons systems could be used by the United States to impose shock and awe on its adversaries and eliminate an adversary’s will to carry on. This entry discusses the background, theory, and uses of shock and awe.

Background and Theory

The shock and awe offensive builds on ideas that were developed in the early 20th century. The idea of using a combination of air and ground forces to attack and shock the enemy was popular among armor and air force officers and theorists. The experiences of trench warfare and the stalemate in World War I were the driving force behind the development of new tactics and doctrine in the interwar period. Officers and theorists were eager to take advantage of developments in armor and military aviation. The goal was to bring future wars to a swift conclusion and reduce casualties.

In 1921, an Italian artilleryman, Giulio Douhet, developed a theory that air power could be used to break the enemy’s morale and end wars quickly, as set forth in *Command of the Air*. His theory was based on the idea that you could defeat an adversary quickly with air power before you defeated that adversary’s ground forces. Douhet wanted the Italian military to develop a heavily armed air force of “battle planes.” The air force would first strike the enemy’s air fields to eliminate the threat from another air force. Subsequent targets would include the enemy’s capital and major cities. Explosives, poison gas, and incendiary bombs would allow the air force to shock and demoralize the enemy. This shock would lead to early capitulation.

Douhet’s theory was expanded on by the British air marshal Sir Hugh Trenchard and was part of the instruction at the U.S. Army’s Air Corps Tactical School. The hope for the officers and theorists who observed World War I was swift victory through the shock of air power aimed at the enemy’s major cities to degrade morale.

Air Power and Shock

The start of World War II saw the employment of shock as part of the German blitzkrieg. Blitzkrieg or “lighting war” consisted of the coordinated

employment of armor, infantry, artillery, and air power by the Germans. This tactic enabled the German's to quickly conquer France, Poland, and large portions of Russia. However, the use of air power to shock Germany's adversaries was only a part of the strategy that Germany had developed. Shock in and of itself did not lead to the defeat of Germany's adversaries. The Germans subsequently used air power to attack and shock Great Britain in the Battle of Britain. But this did not lead to the demoralization and capitulation of Great Britain. Prior to 1945, the use of air power to achieve a shock effect had not led to the capitulation of any adversary.

In 1945, the United States developed the atomic bomb. The United States dropped the first bomb on Hiroshima, Japan, on August 6, 1945, and the second bomb on Nagasaki, Japan, on August 9, 1945. This is arguably the first case in which air power was used to successfully shock the enemy and achieve capitulation. The atomic bomb had a demoralizing effect on Japan. It capitulated on August 14, 1945. However, there were other factors involved in the capitulation of Japan. Japan had already been at war with the United States for almost 4 years. The Soviet Union also invaded Manchuria on August 9, 1945. Arguments have been made that it was the Soviet Union's invasion of Manchuria that led to the capitulation of Japan.

Nuclear weapons added a new dimension to the theory that was developed in the aftermath of World War I. However, the effects of the atomic bombs dropped on Hiroshima and Nagasaki were so devastating that the use of these weapons has been deemed immoral. Nuclear weapons are in a separate category from conventional weapons. They are not a factor in the debate over whether shock and awe can be successful.

The United States used air power to try to shock the enemy into submission in the Vietnam War. Specifically, Operation Rolling Thunder was the strategy employed by the United States between 1965 and 1968 to pressure Ho Chi Minh to abandon his efforts to take over control of South Vietnam. Operation Rolling Thunder consisted of the conventional bombing of targets in North Vietnam by the U.S. Air Force and U.S. Navy. The bombing had the opposite effect on Ho Chi Minh and the North Vietnamese.

Technological development and the availability of precise conventional munitions in the post-Cold

War period were a driving force behind the development of shock and awe. However, the nature of warfare in the contemporary operating environment complicates the idea that shock and awe can lead to victory. The United States found that the use of shock and awe did lead to the rapid defeat of the Iraqi army. However, this assault was followed by a ground assault. The rise of the insurgency in Iraq following the U.S. air campaign of shock and awe and the initial invasion has called into question the effectiveness of shock and awe in 21st-century warfare.

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See also Blitzkrieg Warfare; Bombs, Nuclear; Bombs, Smart; Counterinsurgency; Iraq War (2003); Iraq War, Planning for; Operations, Air; Total War; World War I; World War II

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SINGLE INTEGRATED OPERATIONAL PLAN

The Single Integrated Operational Plan (SIOP) was the plan that coordinated the disparate tools of America's nuclear arsenal into one defense strategy. Created in 1960, under President Dwight D. Eisenhower, the SIOP was the first nuclear war plan that integrated all of America's nuclear weapons. The SIOP officially ended when the Operational Plan (OPLAN) became the organizing structure for planning nuclear strikes in 2003. The OPLAN still integrates the nation's nuclear weapons, but it is more flexible than the SIOP. The SIOP was a plan that embodied the concept of nuclear deterrence, mainly focused on the Soviet Union. This entry discusses the evolution of the SIOP and explains how the SIOP was put into use, both during and after the Cold War.

During the majority of the time the SIOP existed, the Soviet Union was the main threat that the United

States faced. The SIOP gave the president several different nuclear strike options from which to choose. These options ranged from a full-scale nuclear attack on Soviet urban industrial areas to a small-scale attack targeting only military installations. The SIOP also contained plans for a preemptive or a retaliatory strike depending on the national security problem faced at the time.

Prior to the creation of SIOP, there were no central organizing concepts to direct nuclear strikes. Each U.S. regional commander in chief, a 4-star general, had the authority to create a nuclear war plan for his command. Although the commands had specific geographic boundaries, their nuclear war plans often had overlapping target lists. The creation of SIOP eliminated this decentralized process and the redundant target lists.

The motivation to create a unified plan for the employment of atomic weapons was the Defense Reorganization Act of 1958. It gave the secretary of defense new authority to realize Eisenhower's vision of strategic unity. Eisenhower wanted to make sure that the nation's atomic forces, which were part of its strategic defense capability, were part of a single plan. This would prevent such weapons from being used inappropriately in a conflict and would clarify the targeting process to ensure that it supported the strategic objectives outlined by the president.

In its initial form, the SIOP was a blunt weapon, which if used, would leave no reserve nuclear force. Eisenhower's version of the SIOP did not contain the options of limited attack, which later iterations of the plan included. President John F. Kennedy instituted the first revisions of the SIOP when he assumed office. He introduced target categories ranging from individual Soviet nuclear weapons launch locations to one that included all civilian targets. If the need arose, the president could choose to attack only a specific target category or to attack all Soviet targets at once.

In the 1950s, the U.S. Air Force and the U.S. Navy each developed methods of deploying atomic weapons. The navy concentrated on submarine-launched ballistic missiles: the Polaris missile. The air force worked on nuclear-armed strategic bombers as well as its own intercontinental ballistic missile capability. Each service worked independently to develop its own weapons systems; it also developed individual plans for using these new systems in its

missions. This created a situation where the nation had several different plans for using the components of its nuclear arsenal but no overall plan to harness the entire strength of this capability. There were no unified target lists or agreements between services about which targets should be high priority.

An important part of the SIOP was prioritizing targets to determine which ones were appropriate for each category of strike. The plan was purely strategic in nature; it did not include the tactical nuclear weapons of the army and navy. It coordinated the three types of strategic assets of the United States: bomber carried munitions, ground-launched missiles, and submarine-launched missiles. The SIOP ensured that each strategic nuclear weapon targeted a vital enemy capability, installation, or avenue of approach.

The fact that two services had strategic nuclear weapons capability led to disagreements about how to effectively combine them into one plan. The air force initially argued that it should control the employment of nuclear weapons; the army, navy, and Marine Corps did not agree. The SIOP was a compromise that prevented the air force from appropriating control of all strategic nuclear assets, in favor of a joint planning group that would make the national target list.

The creation of the SIOP allowed the Department of Defense to coordinate the targeting of all its nuclear weapons. This came about through the creation of the Joint Strategic Targeting and Planning Staff. This was a joint planning group that included officers from all the service branches. It allowed for the collaboration of all the services in the creation of the SIOP. This meant that each service had input into the plan from its formative stages.

The SIOP integrated not just target lists but other aspects of war planning as well. It contained flight routes, measures of devastation of the weapons planned, information on expected enemy defenses, and descriptions of the type of detonation required to achieve the desired results for each target. This was part of the effort to ensure the proper coordination of a nuclear strike in order to maximize its effectiveness.

During the Cold War, the SIOP was part of the national defense strategy of deterrence. The plan, during this period, focused on Soviet, Chinese, and Warsaw Pact member nation targets. The plan gave

substance to the strategy of deterrence by working through the challenges of targeting, prioritizing targets, and ensuring cooperation among military services. Although circumstances never called for it, the SIOP gave the president and his military advisors clear guidance about how to best conduct a nuclear attack or counterattack.

Deterring nuclear war was the main objective of America's strategic nuclear capability. The SIOP was a fundamental aspect of the deterrence policy. Although each president, during the Cold War, revised the plan to suit the particularities of the security situation he faced, none eliminated it. Once created, the SIOP was the plan that marshaled America's nuclear strike force during the Cold War.

The president always had the authority to revise the SIOP. The following set of procedures

outlined the normal course for changing the SIOP. First, the president would outline his defense policy objectives and principles. The secretary of defense would use these to form the Nuclear Weapons Employment Policy. This document outlined how the use of nuclear weapons in a conflict would support the president's policy objectives. The document then went to the Joint Chiefs of Staff, who used this to form the Joint Strategic Capability Plan, Annex C (Nuclear). This annex refined the targeting lists and enemy objectives given in the Nuclear Weapons Employment Policy. The Joint Strategic Capability Plan then went to the Strategic Command in Omaha, Nebraska. There officials would use this information to make the actual war plans. This war plan was the actual SIOP.



U.S. Navy Vice Admiral John M. Bird, Commander, U.S. 7th Fleet, and Republic of Korea (ROK) Navy Vice Admiral Park Jung-hwa, Commander, ROK Fleet Command, sign into effect a new maritime operational plan during a reception aboard USS *Blue Ridge* (LCC 19), March 20, 2009, in Busan, ROK, marking the completion of the exercise Key Resolve, 2009. The revised operational plan sets the foundation for a smooth transition of wartime operational control responsibilities, currently held by Bird, to the commander of the ROK Fleet by April 2012.

Source: U.S. Navy photo by Mass Communication Specialist 1st Class Ben Farone (released).

After such revisions, the SIOP went through several different simulations to gauge its destructive value. The simulations would check the efficacy of each option and determine the amount of damage expected from each strike. This would give planners information on whether or not they had planned the correct type of nuclear munitions to attack a particular target. It would also give military planners and the president theoretical damage information from the resulting attack.

Although there were several options and strike packages available for the president to choose from, he did not have to limit his choice of nuclear deployment to the defined options. The president could modify a given option by removing some of the targets, or he could change the level of damage planned for a target. In addition to changing previously defined options, the president always had the authority to create new options that would specifically meet his objectives more clearly than the defined options.

Arms limitation treaties such as the Strategic Arms Reduction Treaty required the Joint Chiefs to reconcile proposed reductions with military requirements. The SIOP allowed the Joint Chiefs to effectively judge the strategic nuclear capability of the United States and determine the effect of any new arms limitation treaty. This provided the president with the information needed to ensure that reducing the strategic arms of the United States did not reduce its ability to defeat the Soviet Union in a nuclear war.

The ability to reconcile nuclear warheads with enemy targets also gave the president information that guided American requirements for Soviet arms reduction. If the United States had to decrease the number of warheads it had on hand to attack, then the president could require that the Soviet Union decrease the weapons that the reduced warheads targeted. This ensured that the reduction requests did not risk America's national security or improve the Soviet position with regard to nuclear capability.

After the Cold War, the emphasis of the plan changed with the changing strategic situation. As the threat from the Soviet Union and China dissipated after the fall of communism in Russia and the collapse of the Warsaw Pact, the threat of a chemical or biological attack from a smaller nation became more problematic. President George H. W. Bush

changed the SIOP in 1993 to reflect these new security concerns. For the first time in the plan's history, it contained targeting information for Third World nations. President Bill Clinton formalized this in a presidential directive that allowed the use of nuclear weapons in retaliation for a chemical weapon or biological weapon attack.

The SIOP provided an effective tool to plan the deployment of U.S. nuclear weapons. Although the majority of the time that defense planners used it was during the Cold War, it shaped the concept of nuclear deterrence in the post-Cold War era as well. The SIOP ensured that the president knew what U.S. nuclear weapons were capable of achieving. It allowed war planners to offer realistic projections about the destructive capability of specific strike options. It also provided a rubric to judge whether or not the United States had enough nuclear capacity to deter or defeat the Soviet Union. The change to the OPLAN in 2003 indicated the change in America's nuclear policy. No longer was one nation or an alliance the main target of America's nuclear arsenal. The OPLAN embodied this new understanding of flexibility and represented the changing threats from the Cold War to the post-Cold War eras.

Gates Brown

See also Missiles, Nuclear; Plans, War; Schelling, Thomas; Strategy, Nuclear; Weapons, Nuclear; White House Military Office

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SLANG, MILITARY

See Language, Military

SMALL UNIT COHESION

Small units are dependent on strong bonds built among members of squads or platoons, as well as the individual motivation and will to fight. Small unit cohesion exists as the strongest connection among soldiers and remains the strongest motivating factor in a soldier's will, even stronger than personal survival. These bonds often become so strong (especially during long combat periods), that their loyalties surpass even loyalty to higher organizations. This entry looks at studies of small unit cohesion and the role of small unit cohesion on morale and unit effectiveness.

Prior to World War I and the interwar years, little emphasis was placed on the needs of the regular soldier outside basic physiological necessities, and many supposed that future trends in technological warfare would eliminate much of the necessity for the human role in combat. The major contributions of strong, cohesive small units during World War II proved the vital role that this structure plays in the effectiveness of troops in long-term combat. While many obvious motivating factors such as a sense of duty and honor play a role in keeping troops motivated, effective small units depend heavily on the cooperation and positive relationships among members of a particular squad or platoon.

There are a number of other factors, physical and psychological, that contribute to a soldier's continuing will to fight. Personal survival, first and foremost, seems to fall aside when considering the collective needs of a cohesive unit, and this is furthered in demonstrations of soldiers risking their lives for members of their group (rather than for the ideological or political goals of combat). Leaders, on the other hand, not only provide that ideological motivation for their soldiers but also motivate the will to fight through positive relationships with the troops. The demonstrable effect of leadership on soldiers also extends to negative attitudes displayed by leaders, which spread similarly through the units.

These factors, both social and psychological, work together in a number of ways that affect small unit cohesion. Edward A. Shils and Morris Janowitz's 1948 study, "Cohesion and Disintegration in the Wehrmacht in World War II," sheds light on a number of key factors in the remarkably strong unit cohesion in the German army, even toward the final days of the war. Their study, based on wartime interviews with German prisoners of war from the Western front, reveals that soldiers were consistently more resistant to surrender or desertion when strong bonds existed among men of a particular unit, regardless of their effect on their personal survival or safety. The contributing factors to this cohesion included the German traditional notions of military honor, careful attempts by authority to maintain good relations among various levels of rank, and paternal attitudes adopted by German officers toward their troops (some even referred to their men as their *Kinder*, or children). These bonds rarely dissipated by the war's end, unless the group was cut off from supplies or medical attention.

This strong small unit cohesion is revealed to be part of the distinction soldiers made between primary and secondary groups, and their relation to their primary group (i.e., their small unit). Soldiers whose physiological needs were being met and who received esteem from their fellow group members formed tighter bonds with their primary group and placed its needs above their individual needs, often due to shared common experiences and a sense of external authority to keep individual aggression in check. Furthermore, at this level of cohesion, "secondary symbols," such as the Nazi regime and the moral and ethical dilemmas surrounding its war effort, remained just that and factored little into the day-to-day willingness to fight by the average infantry soldier. Political, ethical, and religious considerations were often secondary concerns in the minds of the prisoners of war interviewed.

Following the Vietnam War and prior to the Global War on Terrorism, the United States was typically involved in shorter, smaller scale conflicts that required less attention to small unit cohesion, as the units in question were often not in combat long enough for the issues to dramatically affect performance. Thus, army training shifted away from a focus on the small unit during the latter years

of the Cold War and the 1990s, and many traditional training methods were abandoned. However, with the nation involved in an ongoing war since 2001, army doctrine required a return to small unit strengthening. Unit cohesion also became an issue in recent years, with the debate leading up to the repeal of “Don’t Ask, Don’t Tell” and its effects on unit cohesion.

Furthermore, U.S. Army literature focusing on small groups has moved in a more technical direction, while focusing less on the interpersonal and social aspects of the units. Many modern scholars now suggest that unit cohesion is less important than task cohesion, or the ability of the group members to achieve a goal, and that task cohesion itself is the primary factor in unit performance. This idea is in opposition to an opinion put forth in an Army War College study on the Iraq War. These scholars cite a separate body of research that claims that there is no causal relationship between social cohesion and unit effectiveness.

Current army publications link unit cohesion and morale to a number of issues. First, leaders are designated the responsibility of maintaining their soldiers’ morale (along with health, welfare, and discipline), while remembering that mission accomplishment is still the primary focus. The Infantry Platoon field manual notes, however, that severe losses might become an obstacle in accomplishing a mission. Similarly, during retrograde, army leaders are advised that the effect on morale could be “devastating.” Other hindrances to unit cohesion and morale include severe casualties, fratricide, lack of supply, and slow tactical movement, which slows further as morale decreases.

The importance of small unit cohesion to overall morale and unit effectiveness is supported through the experiences of soldiers in combat, though questions of its precise place in current military strategy, if it requires one at all, abound. It has been demonstrated that well-organized primary groups experience a greater rate of combat effectiveness and higher morale and that proper leadership demonstrates the same effects. The social and psychological value of membership in primary groups with members of similar attitudes and shared experiences contributes to positive relationships with leaders, greater success, and strong interpersonal bonds.

Hillary Jean Sebeny

See also Combat, Physical and Psychological Impact; Courage; “Don’t Ask, Don’t Tell”; Leadership; Morale; Motivation

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SOCIETY FOR MILITARY HISTORY

With about 2,300 members in 27 countries, the Society for Military History (SMH) is the English-speaking world’s largest and best known body for the promotion of the study of military history. Founded in Washington, D.C., in 1933, the organization has gone through a series of name changes, beginning life as the American Military History Foundation (AMHF), becoming the American Military Institute (AMI) in 1939, and taking its current name in 1990. This entry discusses the history, mission, and publications of the SMH.

The organization started out as a collaborative effort among military publicists and researchers and archivists in the U.S. capital to help provide its military with the documentary resources to come to grips with its past and to wage future wars more intelligently. The moving spirit behind the launching in 1933 of the body intended to fill these needs, the AMHF, was Charles E. T. Lull, a former staff officer with the American Expeditionary Forces in France during the First World War. Lull had emerged from the war convinced that an organization was needed that would remedy what he saw as the U.S. military’s lack of understanding of not only the politics, culture, and military history of its allies and enemies but also its own history. This problem was due, Lull felt, to the military’s lack of contact with the civilian academics and professionals who possessed the

knowledge and access to the sources that could help fill these gaps. The AMHF's effort to bring these two groups together has been the leitmotif of the activity of its successor bodies ever since.

The AMHF did not prosper, however, even within the Washington, D.C., Beltway, where the bulk of its members lived and worked well into the post-World War II era. The Depression kept its numbers and the funding to carry on its activities at a low ebb. In 1938, the AMHF entered into merger talks with the Order of the Indian Wars, the organization for veterans of the Western Indian wars in the United States. Both of these bodies saw a certain synergy in a closer relationship, the AMHF being eager to expand its lagging membership and the Order of the Indian Wars keen to develop a higher profile and an eventual secure home for its records and papers, which included the unpublished memoirs and reminiscences of Indian war veterans. The formal merger of the two organizations finally took place in 1948.

In the meantime, the AMHF in 1939 became the AMI, and its journal, founded in 1937 as *The Journal of the American Military Historical Foundation*, was renamed first *The Journal of the American Military Institute* and then, 2 years later, *Military Affairs*, the name it would bear for the next half-century.

Perhaps surprisingly, the Second World War and the onset of the Cold War did little to bring the AMI out of the doldrums of the Depression era. The organization continued to have difficulty recruiting members and finding the funding to promote its activities and finance a journal. A series of budgetary crises in the 1950s nearly brought the AMI to collapse. Kept alive by support from other national historical bodies and the Department of the Army, the AMI's fortunes revived somewhat when the editorship of its journal, *Military Affairs*, was assumed in 1968 by Dr. Robin Higham of Kansas State University in Manhattan. The organization made its first appearance at a conference of the International Commission of Military History in 1973, and in 1984–1985, it adopted a more formal administrative structure and opened an office in Washington, D.C. In 1987, at a meeting in Richmond, Virginia, the AMI decided to take steps to expand the organization's membership nationally and to open its conferences to a more diverse range of scholarship in military history.

In 1988, with the termination of the contract to produce its journal at Kansas State University, the board of the AMI voted to transfer the offices of the publication to the Virginia Military Institute in

Lexington, Virginia. The initiative for the move came from Professors Blair Turner and Henry Bausum of the Virginia Military Institute, History Department and the late Dr. Larry Bland, editor of the George C. Marshall Papers at the George C. Marshall Library and Museum in Lexington. It was understood that the move to Lexington would entail not only a change of scenery from the plains of Kansas to the Shenandoah Valley but a transformation of the AMI into a more broadly based professional organization and of its journal into a more scholarly publication. In 1989, the AMI journal was rechristened *The Journal of Military History (JMH)*, a fully refereed quarterly academic journal, and in 1990, the organization itself took on a new name, the Society for Military History.

The move to Lexington has proved to be beneficial for the SMH. With financial support from Virginia Military Institute and the George C. Marshall Foundation, the *JMH*, under the editorship of Dr. Henry Bausum from 1989 to 1998, gradually established itself as the premier journal of military history in North America and subsequently in the English-speaking world. Agreements were negotiated to make the *JMH* available to readers electronically. All of this has led to a sharp rise in SMH membership, with a significant number of new members coming from outside North America, and much increased participation in the annual conferences of the SMH. Once confined largely to the East Coast of the United States, SMH conferences now take place across the United States, from Frederick, Maryland, to New Orleans, to Ogden, Utah, and across the Canadian border in Kingston, Ontario, and Calgary, Alberta.

Under its current editor, Bruce Vandervort, the *JMH* serves as a vehicle for the promotion of "the new military history," an approach to the subject that takes into account its cultural and social dimensions as well as those of a strictly martial and political nature. And while mindful that the bulk of its audience is interested in modern military subjects, with the U.S. Civil War and the World Wars of the 20th century leading the way, the *JMH* also has sought to diversify its offerings by including more articles and book reviews on ancient, medieval, and early-modern topics and by increasing the number of articles dealing with non-Western military history.

Each year the SMH offers prizes for scholarship in the field of military history. The Moncado Prizes, which are given for the best article appearing in each

of the four annual issues of the *JMH*, are named after one of the AMI's more colorful members, the Filipino general, politician, billionaire, and religious cult figure Hilario Moncado. The SMH's annual Samuel Eliot Morison Prize, named after the great Harvard historian of U.S. naval operations in World War II, goes to a military historian whose life work has made a significant contribution to scholarship in the field.

In 2007, the SMH entered into an agreement to transfer its archives to Kansas State University for safekeeping. The archival materials, dating back to the foundation of the AMHF in 1933, subsequently have been catalogued and are now open for public use.

Bruce Vandervort

See also Archives, Military; Army, Department of; Civil-Military Relations; History, Military: Approaches to; Virginia Military Institute

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SOCIOLOGY

Military sociology is the study of armed forces through the application of sociological concepts. It is the scientific analysis of the military institution as it functions independently as a self-contained organizational entity, or as it relates to the broader society. Research in the area of military sociology is extensive, cumulative, and often interdisciplinary, drawing from subjects such as psychology, history, political science, and economics. This entry discusses the beginning of this relatively new subfield of sociology, examines some of the topics recently investigated by military sociologists, and ends by projecting future directions in the field. Surely, the literature in

military sociology is far too vast to mention all the major works. Still, a few of the leading works in the field are highlighted below.

Historical Background

Military sociology did not emerge as a subdiscipline until World War II. During that time, the world witnessed technological advances in warfare. The use of jet aircraft, ballistic missiles, and atomic weapons changed both the nature of war and the way military institutions were structured. One of the earliest sociological studies addressing the possible consequences of technological change in the military was written by Harold Lasswell and published in the *American Journal of Sociology* in 1941. In this article, titled "The Garrison State," Lasswell recognized that the modern military officer had become expert at many technical skills and could consequently dominate society. This power elite theme would surface again in the 1960s.

Another seminal study on the military was published in an article titled "Cohesion and Disintegration in the Wehrmacht in World War II." This article, written by Edward Shils and Morris Janowitz, was published in the *Public Opinion Quarterly* during the summer of 1948. Based on interviews of German prisoners of war Janowitz had conducted while he served in the military, the authors applied sociological theories in their investigation of the resilience found among German soldiers in battle. Central to their analysis is the role the primary group plays in a soldier's ability to endure the hardships of war. Shils and Janowitz illustrated that the capacity of the primary group to resist disintegration was dependent on the group's acceptance of political, ideological, and cultural symbols that were directly associated with primary gratification. In other words, a soldier's ability to resist is a function of his immediate primary group's meeting his basic organic needs, such as food, sense of power, and self-esteem. They concluded that as long as the primary group structure of the component units of the Wehrmacht persisted, attempts by the Allies to cause disaffection by the invocation of secondary and political symbols, such as those about the ethical wrongfulness of the national socialist system, were mainly unsuccessful. Before this study was published, the extraordinary determination

of the German army had been attributed to the strong national socialist political convictions of the German soldier. The sociological analysis presented by Shils and Janowitz introduced alternative ways of understanding the commitment of soldiers during wartime.

Samuel Stouffer and his associates conducted a number of social psychological studies on men, and a few on women, in the army during World War II. In 1949, these studies were published in four volumes, titled *The American Soldier*. Included in this research were studies on race relations (attitudes of Negroes and attitude toward Negroes), the motivation to fight, social cohesion, morale, unit pride, the utilization of civilian occupational skills in army jobs, the Women's Army Corps, army wives, attitudes of enlisted men and officers, and many more. These studies formed the bases for subsequent research on race relations, rank relations (between officers and those enlisted), effects of combat, social cohesion, relative deprivation, and many other attitudinal measures of soldiers. Even today, data from these studies can be obtained from the Roper Center for Public Opinion Research archives at the University of Connecticut.

The post-Korean War period also witnessed the publication of major works in the area of military sociology. In 1960, Morris Janowitz published an extensive analysis of the military profession in his book *The Professional Soldier: A Social and Political Portrait*. In this study, Janowitz contrasts the military establishment of the 20th century with that of previous years, as well as with the contemporary militaries of other Western nations. Janowitz observed that authority and discipline had shifted from authoritarian domination to more reliance on group consensus. In addition, the skills required of military officers were bearing a greater resemblance to those necessary for civilian administrators and leaders. Officers were no longer being recruited from an exclusive, elite social stratum but rather from a broad base representative of the population as a whole. Career advancement in the modern military requires officers to be innovative yet work within the confines of the military institution. Unlike the military professional of the past, who was expected to be politically indifferent, the 20th-century military professional is expected to form political and social opinions. Among the themes discussed in

this book were those of military community, family relations, and civil-military relations. Some of these themes were further discussed in Morris Janowitz and Roger Little's *Sociology and the Military Establishment* (1965).

Many other sociological studies on the military were completed by the time Charles Coates and Roland Pellegrin published a text titled *Military Sociology* in 1965. In addition to the studies mentioned above, there were analyses of the scope and method of *The American Soldier* in an edited book, *Continuities in Social Research*, by Robert K. Merton and Paul Lazarsfeld. Echoing some of the themes discussed by Lasswell some two decades earlier, C. Wright Mills theorized that military leaders (*warlords*) were part of the power elite in American society. According to Mills, corporate, political, and military leaders were all members of this elite group. They shared a common worldview and dominated the economic, political, and military sectors of society. Additional topics discussed in Coates and Pellegrin's text included the organizational changes that had taken place in the U.S. military as compared with those that characterized the armed forces of European nations, military organizations as informal social systems, social stratification and mobility, race relations, and the role of women in the military. All of these topics and more formed the basis of contemporary military sociology. Much of the current research in military sociology is an expansion and/or refinement of the earlier studies.

Contemporary Studies

Today's military has changed, reflecting the economic, political, and social changes that have taken place in the broader society. There are more women in the contemporary armed services, and they serve in a variety of roles. More active-duty military members are married with dependent children. External to the military was a political movement to rescind military policy restricting gays and lesbians from serving openly in the military. These changes have helped shape the current research agenda on the military, by expanding on old topics and creating new ones. Some of the topical areas in the sociological study of the contemporary armed services include peacekeeping missions, the Global War on Terrorism, social representation (race, gender, the

intersection of race and gender, religion, ethnic relations, and, more recently, sexual orientation), and the militaries of developing nations.

Over the past two and a half decades, the United States has been engaged in more military operations other than war. Although the armed services have always participated in peacekeeping operations, there has been a greater emphasis on such operations in the U.S. armed services since the 1990s. An example of a sociological study on the U.S. peacekeeping mission in Somalia is the one conducted by Laura Miller and Charles Moskos in the early 1990s. These authors analyzed the attitudes and feeling of soldiers who were engaged in humanitarian efforts, many for the first time. Among the many peacekeeping operations performed by military personnel are those requiring humanitarian assistance and disaster relief, as was the case in New Orleans during and after Hurricane Katrina and, more recently, in Haiti. One question is what is required for military units to perform these operations, and others like them, successfully.

Sociological research is also expanding in the area of military community and military families. A study of army families conducted for the Family and Morale, Welfare and Recreation Command by B. Booth, M. Segal, and Bruce Bell revealed that dependent family members actually outnumber military personnel. The ratio of family members to service members is higher in the army than in the other services. These large numbers may be associated with the military benefits they receive. In an effort to meet personnel goals in the current all-volunteer force, military organizations provide incentives for servicemen and servicewomen to marry by offering compensation and benefits for families, especially in the form of subsidized housing and health care. Yet, while there are many benefits associated with military service, there are costs as well that raise questions about service member and family readiness. One of the questions explored by sociologists studying military families, especially during war, is what effects deployment has on service members' intentions to remain in or leave the military. Another area of inquiry is how advancements in satellite and Internet technology have facilitated fast and decentralized communication between deployed soldiers and their families.

Another recent trend in today's military is the increase in the number of civilian contracting firms

and civilian contractors hired by the Department of Defense. Thus, a relatively new area of inquiry in military sociology is on the effects of military outsourcing on a number of factors ranging from the attitudes of active-duty personnel to military effectiveness. A central question is what effect the integration of civilians into the armed services has on military personnel. What is more, the increasing number of civilians losing their lives in war zones (the Persian Gulf War as well as the wars in Afghanistan and Iraq) raises additional research questions about civil-military relations.

Future Directions

There is and will continue to be a wealth of data and research questions on the military. Many of the future investigations will expand on previous studies. Issues of race, gender, and religion will continue to be explored. Studies of peacekeeping operations will also continue. Among the additional topics that will be addressed in the future is whether or not the all-volunteer force is practicable in the United States with modest changes in recruitment and incentives for the services to meet personnel goals. Conversely, is it necessary for the United States to reinstitute the military draft to ensure a cost-effective military? A possible alternative to both the all-volunteer force and military draft would be for the U.S. government to implement a program of voluntary national service. The issue of personnel procurement will probably never be completely resolved and will continue to surface in scholarly literature on the military.

Another subject that will be studied is that of sexual orientation. The "Don't Ask, Don't Tell" policy, forbidding homosexual service members from serving openly in the U.S. military, was enacted in 1994. Within a decade after the policy was implemented, many law and military officials began to view it as being out of step with the values of the nation and the military. Congress began to take steps to have the policy abolished. The Military Readiness Enhancement Act Bill, introduced by Congressman Martin Meehan in 2005 and reintroduced in 2007 and 2009, called for a repeal of the "Don't Ask, Don't Tell" policy. Both years, the bill failed. Finally, the "Don't Ask, Don't Tell" Repeal Act of 2010 was introduced, passed by both the House of Representatives and the Senate, and signed into law by President Barack Obama on December 22,

2010. Determining the best way of implementing this new law and examining its effect on military readiness, effectiveness, unit cohesion, recruitment, and retention are topics for future studies in military sociology.

Yet another subject that will attract a lot of attention in the near future is the military veteran. There has been a growing interest in researching issues pertaining to male and female veterans since the United States has been involved in the Wars in Iraq and Afghanistan. Many of them return home with battle scars to a society that is ill prepared to render them the type of support they so desperately need. Medical problems including physical injuries and mental traumas are being addressed by medical doctors and clinical psychologists. In addition, there are myriad issues concerning military veterans that extend beyond the medical field. There are social issues pertaining to mental illness and social stigma, economic issues pertaining to unemployment and homelessness, political issues pertaining to entitlements and benefits, and the intersection of these problems and the question of how these issues may affect female and male veterans differently. These and other issues pertaining to military veterans are additional topics that will be examined by military sociologists well into the 21st century.

Brenda L. Moore

See also All-Volunteer Force; Contractors, Private; Diversity; “Don’t Ask, Don’t Tell”; Family, Military; Family Readiness; Gays and Lesbians; Medical Disability, Veteran; Motivation; Natural Disaster, Military Response to; Peacekeeping; Small Unit Cohesion; Veterans Affairs, Department of

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SOFT POWER

The concept of soft power was developed around 1990 by Joseph S. Nye Jr., currently distinguished service professor of the Kennedy School of Government at Harvard University and former assistant secretary of defense for International Security Affairs in the Clinton administration. Distinct from “hard” economic and military power, soft power refers to the power of attraction deriving from a country’s culture, values, ideals, and policies. Political scientists and scholars of international relations have closely scrutinized the analytical strengths and limits of the soft power concept since it entered the public discourse in the 1990s. This entry defines soft power, examines the sources of soft power, and the difficulty in measuring soft power, and discusses public diplomacy activities.

Soft Power and Its Resources

According to Nye, there are basically three ways to influence the behavior of others to obtain the outcomes you want: coercion, inducement, and attraction. Soft power is concerned with the third dimension, attraction. While hard military and economic “command” powers basically rest on coercion and inducement, soft power refers to a nation’s ability to get a desired outcome through the “co-optive” power of attraction. Nye also stresses that legitimacy, credibility, and moral authority are central to soft power. In international politics, soft power serves as an instrument for states seeking to influence foreign populations by shaping and appealing to their values, interests, and preferences.

Nye argues that the soft power resources of a country rest primarily on three things: its culture, its

political values, and its foreign policies. The United States is blessed with ample sources of soft power. They include the political values and ideas embodied in the Constitution and Bill of Rights, the U.S. economic and educational systems, popular culture, the leadership of international institutions that help set the global agenda, and America's history as an immigrant nation. In this regard, Nye strongly suggests that the United States is in a unique position to wield influence through soft power.

The Intellectual Backdrop to the Development of the Soft Power Concept

Nye initially developed the soft power concept to counter the then prevalent argument for the decline of American power most vocally articulated by Paul Kennedy's work *The Rise and Fall of the Great Powers* (1988). In his seminal work *Bound to Lead* (1990), Nye, not in agreement with the talk of American "decline," maintained that the United States remained the strongest nation not only in military and economic power but also in soft power.

In the early 2000s, Nye, a strong critic of the George W. Bush administration's approach to Iraq, warned against the overreliance on hard military power. Alarmed by the low opinion of U.S. foreign policy and the rise in anti-American sentiments in the world, Nye argued for the incorporation of soft power into the overall U.S. strategy as an alternative to the Bush administration's militarism. More recently, Nye has advocated "smart power," which skillfully combines both hard and soft power to achieve the nation's foreign policy goals. Nye, thus, argues that the important task ahead for U.S. diplomacy is to sharpen the strategic vision of how to integrate soft and hard power into "smart power."

The soft power concept thus has not merely been an academic one. It conceptualizes a form of real power that a country possesses to wield its influence, in the conduct of its diplomacy, so as to promote its national interests and security. In the American context, Nye has developed and polished the soft power concept to restore American leadership in global affairs.

Analytical Strengths and Challenges of the Soft Power Concept

The soft power concept has contributed to a more detailed understanding of a country's power in

international politics in today's world. For the soft power concept to be useful in analyzing today's international politics, however, the following key issues should be clarified.

First, as Nye himself acknowledges, much of U.S. soft power has its origin in organizations in civil society as diverse as Hollywood, Microsoft Co., Harvard University, and so on. As private sources of soft power, they are outside or beyond the control of the U.S. government. For the U.S. government to deploy America's soft power to achieve the goals it has set involves a difficult task. Second, values and culture are by their nature hard to measure and evaluate directly. The contribution of the soft power concept to our understanding of a country's power lies in that it conceptualizes a power different from quantifiable hard power (for economic power by gross domestic product and for military power by military expenditures). The very fact that soft power is difficult to measure is the major reason why some political scientists and policymakers are not so enthusiastic about embracing it as a genuine power ready for use in international politics. Third, how to monitor and evaluate how the power of attraction is perceived by the receiver is difficult. Depending on how they are received by target audiences, there is always the possibility of a gap between the intentions of the transmitter of soft power and the perceptions of its receiver.

In any event, it requires a long-term perspective to evaluate whether or not causal relationships exist between policy inputs utilizing soft power and their outcomes.

Soft Power and Public Diplomacy

The kind of diplomatic activities in which the government of a country utilizes its soft power is called public diplomacy. Public diplomacy generally refers to official government efforts to promote national interests and security by engaging, informing, and influencing foreign populations. From a U.S. perspective, it is a tool to influence public opinion in foreign publics and mobilize it in ways that support U.S. foreign policies and their objectives, by promoting greater appreciation and understanding of U.S. society, culture, institutions, values, and policies. Thus, public diplomacy can be viewed as a prime example and expression of soft power. During the

Cold War period, the entity in charge of public diplomacy was the U.S. Information Agency (established as an independent agency in 1953). After the agency was abolished in 1999, its functions and personnel were absorbed into the State Department. The abolishment of the U.S. Information Agency signaled that the U.S. government gave short shrift to public diplomacy after having won the Cold War on “ideas.”

However, there have been urgent calls for revitalizing public diplomacy after the September 11, 2001, terrorist attacks and the Iraq War, against the backdrop of a serious image problem facing the United States, that is, the image of U.S. unilateralism based solely on military superiority, in spite of the Bush administration’s efforts to sell the Iraq War as a just war. Diplomatic circles in America, both official and private, have been concerned that the United States is losing its friends and its influence, even among traditional allies, and that anti-American sentiments are rising, especially in the Arab/Muslim world. In this situation, public diplomacy programs designed to foster increased understanding of U.S. culture, society, and policies are increasingly relied on as an effective weapon in the Global War on Terrorism. In terms of dollars, the budgets for public diplomacy programs have been increasing over the years (currently around \$536.5 million), although they remain well below 1% of the Pentagon budget.

At present, there are a variety of public diplomacy activities sponsored by the U.S. government. They include educational and cultural exchange programs, such as programs to send American performers and artists abroad and to bring secondary and college students to U.S. educational institutions; international broadcasting using radio, satellite TV, and the Internet, including the State Department’s International Information Programs website, InfoUSA; and programs to promote dialogue between American citizens and foreign publics. It is particularly noteworthy that in recent years, the U.S. government has expanded its public diplomacy efforts in the Arab/Muslim world. They include expanding educational exchanges and launching international broadcasting aired by Radio Sawa and Alhurra Television. These programs have been designed to win over the hearts and minds of the populations of Muslim countries, especially the younger generation.

Effectiveness of U.S. Soft Power as Measured by Opinion Polls

One of the quantifiable pieces of evidence used to measure, however imperfectly, the effectiveness of soft power is favorability ratings in opinion polls conducted in foreign countries.

According to the opinion polls conducted by the Pew Global Attitudes Project in 2009, the image and perception of the United States have improved markedly in most parts of the world, including western Europe, especially after the inauguration of President Barack Obama. Also, according to the Asia Soft Power Survey conducted by the Chicago Council of Global Affairs in 2008, America enjoys high levels of soft power in all the surveyed countries, including China, Japan, and South Korea. The survey has confirmed that Asians generally see U.S. cultural influence as strong, pervasive, and positive; regard U.S. leadership of international institutions as most effective; and have great respect for American popular culture, education and political systems, and diplomatic standing.

However, the image and perception of the United States among Arab/Muslim populations remain largely unfavorable. Again, according to the 2009 Pew Global Attitudes Project, while opinions of the United States held by the Arab/Muslim public in a few countries (including Jordan and Egypt) improved after the inauguration of President Obama, they remain largely unfavorable among the eight Muslim countries surveyed, particularly the Palestinian territories and Pakistan; only in two nations, Indonesia and Nigeria, did a majority of Muslims express a positive opinion of the United States. Furthermore, the recent opinion polls conducted in 2012 by the Pew Global Attitudes Project have revealed that the image of the United States held by Muslim nations has not improved significantly during the Obama presidency. In particular, the antiterrorism policy of the Obama administration, including drone attacks, is widely unpopular among Muslim nations. The same opinion polls have also found that American soft power, including ideas about democracy and popular culture, generally receives low ratings in Muslim nations, although young people are more likely to embrace such ideas than their older counterparts.

There are several factors involved in the Arab/Muslim perceptions of the United States. They hold

deep resentment toward the United States, partly because there has been a significant gap between the trumpeting of American values (freedom and democracy) by the U.S. government and its actual actions, symbolized by the mistreatment of prisoners in the Abu Ghraib prison. The rather dismal state of America's reputation and standing in the Arab/Muslim world suggests that public diplomacy using soft power resources does not easily produce the intended results.

Some observations should be made in regard to the relationship between the Arab Spring (a period of grassroots demonstrations and wars in the Arab world that began in 2010 and saw the toppling of authoritarian regimes in Tunisia, Libya, and Egypt) and soft power. There is no doubt that the pro-democracy movements that have sprung up in the Arab world since 2010 have been motivated by the Arab peoples' genuine attraction to and desire for democracy, freedom, and human rights, all of which have their origins in Western ideals and culture as soft power. Taking note of this, some American analysts have suggested that the support by the U.S. government and U.S. nongovernmental organizations for liberal democratic institutions in the Arab world has contributed to the Arab Spring revolts. It remains to be seen, however, whether or not the U.S. government will put promoting democracy before achieving regional stability when pursuing its strategic interests in the region. In any event, for American soft power to be an effective resource to promote national interests, it is imperative for the U.S. government to substantiate its democracy promotion rhetoric with credible action buttressed by soft power programs in its foreign relations with the Arab world.

Conclusion

There is no denying that the United States has vast resources of soft power. While it is still premature to judge the effectiveness of the use of soft power by the U.S. government in pursuing its foreign policy goals, it should be remembered that there is a linkage between the successful deployment of hard power and the projection of soft power. Arguably, the U.S. experience in the past 10 years or so suggests that heavy-handed use of hard power might reduce or squander soft power.

Furthermore, it is important to note that for U.S. soft power to deliver the desired outcomes, the issue

of who uses what elements of soft power for what goals in what context holds the key to a successful application of soft power. Most important, as critics of current American public diplomacy have suggested, instead of taking a high-handed method of transmitting American values (which includes a tinge of imposition) to target foreign audiences, an interactive, dialogue-based approach should be adopted in the deployment of America's soft power. In doing so, it is essential to listen to the needs and perspectives of target audiences abroad, as well as to show respect for their culture and their ideals. Perhaps only then can America's enormous soft power be expected to bring about long-term changes in the perception, attitude, and behavior of foreign publics.

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See also Abu Ghraib; Global War on Terrorism; Iraq War (2003); Leadership; Neoconservatives; Propaganda; U.S. State Department

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SOMALIA

Somalia is virtually synonymous with the Horn of Africa—the protruding landmass that juts out from northeast Africa into the Indian Ocean. Unlike other Horn of Africa states, the whole country falls within this geographically prominent region. Measuring about 637,657 square kilometers, the republic was curved out of the huge Somali-inhabited territory in East Africa, which measures up to 1 million square kilometers. In its north-south axis, it stretches from the border of Djibouti to Kenya; and in the east-west axis, it expands from the shores of the Indian Ocean to the Ethiopian border. Though mostly flat and semiarid, the country has a wide-ranging landscape with diverse ecology, that is, mountains, plateaus, valleys, and coastal plains that, if properly managed, are sufficient to sustain native vegetation and livestock. It is watered by two rivers, the Juba and Shabele. In addition, the country receives an annual rainfall of about 11 inches, which in some areas creates powerful rivulets that carry water to distant locales. However, due to lack of planning and water conservation, the country is susceptible to drought and famine.

Ethnically, the Somali people belong to the Hamatic stock of nations and speak an ancient Afro-Asiatic language known as Cushitic. Although they are racially related to their neighbors—that is, the Oromo, Afar, Saho, and Beja—they form a distinct nationality defined by a common belief in Islam and their Arabian descent. Despite their Asian connections, Somalis are indigenous to the Horn of Africa and have over the millennia adapted to the region's meager resources and tumultuous social environment. Nomadic, equalitarian, and fiercely

independent, they have been fittingly described as “a fierce and turbulent race of republicans.”

The Somali people are ethnically and culturally homogeneous. However, with the exception of a brief period in the 16th century, they did not reside in one state. Rather, they existed as an ethnic community containing countless clans who squabbled over water and pasturage. It took the European conquest in the late 19th century to unite them, make them aware of their social affinity, and kindle their national sentiments. Under colonial rule, Somali nationalism spread and finally matured after the Second World War. With the ensuing wave of decolonization that swept the African continent after the war, the country gained independence in the summer of 1960.

The Somali Republic was formally constituted on July 1, 1960, when the British and Italian Somali colonies gained independence, merged, and chose Mogadishu, the seat of the Italian administration, as the national capital. After independence, statehood and nation-building were continually undermined by lingering clanism and the traditional aversion to authority. These cultural propensities were, however, kept in check by the postcolonial state until the late 1970s, when the ruling military regime was enfeebled by a costly war with Ethiopia. The following two decades saw a proliferation of clan-based opposition to the government, without a unifying ideology or center of loyalty. After the fall of the government, these so-called political movements turned against one another until they totally dismantled the state and ended the Somali people's short-lived experimentation with statehood (1960–1991).

History of Somalia's Precolonial Army

The history of Somalia's armed forces spans more than 400 years. Dating back to the later period of the Awdal Empire (ca. 1528–1591), Somalia had known formally constituted national armies, though they were usually irregular and unregimented. According to Sihab ad-Din Ahmed, during the reign of the legendary Imam Ahmed Ibrahim al-Ghazi (1528–1543), locally known as Ahmed Gurey, each of the seven constituent principalities of the Somali Empire boasted a standing army of tens of thousands of men. Of these, large numbers were mounted and equipped with firearms—essentially, matchlocks and cannons—that were imported to Zeila, the capital

of the empire, by Arabian merchants. In addition, the Somali army counted among its ranks many Turks, Moors, and Arabs, who were attached to the court of the Islamic ruler. Thus, by the early 16th century, when the Somali-Abyssinian wars broke out, the Somali army was arguably one of the largest and best equipped forces in sub-Saharan Africa. It took the army only 5 years to rout the enemy forces, put their king to flight, and virtually take over their whole country.

Colonial Armies: Precursors of Modern National Armed Forces

Great Britain enjoys the distinction of laying the foundation for Somalia's modern armed forces. As early as 1884, London created the Somaliland Coastal Police, which claims the proud appellation of being the first modern Somali force. Like other early peacetime armies in the continent, the force began with a modest size and a limited role—that is, patrolling the coastline, with occasional sallies into the interior. Organized and deployed on the twin principles of efficiency and parsimony, the force remained small until 1898, when the colony began to cover its fiscal expenses. Subsequently, the outbreak of the Dervish Rebellion, led by Sayyid Mohamed Abdalla Hassan (known in the West as the Mad Mullah), dictated the expansion of the native colonial army. Meanwhile, famine and other economic hardships facilitated native recruitment. As a result, within a year, the numbers of the local troops jumped from a mere 240 to 1,000 infantry and 500 mounted men. Trained and equipped with modern military hardware, the Somali Levy, as the force was renamed, became “one of the region's best trained military units.” The establishment of the Somaliland Camel Corps some 10 years later further bolstered the numbers and the fighting prowess of the Somaliland corps.

In Italian Somalia, the recruitment of the native army did not begin until the end of the 19th century. As a recently unified nation and a latecomer to the colonial scramble, Italy was hampered by financial difficulties and a lack of colonial experience. In fact, on November 25, 1896, when Antonio Cecchi, Italy's first governor of Somalia, was ambushed and killed some 12 miles outside Mogadishu by local warriors, he had only 70 native soldiers with him.

In 1910, following the early pacification campaigns, the colonial authorities created two police forces, a regular contingent and a rural constabulary known as *gogle*.

The accession of the Fascist Party to power in Italy sped up the process of native recruitment in southern Somalia. As soon as he assumed the governorship in Mogadishu in December 1923, Cesare Maria De Vecchi di Val Cismon, the first fascist governor in the colony, initiated a dual-track policy of reorganizing the existing forces and recruiting new ones. Still, the size of the colonial army remained modest (numbering only 800 men) until 1925, when a rebellion in *Majertenia* (currently Puntland) necessitated the expansion of the Somali *Bandas* (irregular militia).

A decade later, at the start of the Italo-Ethiopia War of the 1930s, the Italian authorities in Mogadishu again organized an irregular contingent of border guards, known as *Dubat*. Undrilled and probably underpaid, the *Dubats* were allowed to operate like “raider bands” and live off the land. After Italy's defeat in 1941, its colony along with its army was brought under British control. The two colonial forces remained integrated until 1950, when the victorious Four Powers (the United States, Great Britain, France, and the Union of Soviet Socialist Republics) agreed to return Italian Somalia to its former colonial master, Italy, but this time supervised by the United Nations Trusteeship Council.

Somalia's Postcolonial Armed Forces

The Somali Republic gained its independence in the summer of 1960. The state was constructed from the merger of Italian and British colonial territories. The union of the two colonies also encompassed the reintegration of the colonial troops. From the British colony came the Somaliland Scouts, while the Italian side contributed the *Forza di Polizia della Somalia* (Police Force of Somalia). Put together, they numbered only 3,700 armed men.

Before liberation, the development of Somalia's military was hampered by colonial policies. This was even more so in Italian Somalia, where the United Nations Trusteeship Council, which exercised ultimate governing authority on the territory from 1950 to 1960, explicitly barred the creation of the Somali

military. This is why at independence the size of the country's armed forces was modest. With the addition of 1,000 hastily organized local recruits, known as the *Darawishta*, the number of the nation's armed forces rose to 4,700 soldiers. It was from these modest beginnings that in less than two decades of statehood the Somali National Army (SNA) evolved into one of the largest, best equipped, and best trained military machines in sub-Saharan Africa.

According to General Jama Mohamed Ghalib, who held various posts in the postindependence governments, the architect of the national military, as the SNA was popularly called, was His Excellency Abdullahi Issa Mohamud, then the prime minister of the Provisional Administration (1956–1960) of Italian Somalia. From the mid-1950s, Issa's government, in violation of the Trusteeship Council's policy, secretly recruited young officers who would lead the future national army and sent them overseas for military training. Those who returned home before independence were temporarily attached to the Somali Police Force (SPF). In December 1958, at the approach of freedom, the prime minister created the posts of police commandant and deputy commandant with the intention of moving some of these forces into the soon-to-be-created national military.

As planned, upon independence, the nation's armed forces were split into two commands, the SPF Command and the SNA Command, and placed under the able leadership of Generals Mohamed Abshir Muse and Daud A. Hersi, respectively. In addition, the prime minister's regime "militarized" a small contingent of Civil Aviation personnel (about 350), which was "Somalized" in 1954, and attached them to the SNA. Headquartered in Mogadishu, the national capital, both commands were charged the twin tasks of national security and social integration. Since they were less corrupt and less clannish than their civilian counterparts, the armed forces became a source of pride and a symbol of national unity.

Somalia's Armed Forces During the Cold War

The bane of Somalia has always been its geographic location. Situated on the easternmost corner of the African continent, the country is on the pathway between Asia and Europe. Its coastal waters, the

Gulf of Aden, connect the Red Sea and the Indian Ocean. During the Cold War, the two superpowers, the United States and the Soviet Union, competed for control of this strategically important country. On its part, Somalia, motivated by the cause of the "missing Somalis,"—French-ruled Djibouti, the Ogaden in Ethiopia, and the Northern Frontier District in Kenya—actively sought and received economic and military aid from the two superpowers. Consequently, from the early 1960s to the mid-1980s, when the Cold War ended, the size and state of preparation of Somalia's armed forces had vastly increased.

At independence, Somalia inherited a pro-Western regime whose budget was heavily subsidized by Italy, Britain, the United States, and West Germany. However, the Western aid was skewed to nonmilitary sectors. Ties between Somalia and its Western benefactors soured in 1963, when Mogadishu approached them with a request to expand the size of the SNA from 6,000 to 20,000. Coming in the middle of the Cold War, Somalia's military buildup was perceived in the West as a threat to its regional allies—principally Ethiopia, Kenya, and France—and was shrewdly rebuffed. The disappointment forced Mogadishu to seek military assistance from the Eastern bloc countries, especially the USSR and the People's Republic of China, which agreed to equip, train, and more than double the size of Somalia's armed forces.

Mogadishu's acceptance of socialist aid marked the arrival of the Cold War in the Horn of Africa. The deal led to the expansion of the nation's armed forces but fractured the country's relationship with the West, especially the United States. The overthrow of the pro-Western government in 1969 by a military junta, who professed "scientific socialism," exacerbated the fissure. In 1974, when the Soviet Union rewarded her new African ally with the highly coveted Treaty of Friendship and Cooperation, the expansion and modernization of Somalia's armed forces was well under way. Before the breakdown of the two countries' relationship 3 years later, the Kremlin boosted Somalia's armed forces to more than 30,000 heavily armed troops and a modest air force of about 2,700, including 66 combat aircraft. On its part, Mogadishu awarded its communist benefactor a military base in the port city of Berbera and an intelligence-gathering

station in *Balidoole*, located 90 kilometers from Mogadishu.

Soviet Perfidy and the Big Switch

Between 1970 and 1977, Somalia anchored Soviet interest in the Horn of Africa, and the country was handsomely rewarded for the cooperation. The Soviet Union and East Germany equipped and trained the SNA and SPF, respectively. From the communist perspective, these forces were arrayed against “Western imperialism.” Since the African states were “progressively inclined,” they were “natural allies” of the socialist world. Wars between them had to be discouraged. Accordingly, when Somalia attacked Ethiopia in 1977, a country with socialist credentials, the Kremlin severed its ties with Mogadishu and shifted all economic and military assistance to Addis Ababa. Betrayed and wounded, on November 13, Somalia abrogated the 1974 Friendship Treaty, the linchpin of Soviet-Somali relations, and began to cultivate diplomatic ties with the West.

During the tenure of the Friendship Treaty, Somalia was receiving friendly overtures from the U.S. government. For instance, on April 6, 1977, President Jimmy Carter was widely quoted in the mass media as having instructed his secretary of state, Cyrus Vance, and national security advisor, Zbigniew Brzezinski, “to move in every way possible to get Somalia to be our friend.” Four months later, the White House floated a promise of military assistance to Somalia should the latter leave the Soviet camp. The enunciation of the Carter Doctrine, the creation of the Rapid Deployment Force, and the radicalization of Ethiopia’s military junta made Somalia ever more attractive to Washington. Thus, in August 1980, Carter, although initially hesitant to arm Somalia, offered a military agreement to Mogadishu.

Under the agreement, the United States would inherit Soviet facilities, including the Port of Berbera, while Somalia would receive military and economic assistance from the West. A year later, Carter’s successor, Ronald Reagan, increased American aid to Somalia. Unlike his predecessors, Reagan was not satisfied with the mere “containment” of the Soviet Union. Instead, he sought the reversal of communist gains in the Third World. The best way to achieve this, he thought, was through an expensive

arms race. Thus, during the Reagan administration, Somalia’s armed forces peaked at 90,200, with a defense budget of about USD 130 million.

Organization of Somalia’s Armed Forces

Before the collapse of the state in 1991, Somalia boasted about 160,000 troops. Of these, the military, as the SNA was popularly known, claimed 70,000 well-trained and well-equipped fighters. The SNA was subdivided into corps, divisions, brigades, and battalions. According to General Mohamed Salah, who oversaw their training, the SNA had four corps and 12 divisions, which were lumped into five regional commands and at least one independent base in Kismayo, the regional capital of Lower Juba. All of them came under the command of a single joint chief of staff, who was directly responsible to the minister of defense.

The remainder of the national forces was accounted for by the air force, the navy, the police, and the so-called Youth Pioneers, a quasi-military unit of about 10,000. Of these, the SPF was the largest, consisting of three main corps—the *Daraawishta*, a paramilitary frontier force; the *Birmadka*, an antiriot, emergency unit; and the Territorial Police, which operated all the police stations in the country. In addition, the SPF operated specialized technical services, such as the Custodial Corps, Health Services, Communication and Transportation Units, the Immigration Office, Interpol, the Criminal Investigation Department, the Special Operations Unit, a fire brigade, and a police training academy.

In the 1980s, Reagan’s arms race strategy fueled the growth of Somalia’s armed forces. The end of the Cold War removed the rationale for continued American support. The lack of a great power patron reduced the inflow of material and technical resources. The rise of clan-based movements—the Somali Salvation Democratic Front, the Somali National Movement, the Somali Patriotic Movement, and the United Somali Congress—politicized the troops. Competition for power and resources among the top brass sapped the morale of the troops. After 1988, when they were routed in northwestern Somalia (currently Somaliland) by the Somali National Movement, the nation’s armed forces began to disintegrate. The caretaker government of Ali Mahdi Mohamed (1991–1992),

installed after the collapse of the military regime of General Mohamed Siad Barre, oversaw the final dissolution of Somalia's armed forces—once a symbol of national pride and unity.

The USC Militia and the Black Hawk Down Incident

Somalia's armed forces were disbanded but not destroyed when General Barre's regime folded in January 1991. They simply melted into their respective clans, where some of them assumed military leadership. They fought their last major international battle on October 3–4, 1993, against the American Special Forces—Delta assaulters, Rangers, Navy SEALs, and a SOAR regiment—who had come to the country on a humanitarian mission. For 2 years before the Black Hawk Down incident, as this 2-day battle is famously known, the country was riven by a bitter civil war that disrupted food production and distribution and set off widespread famine. The American troops were deployed by President George H. W. Bush on December 4, 1992, to secure Mogadishu's seaport and airport, open access roads to the starving population, and protect food distribution centers in southern Somalia. Since these roads and facilities were controlled by one General Mohamed Farrah Aidid's militia, who collected toll fees, the American interference was bound to excite local animosity.

Somali animosity peaked in June 1993, when the United Nations representative and head of the American mission to Somalia, Admiral Jonathan Howe, ordered the arrest of General Aidid, whose militia had ambushed Pakistani troops earlier that month. It was the attempt to capture the general that led to the Black Hawk Down incident. During the battle, the Somali fighters were armed with light weapons, such as RPGs, AK-47s, and PKM guns. Their American adversaries, a 160-men assault force, were equipped with M-60 machine guns, .50 caliber machine guns, and M16 rifles. Their arsenal also included attack helicopters, Humvees, trucks, and surveillance aircrafts. With additional ground troops to join them later, they formed what Mark Bowden, in his book *Black Hawk Down*, called “a formidable sum of men and machines.”

The Battle of Mogadishu, as the incident is also known, ensued for 2 days. It marked the

most intense battle the Americans fought since the Vietnam War. Whatever the Somalis lacked in fire power, they made it up in numbers, military experience, and knowledge of the terrain. As soon as the battle began, they shot down two MH-60 Black Hawk helicopters and captured one of the pilots, Chief Warrant Officer Michael Durant. In addition, they trapped and pinned down some of the special forces who came to rescue their fallen comrades. These had to be in turn freed, with additional cost of men and materiel. Before they withdrew the next day, the Americans suffered 18 deaths and 57 troops wounded. The Somalis followed them with more attacks, killing 3 more soldiers and wounding 34 others. On their part, the Somali militia sustained a staggering number of casualties—estimated up to 500 lives. However, they took comfort in repulsing one of the most powerful armies in the world.

The State of the Somali National Army

Between 1991 and 2004, when the Transitional Federal Government (TFG) was constituted, Somalia had no organized national army. All professional soldiers either joined their clan militias, migrated to other countries, or slowly melted into society. The creation of the TFG in 2004 necessitated the reconstitution of the SNA. On assuming power, the former took a dual-track approach: (1) to recall whatever was left of the former military personnel and (2) to train new volunteers. Since the country's training academies were destroyed by the civil war, the new forces had to be prepared in the neighboring countries, that is, Ethiopia, Kenya, Uganda, Sudan, and Djibouti. Shabbily constituted, inadequately equipped, and small in size (about 14,000), the present Somali army is merely a shadow of its former self. For almost a decade, the armed forces were unable to stabilize the country.

To supplement its army, the TFG formally requested peacekeeping troops from the African Union in 2007. Acting on the Somali appeal, the African Union's Peace and Security Council launched the African Union Mission in Somalia. Headquartered in Mogadishu, the African Union Mission currently deploys more than 14,000 fighters in the country. Its concept of operation is to deploy, control, and stabilize the security situation in Mogadishu in one sector before fanning out into the



Pakistani United Nations security troops board a U.S. Air Force C-130 Hercules aircraft for transport to Mogadishu, Somalia.

Source: Department of Defense photo. Photo by Technical Sergeant Marv Lynchard.

others. In its early phase, the African mission registered some success. However, as an auxiliary force, it poses a long-term threat to Somalia's national security.

Summary

To sum up, the history of Somalia's modern armed forces spans more than 100 years. Dating back to the late 19th century, when the Somaliland Coastal Police was created, Somalis have known formally constituted armies—though sometimes irregular and unregimented. The turbulence of world politics coupled with the Somali people's desire for national unity necessitated the militarization of the Somali Republic. At present, neither appears to be waning. Instead, both are feeding on new issues and grievances. This suggests that Somalia will rearm in the long run. Although a revanchist Somalia will not

pose a threat to great powers like the United States, it will undoubtedly challenge the security and stability of the states in the region.

Hassan Omar Mahadallah

See also Humanitarian Intervention, Foreign; Nation-Building; Peacekeeping; Piracy, High Seas; Somalia Intervention; United Nations

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A Ugandan soldier serving with the African Union Mission in Somalia mans the front line in Maslah Town, on the northern city limit of Mogadishu. Working with the forces of Somalia's Transitional Federal Government, its troops have managed to drive the Al Shabaab extremist group out of the Somali capital and provide a period of relative peace not seen in the city since 1991.

Source: Mogadishu, Somalia. UN Photo/Stuart Price.

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SOMALIA INTERVENTION

This entry examines the history of humanitarian and enforcement interventions in Somalia that took place in the 1990s and their legacy. Initially, the United Nations intervened in the early 1990s to avert a humanitarian crisis and deployed a small peacekeeping force to ensure delivery of desperately needed food to starving Somalia. In 1992 and 1993, with the support of the outgoing administration of

George H. W. Bush and the incoming administration of Bill Clinton, the UN mission expanded to include nation-building. Despite the commitment of substantial American forces to support the UN, this mission went disastrously wrong and led to the American and the UN withdrawal from Somalia. The legacy of Somalia would call into question the role of the United States in nation-building as part of the United Nations or in other multilateral efforts.

The Fall of General Mohamed Siad Barre

During the Cold War, Somalia was heavily dependent on foreign aid from the United States. As a result of this dependency, Somalia never developed a stable and sustainable economy. The U.S.-supported Siad Barre regime was preoccupied with retaining power

rather than developing democratic governance or a capitalist system. It became embarrassingly apparent in the late 1980s that the Barre regime was increasingly relying on human rights abuses against the regime's detractors to retain power. As the Cold War wound down, the U.S. government felt that it could no longer overlook these excesses, and foreign aid from the United States to the Barre regime ended in 1989. This resulted in the end of Siad Barre's control of Somalia in January 1991, and the state soon fractured into pieces as 14 Somali warlords vied for control. At one point early in the conflict, the prized capital city of Mogadishu was divided between five powerful warlords, including Siad Barre's main political rival, Mohamed Farrah Aidid.

United Task Force and UN Operations in Somalia I

A refugee crisis ensued, which is still plaguing Somalia and neighboring states to this day. What little economy and agricultural production there was ground to a halt because of the fracturing of the state and an ongoing drought; as a result, there was mass starvation and malnutrition. The United Nations responded with a small force of fewer than 5,000 UN peacekeepers and civilians to distribute aid to the starving Somalis. The United Nations had relatively little experience, outside of the Congo peacekeeping mission of 1960, with delivering humanitarian aid in a hostile environment. As such, little aid was getting through, and many warlords saw this aid as a direct challenge to their authority. Mohamed Aidid declared that a battalion of Pakistani peacekeepers stationed in Mogadishu would no longer be tolerated, and the rival warlord, Ali Mahdi Mohamed, ordered the shelling of aid ships and forced several to turn back before delivering any humanitarian relief.

On December 3, 1992, the United Nations Security Council (UNSC) passed Resolution 794, authorizing the use of military force to distribute humanitarian aid and enforce a tenuous cease-fire between the warring factions in Mogadishu. It should be noted that because there was no functioning central government in Somalia, Chapter VII of the United Nations Charter was invoked in an effort to establish a peacekeeping mission. This created numerous initial headaches as the United Nations was now experimenting with peace enforcement,

or even peacemaking, and was not engaging in a traditional peacekeeping mission in which a host nation government has invited in a UN peacekeeping presence.

President George H. W. Bush used UNSC Resolution 794 to commence large-scale U.S. military involvement with the initiation of Operation Restore Hope, in which the U.S. military would take the lead in delivering humanitarian aid and enforcing the cease-fire. The Unified Task Force (UNITAF) set up by President George H. W. Bush, under the command of the U.S. military, eventually swelled to approximately 40,000 international troops, of which 28,000 were American. U.S. Marines made up the majority of the American contingent and were primarily charged with protecting and delivering humanitarian aid shipments and protecting civilian personnel operating in Somalia. The rules of engagement were defensive in nature, but the UNITAF forces made it clear from the outset that attacks on food shipments or personnel would be dealt with quickly and forcefully, keeping the lanes of aid flowing during the initial stages of military operations in Somalia.

However, the UNITAF mission lacked a political objective undergirding the humanitarian initiative, which would have been acceptable had the peacekeeping forces left after starvation was alleviated. The original intent behind the UNITAF mission was to have the humanitarian objectives met, and the troops withdrawn from Somalia before President Bill Clinton took office. Unfortunately, the political situation on the ground caused one of the main belligerents, Mohamed Aidid, to interpret the peacekeeping presence in a very political way. Because Aidid's main political rival, Ali Mahdi, had been elected under suspicious circumstances at a UN-brokered conference in July 1991, Aidid logically viewed any UN peacekeeping effort as an attempt to legitimize Mahdi as the Somali president. However, Aidid initially avoided, as did Mahdi, direct conflict with UNITAF forces; they focused most of their military actions against each other and other smaller, rival clan lords. The brutality of the fighting in 1991 and 1992 resulted in tens of thousands dead and hundreds of thousands displaced, many of whom were civilian noncombatants. The reliance on indiscriminate shelling was particularly devastating and destabilizing for the Somali people.

Despite the overall failure of the UN intervention in Somalia, the initial goal of the mission to distribute food and other humanitarian aid was a success. Unfortunately, Aidid was consolidating power in Mogadishu at roughly the same time starvation was coming under control and a strained normalcy was returning. Neither the United Nations nor the United States reached out to Aidid at this time or recognized him as the victor. Aidid continued to view the peacekeeping/peace enforcement mission as a threat to his political survival.

UN Operations in Somalia II

The UN mission entered into mission creep as President Bill Clinton took office. UNITAF operations resulted in hundreds of thousands of lives saved, a temporary end to starvation, and a return to some semblance of normality in Somalia, albeit with no functioning central government. However, U.S. and UN leaders were at a loss regarding what to do next. There were some who felt that the mission was complete and that troops should be withdrawn from Somalia; but these voices were few, and the incoming president felt that he needed to do more to shake the campaign characterization that he was uncomfortable in his role as commander in chief. Despite wanting to succeed and prove himself, Clinton also wanted to quickly hand over the main responsibilities for the continuing mission in Somalia to the United Nations. To this end, UNSC Resolution 814 was unanimously passed on March 26, 1993, and UN Operations in Somalia II (UNOSOM II) commenced. Acting under Chapter VII of the UN Charter, and because state sovereignty in Somalia had completely broken down, an extension of peacekeeping/peacemaking operations until October 31, 1993, was enacted.

Resolution 814 was a watershed resolution for the United Nations in terms of declaring the instability in Somalia to be an international threat to security and authorizing aggressive use of force to achieve very broad economic, social, and political goals. Resolution 814 was a nation-building mandate in Somalia, but because Clinton desired that U.S. troops leave Somalia as soon as possible, it was heavily focused—at least initially—on disarming the rival warlords and creating and enforcing a cease-fire. One of the most fateful decisions made by the Clinton administration during UNOSOM II was to

remove 25,000 combat troops. This, coupled with a startling lack of armor capabilities (both tanks and armored personnel carriers), made the most aggressive and dangerous phase of the UNOSOM mission that much more difficult.

After a series of particularly aggressive attacks by Aidid's forces in August 1993, one of which resulted in the deaths of four U.S. Army military policemen, Clinton decided to ramp up the effort to capture or kill Aidid over the protestations of Marine General Joseph Hoar, who was in charge of Central Command operations. Hoar worried that the odds of capturing and killing Aidid were low, but he also worried that even if Aidid were captured, another brutal warlord would simply fill the void created and nothing on the ground would change.

But these worries fell on deaf ears, and Clinton ordered in a special operations force consisting of Delta Force commandos, a helicopter detachment, and Army Rangers whose main mission it was to capture or kill Aidid. Once aggressive, offensive missions began—which included operations such as bombing suspected weapons caches, attempts to control the local media, mass arrests, and targeted attempts to capture or kill Aidid—the UN mission had inadvertently taken a side in the Somali civil war. The mission creep extended past the formal mandate contained in UNSC Resolution 814, justifying Aidid's fears that the UN mission was actually aimed at removing him from any sort of political or power position in a postconflict Somalia.

Aidid continued to ramp up the pressure on the UN mission and the U.S. leadership by indirectly attacking affiliated peacekeepers. In a particularly heinous attack on June 5, 1993, 24 Pakistani peacekeepers were killed by a mob of Aidid's supporters. This sent shockwaves through the United Nations as peacekeepers had previously been considered off limits as targets. The response was particularly heavy-handed, and if the UN forces had not been formally involved in the Somali war previously, it became more difficult to deny involvement as the U.S. and coalition forces went on an all-out offensive against Aidid and his supporters.

Because of the lack of armor support, Black Hawk helicopters increasingly became comfortable staying low to the ground after a force drop and providing air cover fire. Aidid and his military advisors noticed this and identified the Black Hawks as a prime target for attack. For the first

time, Aidid was willing to attack U.S. forces directly as he thought that if he could bring one Black Hawk down, U.S. forces would rush to aid the victims of the crash and his forces could concentrate fire on the exposed American forces. Not only was he correct, but the operation on October 3, 1993, resulted in two downed Black Hawks and a stand-off with American forces that lasted most of the next day.

At the end of the 2-day debacle, 18 U.S. soldiers were dead, with dozens more wounded, and hundreds of opposing Somali forces were killed, with more than 1,000 wounded. While the losses were surprising and horrific for the United States, they were not sufficient to halt operations. However, Aidid had also successfully divined the mood of the American public and how to manipulate it through CNN and other news sources. Aidid orchestrated his supporters to drag dead U.S. soldiers in front of news cameras in an attempt to shock the American public and American leaders into withdrawal. The media operation worked, and President Clinton ordered the immediate withdrawal of all remaining U.S. forces. The UN mission ended in 1995, and although Aidid “won the day,” Somalia has never recovered and remains the ultimate example of a failed and fractured state.

Lessons From Somalia

The lessons learned from Somalia are many. The immediate American public policy takeaway from the Somalia peacekeeping/enforcement missions was that Africa was to be avoided militarily. This resulted in what some have dubbed a “Somalia syndrome”—causing U.S. policymakers to avoid intervening in the genocide in Rwanda.

Operationally, there was a stark lesson learned regarding peace enforcement missions. These missions will be difficult, require vast military resources, and cannot be constrained by a timetable. Furthermore, fewer troops and almost no armor support were provided for the peace enforcement phase of the mission. This resulted in a severe operational constraint that increased the risks inherent in UNOSOM II, which had a far wider list of operational and strategic goals than UNOSOM I or the UNITAF mission. Therefore, one can conclude that peace enforcement missions should only be undertaken when the nation-states involved believe that

they have a pressing national interest in alleviating the problems associated with an ungoverned state and where the American public shows the political will to support the mission until completion.

A final lesson that can be gleaned from the Somalia mission is the importance of information operations and public affairs. Aidid understood the American mood and how to manipulate this mood through the international media far better than the American and UN forces did. This allowed him to use dead U.S. soldiers as an effective lever to end the foreign military presence in Somalia.

Dan G. Cox

See also Humanitarian Intervention, Foreign; Nation-Building; Peacekeeping; Somalia; United Nations

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SOUTH AMERICA

The South American continent is a geographically diverse region consisting of 12 independent states and one European dependency. Nine states are Spanish speaking, one Portuguese, one English,

and one Dutch, while the European dependency is French speaking. Although these are the dominant languages in each state, the picture is complicated by a host of indigenous languages and a few creoles. The geography of the region ranges from the high Andes through several lower ranges, highland plateaus, and deserts to the tropical rainforests of the Amazon River and its tributaries. Climate varies mostly with altitude but also, to a lesser extent, with latitude. In addition, there are the grasslands of the pampas in the southern part of the continent and the llanos in the north. Indigenous Amerindians are found throughout the region, ranging from the descendants of the high Andean civilizations of the Incas and their Aymara allies to small tribal groups found in the tropical rainforests. Perhaps a majority of the people of the region are descendants of the Spanish and Portuguese colonizers and Amerindians known as mestizos, or mixes with the descendants of African slaves or with other Europeans. The minorities are European in most countries, although there are also populations of Chinese, Japanese, and East Indian ancestry. This entry examines the culture, politics, armed forces, civil-military relations, recent history, and interstate conflicts of the countries of South America.

Basics of the Region

There are several ways of viewing South America. First, one can consider it as being made up of several, somewhat overlapping, subregions based on geography and political-economic relationships. The five subregions are as follows:

1. The Andean Ridge, consisting of Venezuela, Colombia, Ecuador, Peru, Bolivia, and Chile, all of which are, or have been, member states of the Andean Group
2. The Southern Cone, made up of Argentina, Chile, Uruguay, and Paraguay
3. Brazil, a region unto itself
4. The Guiana Highlands, consisting of Guyana, Suriname, French Guiana (the sole European dependency in South America), and parts of Brazil and Venezuela
5. The Amazon Basin, made up of parts of Bolivia, Peru, Ecuador, Colombia, Venezuela, the Guianas, and Brazil

A second way of looking at the region is culturally. This follows the concept of the great Peruvian political thinker and leader Victor Raul Haya de la Torre, who saw South (and indeed all of Latin) America in terms of its indigenous roots. Haya called the region *Indo-America*, but the term in South America really applies only to Peru, Bolivia, Ecuador, and Paraguay, where indigenous languages are widely spoken either by significant pluralities or by a majority of the population. The rest of the region is generally dominated by the Mediterranean variant of European culture, with varying degrees of African and indigenous influence.

A third way of considering the region is in terms of political groupings. Here, one finds the Bolivarians—countries influenced by Hugo Chavez's Bolivarian Revolution and its 21st-century socialism. Strongly entrenched in this group are Venezuela itself, Ecuador, Bolivia, and Paraguay (although the last of these is also significantly influenced by the second group). The second group is best described as the "democratic left," including Brazil, Peru, and Uruguay. Argentina flirts with this group and the Bolivarians. Chile and Colombia are very much democratic in their behavior, while Chile has recently moved from the center-left to the center-right in its policies, and Colombia is firmly following a center-right approach. The outliers are the Guianas, whose culture is quite different from that of the other countries of the region.

The security organization of all the states of the region, with the exception of Brazil, is similar. While all have traditional armed forces of varying size, all but Brazil also have a national police force that is organized along paramilitary lines, whether it is called the *policia nacional*, *Gendarmeria*, or *Carabineros*. Brazil differs in that its regular police are state entities, but they too are organized along paramilitary lines as *policia militar*.

Recent Historical Developments

Exactly when one dates recent historical developments in the region depends very much on what is being emphasized. In South America, a good place to start is the beginning of the return to democracy in the region following the major military interventions in the 1960s. In 1975, Venezuela and Colombia were the only independent states in South America governed by freely elected leaders. Venezuela had

become democratic in 1958 for the first time in its independent history. By contrast, neighboring Colombia had been more or less democratic since independence, having suffered only three military coups in its history. The last one, in 1953 by General Rojas Pinilla, was called for by all political parties as a way to end the civil war, known as *La Violencia*. Military rule was ended in 1957 (although the civil war “continues” to this day).

South America began its return to democracy in 1978 when Ecuador inaugurated a democratic government. Peru followed in 1980, Argentina in 1982 (after the Falklands/Malvinas war), and Brazil in 1985, followed by several others. Then, in 1988, Chile held a plebiscite over whether President Augusto Pinochet should be allowed to continue in office. Led by the Christian Democrat Patricio Aylwin, the “campaign for the ‘No’” won resoundingly. General Pinochet decided not to run in a competitive election, and Chile returned to the democratic fold. By 1990, all of South America was under democratic rule.

South American Interstate Conflict

Although South America is one of the world’s most peaceful regions, with only three major interstate wars since independence, it has fought a number of interstate, small-scale border wars and one significant war with an extraregional power in the recent past. Moreover, there have been several potentially major conflicts that were barely avoided since 1978. In that year, Argentina and Chile very nearly went to war over the islands in the Beagle Channel, and the conflict only subsided through papal intervention. In 1980, Peru and Ecuador renewed their border war over their *Cordillera del Condor* boundary in the Amazon area. This fight nearly included a major Peruvian air campaign against Ecuador’s cities, but for the diplomatic intervention of the Brazilian and American ambassadors to Peru directly with President Fernando Belaunde, who ordered the Peruvian air force to stand down.

In 1982, there was the Falklands/Malvinas war between Argentina and Great Britain, which began with the Argentine invasion of the British possessions of South Georgia and the Falklands and ended with the retaking of Port Stanley by the British commandos after amphibious landings on the islands and significant air and sea combat. This involved

the loss of several British warships and one of Argentina’s major surface combatants, the cruiser *General Belgrano*, to torpedoes launched by the British nuclear attack submarine, HMS *Conqueror*. This action by the British just outside their declared “exclusion zone” caused the Argentine aircraft carrier, *Dos de Mayo*, to return to its base and likely cost Argentina the war. The other consequence of the war was the fall of the military dictatorship and Argentina’s return to democracy.

In January 1995, the war between Ecuador and Peru resurfaced. Unlike the previous iterations, it did not threaten to expand beyond the border fighting. Still, this was quite intense but resulted in enough of an Ecuadorian victory to give that country the confidence finally to settle the dispute diplomatically. A peacekeeping operation conducted by the four Guarantor Powers (Argentina, Chile, Brazil, and the United States) incorporated both Peruvian and Ecuadorian officers, helping to make the settlement on the ground support the diplomatic negotiations in Brasilia.

In March 2008, Colombian troops entered Ecuador, striking a base camp of the Fuerzas Armadas Revolucionarias Colombianas (FARC), killing a senior FARC leader, Raul Reyes, and seizing his laptop computer. The files in the computer made it clear that not only was there a FARC sanctuary in Ecuador but there were also sanctuaries in Venezuela and that Chavez was providing support and sustenance to the FARC. Both Ecuador and Venezuela mobilized forces on their borders with Colombia, but no fighting broke out. Moreover, Ecuador began to take steps to make certain that the FARC ceased using Ecuadorian territory as a sanctuary. Two years later, the Colombian government released more captured intelligence implicating Venezuela in supporting the FARC monetarily with arms and with sanctuaries. Venezuela cut off diplomatic relations and again mobilized its forces, but after a meeting between the newly inaugurated Colombian president Juan Manuel Santos (the immediately previous defense minister) and Chavez, diplomatic relations were restored, and the Venezuelan military stood down.

Insurgencies and Other Intrastate Conflicts

The oldest, most tenacious, continuing insurgency in South America is that in Colombia—the country

with the longest history of democracy in the region but also with the longest history of internal war. Since independence in the 1820s, Colombia has only known 44 years of internal peace, between the end of the War of 1000 Days in 1902 and the beginning of *La Violencia* in 1946. The latter, which began as a civil war between the traditional political parties of Colombia, the Liberals and the Conservatives, escalated explosively after the riot known as the *Bogotazo* in 1948, then degenerated into banditry with political overtones after the Rojas Pinilla coup in 1954, and surged again in Marxist-Leninist form with the founding of FARC in 1962. This war has been continuous ever since.

The FARC insurgency in Colombia has seen numerous ups and downs, twists and turns, and has been complicated by other Marxist-Leninist insurgencies, the most important of which is that of the Ejercito de la Liberacion Nacional, along with nongovernmental counterinsurgents whose formal name was Autodefensas Unidas Colombianas, more generally known as paramilitaries. In addition, there have been several cocaine cartels in the game, and none of these groups are mutually exclusive. Currently, the Autodefensas Unidas Colombianas has laid down its arms, the Ejercito de la Liberacion Nacional is largely neutralized, while the FARC is on the defensive but in a strong alliance with some of the cocaine cartels.

The second major insurgency in South America is that of the Shining Path (Sendero Luminoso, SL) in Peru. Founded as a faction of the fractionated Communist Party of Peru in the 1960s by the head of the Education Program at the National Autonomous University San Cristobal de Huamanga in Ayacucho, Abimael Guzman, SL began a decade-long recruitment before it launched its first armed action in 1980. For the next 12 years, SL expanded its activities in the highlands, in the coastal cities (especially Lima), and in the coca-growing Upper Huallaga Valley. A combination of reoriented army strategy and tactics, support for volunteer rural militias called Rondas Campesinas, and effective intelligence work by the National Intelligence Service and the National Police's National Counterterrorism Directorate, coupled with major SL errors, brought about the capture of Guzman and other members of the leadership in September 1992. The capture of Guzman quickly resulted in the disintegration of most of SL. However, remnants remained active in

the highlands around Ayacucho, while SL's Huallaga Regional Command continued to operate largely untouched and, indeed, expanded operations as it entered into agreements with Colombian cocaine cartels—agreements that Guzman had forbidden in the past. Nearly two decades later, SL has reemerged as a political and military force, although it is yet to achieve the level of threat it once had. On the other hand, the Peruvian military and police no longer have the highly developed capabilities that allowed them to defeat SL in 1992.

Other Security Threats

Colombia, Peru, and Bolivia all face significant threats from well-armed cocaine traffickers. As noted, in the first two cases, these bleed over into the ongoing insurgencies. Brazil has serious problems with major criminal gangs that have ties to the favelas (slums on the hills surrounding the major cities). On several occasions, the Brazilian army has been brought in to restore order to these cities, which have been terrorized by criminal gangs in league with favela chiefs. Ecuador has seen its democratic government toppled by protests from indigenous groups, as has Bolivia. In both cases, these troubles led to the electoral victories of Presidents Evo Morales of Bolivia and Rafael Correa of Ecuador, both former allies of Chavez.

A remaining security threat is manifest in the Southern Cone in the zone known as the Tri-border Area (TBA), where Argentina, Brazil, and Paraguay come together. It is an area known for the absence of law and order and significant cross-border smuggling. Much of the commerce is in the hands of people of Lebanese descent, known as Turcos, most of whom were born in South America. It is, however, also an area where the Iranian- and Syrian-backed terrorist organization Hezbollah has been highly successful in raising funds. More ominously, Hezbollah has been linked to the 1992 bombings of the Israeli embassy and the Jewish community center in Buenos Aires.

Inter-American Relations

Inter-American relations, in the context of this entry, mean the relations between the United States of America and the states of South America. These relationships take place in a number of contexts: commercial, legal, criminal, economic, political,

and military. They are at once bilateral and multilateral. For the United States, bilateral relations are conducted between governments by their embassies in Washington and the various national capitals. However, U.S. military relations with South America are coordinated through the U.S. Southern Command, with its headquarters in Miami, Florida. Multilateral relations generally are conducted through the Organization of American States and other international, intergovernmental organizations such as the United Nations and its family of specialized agencies.

U.S. bilateral relations with South American countries since 1989 have generally (a) supported the transition to democracy that took place there, (b) resisted military interventions in civilian governments, and (c) focused on addressing the problems caused by the production and smuggling of cocaine. The end of the Cold War by the early 1990s reduced the problem of potential communist subversion and insurgencies, with the exceptions already noted.

The Reagan administration first declared drug trafficking a national security issue with National Security Decision Directive 221 in 1986. This was followed by Operation Blast Furnace in Bolivia that summer, which was a combined Bolivian-U.S. counterdrug operation that on the American part was interagency, with the Drug Enforcement Administration and U.S. Southern Command participating. This was followed by President George H. W. Bush's National Security Directive 18 in 1989, which called on all U.S. unified commands to develop counterdrug plans. The U.S. Southern Command developed both an operations plan and a campaign plan that it implemented with major emphasis on Colombia, Peru, and Bolivia. Plan Colombia during the Clinton administration attempted to provide major development assistance from both the European Union and the United States, as well as the majority of funds from Colombia itself. Because the European Union tended to focus on civilian projects, the United States aimed its assistance toward security. Unfortunately, the European Union did not meet its commitments, so the program was perceived as largely security focused. The George W. Bush administration continued Plan Colombia and raised its support for President Alvaro Uribe in his fight against both drugs and insurgents.

The generally perceived failure of what was dubbed the "Washington Consensus" of the 1990s caused an electoral backlash throughout South America, with left-of-center parties winning control

of governments in Venezuela, Ecuador, Bolivia, Argentina, Brazil, Paraguay, and Uruguay. Of these, Venezuela, Bolivia, Ecuador, and Argentina consistently expressed anti-U.S. rhetoric and took anti-U.S. positions in international fora. Brazil, while not opposing the United States rhetorically, has followed a very independent foreign policy. Similarly, Chile opposed the United States in the United Nations on the issue of Iraq policy.

Civil-Military Relations

Throughout South America's independent history, the principal question of civil-military relations has been how to bring the armies under civilian control. Failure to do this resulted in military governments alternating with elected civilian ones from the 1820s to the 1980s. Occasionally, civilians seized power by force but nearly always with military support. Likewise, military coups were supported by civilian politicians. Since 1958, there has been a gradual shift toward civilian rule, even when the civilians were less than wholly democratic.

The last military governments in South America to leave office were those of Chile in 1989 and Paraguay in 1992. Unfortunately, that was not the end of the *golpe de estado* (coup d'état). In 1992, President Alberto Fujimori of Peru conspired with his de facto intelligence chief, Vladimiro Montesinos, and the commander of the army, General Nicolas de Bari Hermosa, to mount a coup against his own government. This *autogolpe* reintroduced authoritarianism into Peru, which lasted until Fujimori's third election as president was perceived as fraudulent and Montesinos was captured on video giving cash bribes to members of Congress. The Fujimori regime ended in 2000 with a return to democracy.

While the military in Ecuador played a major role in some of the political unrest in that country from 1997 until 2005, its role was mixed. However, the military never did take power for itself. The most egregious military interventions were in Venezuela, where in 1992, Lieutenant Colonel Chavez attempted a coup against the constitutional president, Carlos Andres Perez. Arrested, convicted, and jailed, Chavez was released early and ran for president, winning in 1998. In 2002, military and civilian leaders briefly overthrew Chavez, who was, however, returned to power by loyal military officers and ruled until his death in 2013. During this time, President Chavez gradually turned the country into a significantly more authoritarian regime.

The rise of democratic governments over the past two decades has clearly had an institutional impact on South American civil-military relations. Closely related to this development is the establishment and maintenance of a professional civil service in all government agencies, not only defense. The region long suffered with weak or nonexistent civil services, so much so that in many countries the only professional national public service was the uniformed military. Since 1990, there has been a conscious effort in many, if not most, South American states to establish defense ministries with civilians in the chain of command and in responsible positions. Today, all the countries of South America, except Guyana, have a Ministry of Defense; in most, the minister is a civilian, and in all but three, the minister is in the chain of command. Only four countries have vice ministers, and only two of them are in the chain of command. Similarly, only two vice ministers are civilians, but only in Bolivia is the vice minister both in the chain and a civilian. Again, most of the countries of the region have established Joint Staffs within the ministry, subordinate to the minister. Eight of the countries have created civilian positions within the Ministry of Defense that have policy responsibilities. Nevertheless, a majority are handicapped by the weak or nonprofessional civil service situation. Despite this, what we see is a significant increase in the subordination of the military to the civilian government over the past 20 years.

This subordination has led to two significant changes: one structural, the other in employment. Structurally, nearly all the militaries have dropped conscription and now rely on volunteers, which has reduced the size of the military. South American militaries since the end of the Cold War have been employed much more extensively in peacekeeping operations, with Argentina, Brazil, and Chile taking the lead. This was especially evident in the organization of the 2004 Haiti operation MINUSTAH (United Nations Stabilization Mission in Haiti), in which most of the countries in the region volunteered forces.

Prospects for the Future

Trends identified in this entry are the following:

- Long-term institutionalization of democracy with, however, significant setbacks
- Reduction of insurgencies but increase in lawlessness, especially related to drug trafficking

- Continued low incidence of interstate war, with even less likelihood in the future
- Greater integration of the region into the global system, with more independence from the United States, especially by Brazil as a regional leader
- Civilianization of defense, resulting in smaller, more professional militaries, and significant civilian participation in and command of defense establishments
- Increased involvement in international peacekeeping

John T. Fishel

See also Brazil; Colombia; Drug Interdiction; Organization of American States; School of the Americas; U.S. Southern Command; Venezuela

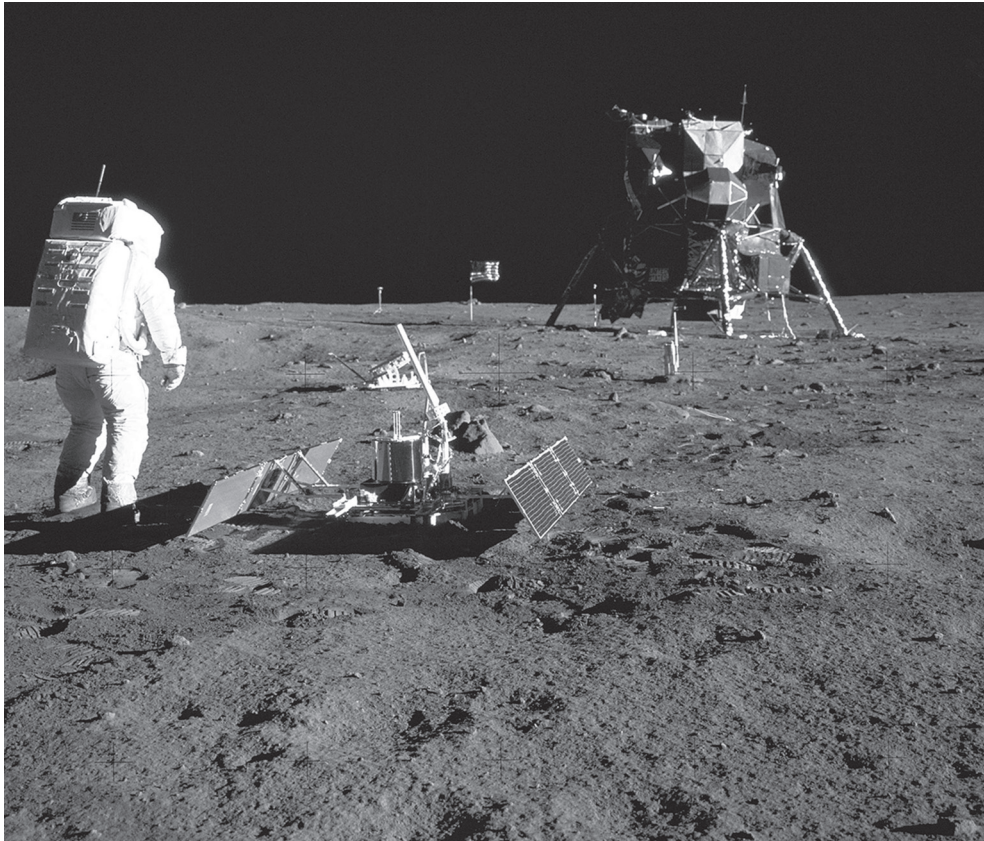
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SPACE

Human beings have dreamed of exploring space for centuries, but the realization of that vision in the 20th century had its roots in military thinking. From the rocket technologies developed in Germany during World War II to the use of satellite imagery and communications during the Global War on Terrorism, space exploration and the military have repeatedly intertwined. This entry discusses the links between the U.S. military and technological innovations related to the space program.

These connections began early in the Cold War. After 1945, the Soviet Union and United States vied



Astronaut Edwin E. "Buzz" Aldrin Jr., Lunar Module pilot, is photographed during the Apollo 11 extravehicular activity on the moon. He has just deployed the Early Apollo Scientific Experiments Package. In the foreground is the Passive Seismic Experiment Package; beyond it is the Laser Ranging Retro-Reflector; in the center background is the U.S. flag; in the left background is the black-and-white lunar surface television camera; and in the far right background is the Lunar Module "Eagle." Astronaut Neil A. Armstrong, commander, took this photograph with a 70-millimeter lunar surface camera.

Source: National Aeronautics and Space Administration.

for the services of German scientists and engineers who had developed V-2 rockets for the Nazis during World War II. The Americans successfully lured Wernher von Braun and others to come to the United States to bolster the nation's munitions program. He soon envisioned using rocket technologies to send human beings and spacecraft into the cosmos, but these dreams also had implications for the Cold War rivalry with the Russians. Satellites might perform military reconnaissance missions, and exploration of space could lead to celestial military bases or colonies. In the 1950s, both sides sought symbolic victories along the way to these goals, launching a "space race" that showcased Soviet and American technologies before the eyes of the world.

Many of these early triumphs went the Soviets' way. They launched *Sputnik*, the first orbiting satellite, in 1957. President Dwight Eisenhower, though confident of American missile superiority and unimpressed by space gadgetry, faced pressure to support the creation of the National Aeronautics and Space Administration (NASA) the following year. Although NASA is a civilian agency, it maintained strong ties with the military; all the astronauts who journeyed into space until 1972 served with the U.S. armed forces. Eisenhower's more aggressive successor, John F. Kennedy, declared in May 1961 that the United States would land a man on the moon before the end of the 1960s. The pledge materialized in the wake of the embarrassing debacle at the Bay of Pigs



The United Launch Alliance Delta II rocket carrying the Space Tracking and Surveillance System–Demonstrator (STSS-Demo) spacecraft as it leaps into the sky from Launch Pad 17-B at Cape Canaveral Air Force Station. STSS-Demo was launched at 8:20:22 a.m. Eastern Daylight time by National Aeronautics and Space Administration for the U.S. Missile Defense Agency. The STSS-Demo is a space-based sensor component of a layered ballistic missile defense system designed for the overall mission of detecting, tracking, and discriminating ballistic missiles. STSS-Demo is capable of tracking objects after the boost phase and provides trajectory information to other sensors.

Source: National Aeronautics and Space Administration/Sandra Joseph and Kevin O’Connell.

in Cuba and the first successful space flight of the Soviet cosmonaut Yuri Gagarin.

With that mandate, NASA procured big budgets to develop technologies and techniques to reach the moon in several stages. Alan Shepard was the first American in space in May 1961, John Glenn the first American to orbit the earth in February 1962, and Ed White the first American spacewalker in June 1965. A year and a half later, at the start of the Apollo program that would send manned missions to the moon, the space program suffered a tragic setback when Gus Grissom, Ed White, and Roger Chaffee died in a training accident. Nonetheless, the program proceeded. In the Apollo 8 voyage of December 1968, Frank Borman, Bill Anders, and

Jim Lovell became the first human beings to leave the earth’s orbit and enter the moon’s. After two more test missions, NASA met Kennedy’s deadline by landing Neil Armstrong and Edwin “Buzz” Aldrin Jr. on the moon’s surface on July 20, 1969, as Michael Collins orbited overhead. Though President Richard M. Nixon declared the accomplishment a unifying moment for humankind, he surely relished the Cold War victory. Nevertheless, in a sign of Cold War détente, the adversaries later docked two manned spacecraft in the Apollo-Soyuz Test Project of 1975.

The Cold War thaw did not last long, and when hostilities intensified under President Ronald Reagan in the 1980s, so did the militarization of

space. On March 23, 1983, Reagan announced his commitment to a national defense system designed to protect the United States from nuclear attack. The program, known as the Strategic Defense Initiative, included plans for a space-based missile defense shield that would shoot down incoming ballistic missiles with laser beams—thus earning the nickname “Star Wars.” Supporters of the plan argued that it would eventually render nuclear weapons obsolete, Reagan’s broader goal, once the technology was shared with the Soviets. Critics worried that it would lead to a new arms race, was technically unfeasible, and would cost billions of dollars when social spending was in decline. Though the program continued under other names and in more modest forms after Reagan’s presidency, the end of the Cold War in 1991 lowered the stakes, and the space-based defense shield never came to pass.

By the 1990s, the U.S. military was incorporating the space program’s technological innovations into its operations, with some observers calling the 1991 Persian Gulf War the first space war. In that conflict, the military’s Space Command used orbiting satellites to help ground troops navigate the desert sands of Iraq and to detect the launch of Iraqi Scud missiles. Satellites also facilitated better combat communications and weather prediction, while affording views of enemy positions and enabling poststrike damage assessments. Yet much of this technology was still experimental and imperfect at the time of the Persian Gulf War.

After the terrorist attacks of September 11, 2001, improved space-based technology became central to military thinking. Satellites orbiting the earth provided all manner of military applications for the Global War on Terrorism and the campaigns in Iraq and Afghanistan. Intelligence gatherers used satellite imagery to locate suspected terrorists operating around the world. American ground troops used Global Positioning System satellites to navigate combat zones; the same satellites directed unpiloted drones and missiles toward targets in remote areas. The Defense Satellite Communication System offered wide-ranging communications capabilities.

Of course, America’s increasingly sophisticated enemies have tried to counter these advantages. Iraq attempted to block Global Positioning System signals during the 2003 war, and the Defense Department started developing Global Positioning System antennas that could avoid jamming. In the

future, conflicts will doubtless hinge on just such battles of technology, with much of it operating far above the earth.

Andrew J. Huebner

See also Global Positioning System; Global War on Terrorism; Technology; Warfare, Electronic; Weapons, Space

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SPANISH-AMERICAN WAR (1898)

The 1898 Spanish-American War pitted a burgeoning world power, the United States, against the fading Spanish empire, primarily over the Spanish colony of Cuba. This entry examines the origins, naval and ground battles, and consequences of the Spanish-American War.

Cuba and Puerto Rico were the two last outposts of a Spanish empire in the Western Hemisphere that had once scaled almost all of Central and South America. Spain had lost most of its possessions in the first half of the 19th century, and from 1868 to 1878, a native Cuban independence movement had challenged Spanish rule. Spain clung to the island, using strong military force to quell the rebellion. For its part, the United States had since the promulgation of the Monroe Doctrine in 1823 dedicated a significant portion of its foreign policy to the limitation or removal of European influence from the hemisphere but had held off from direct military confrontation until the circumstances allowed for more decisive action in the later decades of the 1800s. Activities in Cuba provided just such an opportunity. Beginning in 1895, a new Cuban independence movement under leaders such as José Martí, Máximo Gómez,



Spanish-American War, infantry, holding Krag rifle with fixed bayonette and cartridge belt. "American Regular Army, Private c. 1898" inscribed on back of mount in ink. Source: Electro Photo Company, ca. 1898. Gladstone Collection, courtesy of the Library of Congress.

and Antonio Maceo managed to build up enough momentum so that the Spanish felt compelled to use harsh measures to suppress the rebellion. Under General Valeriano Weyler, the Spanish began concentrating the Cuban population into camps to separate civilians from insurgents. Many Americans already sympathized with the Cuban insurrection, and the terrible conditions in the camps only garnered more support in the United States for independence.

The United States kept a close watch on events in Cuba, and as part of that effort, it sent naval vessels to protect Americans and American interests in Havana. On February 15, 1898, an explosion rocked one such vessel, the USS *Maine*, and it sank, taking more than 200 American sailors with it.

The explosion was most likely an accident, but in the heated politics of the day and spurred on by an excitable press, many Americans blamed the Spanish for the sinking of the *Maine*. President William McKinley, who had long been trying to help negotiate an amicable end to the fighting in Cuba, now felt compelled by public pressure to take a harder stance, demanding that Spain grant Cuba outright independence. The Spanish refused, and in late April 1898, the United States declared war.

Conflict

The war itself was fought in three theaters—the Philippines, Cuba, and Puerto Rico—all with naval and ground components. The fighting in the Philippines began with the May 1, 1898, Battle of Manila Bay, during which a U.S. Navy squadron under Commodore George Dewey wiped out the Spanish fleet at the Philippines capital. Dewey followed his victory by watching and waiting while a native Filipino insurgent movement pressured the Spanish ground forces around the city itself. McKinley dispatched the Eighth Army Corps under General Wesley Merritt to follow up on Dewey's efforts, and Merritt's forces arrived in theater and landed forces south of Manila in July. Thereafter, his forces worked their way past the Filipino insurgents and in August fought a largely symbolic battle with the Spanish to take Manila itself, as the Spanish forces on the ground fought just enough to maintain their dignity before capitulating. As the Americans and Spanish negotiated a peace that would ultimately exclude the Filipino insurgents, Merritt's men effectively stepped into a besieged city and would have to fight their way out once the war morphed into the Philippines Insurrection in early 1899.

The main action in the Spanish-American War happened in Cuba itself. The geography, economy, and racial divisions of Cuba had significant effects on the course of the Cuban Revolution. Put simply, the Spanish, especially after Weyler's efforts, exerted far greater control on the western half of the island, including around the city of Havana. The revolutionaries had more influence in the east and in 1898 were harassing Spanish contingents throughout the region. For their part, and in an effort to secure the civilian population against the insurgents, the Spanish broke up their forces into smaller units distributed throughout the countryside.



30559—Burial of the Victims of the "Maine" in Their Final Resting Place—Arlington Cemetery, Va., Dec. 28, 1899.

Burial of the victims of the USS *Maine* in their final resting place—Arlington Cemetery, Virginia, December 28, 1899.

Source: Courtesy of the Library of Congress.

Not wanting to confront the Spanish in their area of strength in the west, the Americans decided to land their forces on the southeastern portion of the island. When the main Spanish fleet under Admiral Pascual Cervera crossed the Atlantic and put in at the southeastern port city of Santiago de Cuba in late May, the target of American operations became more specific. The American fleet under the overall command of Admiral William Sampson blockaded Cervera in the port, and the Fifth Army Corps under General William Shafter headed toward the city to pressure the Spanish fleet from the land. After consulting with the Cuban revolutionaries, Shafter landed his forces east of Santiago at Daiquiri and Siboney in late June. From there, he sent his 17,000-man corps, divided into three divisions, northwest

toward the main Spanish defensive positions at San Juan Ridge, the high ground east of Santiago. To the northeast of San Juan Ridge, Spanish forces at the heights at El Caney threatened the right flank of the American advance, so Shafter broke off one of his divisions to eliminate the threat. That division, under General Henry Lawton, struggled against the outnumbered but well-entrenched Spanish troops, which forced Shafter to assault San Juan Ridge with only the remainder of his force on July 1.

Once again, the Americans had a decisive advantage in troops and materiel, but once again, the Spanish fought well and inflicted heavy casualties on the assaulting forces. Still, aided by timely support from a battery of Gatling machine guns, the two American divisions swarmed up the heights

and cleared out the Spanish defenders. Although the First U.S. Volunteer Cavalry Regiment, Theodore Roosevelt's Rough Riders, eventually received much of the credit for their efforts on the extreme right of the American assault, all of the American units involved played their part in winning the Battle of San Juan Hill. In the aftermath, Shafter surrounded Santiago, and Cervera's fleet had to try to run the American blockade. On July 3, Cervera tried to take his six ships out of the bay, but the American ships completely destroyed the small fleet in short order. The Fifth Corps laid siege to Santiago, which formally surrendered on July 17, ending the major action in Cuba.

The subsequent fight for Puerto Rico proved anticlimactic, as the more than 15,000 men under General Nelson Miles landed in late July and, facing little resistance from the 7,000-man Spanish contingent, controlled almost the entire island until the August 12 armistice halted the fighting. In the meantime, American and Spanish diplomats began the long process of negotiating the peace, which culminated with the Treaty of Paris, 1898 (ratified in April 1899). The treaty provided for (a) the independence of Cuba, (b) the cession of Puerto Rico and Guam to the United States, and (c) the cession of the entire Philippine archipelago to the United States for a payment of \$20 million. In less than 5 months of fighting, the Spanish-American War spelled the effective end of the Spanish empire in the Western Hemisphere and the Pacific and a significant expansion of American power and influence on the world stage. No wonder that at the time, the American statesman John Hay called it a "splendid little war."

Consequences

The luster quickly came off of the fight, because the Spanish-American War introduced a number of important controversies, some of which continued for generations after the war's end. The acquisition of the Philippines, and the bloody and highly politically contentious insurrection that followed, was just one of the unintended consequences of the fight. The United States also had to figure out how to handle its new territories and responsibilities, especially with regard to Cuba. The original declaration of war had included the Teller Amendment, which swore off any designs of the United States to annex the island. The amendment had emerged out of a

combination of anti-imperialist sentiments and considerations of local American politics and economics, but it did not reflect the totality of American ambitions. Many Americans wanted to take some territory in Cuba, control the island directly, or at least feel a responsibility to ensure its stability. So as part of the peace process, the Americans took control of the port at Guantanamo Bay and built the facility into a significant naval base, which the United States holds to this day. Even as Cuba transitioned from military government toward independence, the Americans formalized their partial control over Cuba in the form of the 1901 Platt Amendment, which allowed the United States to intervene in Cuba in the event of instability or a foreign threat to the island. A tendentious relationship ensued, replete with interventions and various diplomatic crises, and Cuba remains an important area of concern for the United States. In the short term, the difficulties attendant on expansion in both the Pacific and the Caribbean led most in the United States to back away from the imperial ambitions that had helped trigger the fighting.

Concerning military matters, it would seem that the rapid American victory would have led to mostly positive feelings within the military, but despite an initial spike in patriotic fervor and enthusiasm, the good feelings did not last for long. The army struggled mightily in organizing and equipping troops for overseas operations, especially in the tropical climes of Cuba and the Philippines. Malaria, yellow fever, and dysentery ravaged army units during the siege of Santiago, and even worse, widespread disease struck the facilities holding troops that could not be transported overseas and became packed into the southeastern United States. The army came under criticism for material shortfalls, inappropriate or outdated equipment and gear, insufficient or subpar food, and scandals in procurement. In truth, the army and the War Department had their fair share of difficulties, but they improved quickly as the war went on and did fairly well considering how far they had to go in such a short time.

Interestingly, military reformers, especially on the army side, fed into the negative perception, sometimes to the point of exaggeration. For them, the Spanish-American War became useful as a case study of the preparedness movement, driving the need to reform the U.S. Army. Advocates of preparedness made the case that the victory had a lot more to

do with Spanish failures than American successes. Indeed, the war helped lead to significant reform in the War Department under Secretary of War Elihu Root, including the creation of a general staff and the opening of the Army War College.

For many years, the majority of the historical literature on the war either followed this line of argument or focused narrowly on Roosevelt, the Rough Riders, and the Battle of San Juan Ridge. More recently, scholars have emphasized other aspects of the conflict, including how race and gender helped trigger the war, and the internal dynamics of the Cuban war against Spain, but the military course of the war has not received as much attention. Nevertheless, for the military, as well as for the country as a whole, the Spanish-American War had in many ways ushered in the modern era.

Thomas Bruscino

See also Cuba; Guantanamo Bay Prison; Haiti, U.S. Intervention in; Philippines; Philippines Insurrection

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SPECIAL FORCES, AIR FORCE

The U.S. Air Force (USAF) Special Operators provide U.S. forces with the ability to move personnel into contested areas as well as perform search-and-rescue (SAR) missions behind enemy lines “anywhere, anytime.” The U.S. Air Force’s Special Operations Command (AFSOC) is composed of more than 16,000 members, although the actual special operators make up a much smaller portion of the organization. In 2012, the current members of AFSOC included two active-duty wings, one reserve wing, one National Guard wing, and two overseas groups. This entry discusses the history, missions, and air assets of the USAF Special Operations Forces.

History

The AFSOC’s history dates back to the Second World War. The 1st Air Commando Group was established on March 29, 1944. General Henry H. “Hap” Arnold charged Lieutenant Colonels Philip Cochran and John Alison with the creation of the Air Commandos to support the guerrilla forces operating in Burma in early 1943. Cochran and Alison succeeded in training hundreds of men to operate as a highly efficient special operations force. The unit operated numerous aircraft, and its missions included scouting, medical evacuation, fighter sweeps, and insertion and extraction of personnel using Waco Gliders. The Army Air Forces also had special forces soldiers in the European theater of operations, called “Carpetbaggers,” who inserted and extracted guerrillas into Nazi-held France. These forces were especially important as the invasion of France drew closer in the spring of 1944, and special forces operators placed hundreds of men in the country to aid the French resistance. The end of World War II saw the inactivation of all Air Force Special Operations assets and units. This meant that there was nothing in place when the Korean War broke out in 1950.

The reestablishment of special tactics units within the air force occurred on an impromptu basis as different units fashioned special operations roles out of necessity during the Korean War. The first official USAF Special Operations squadron was activated in 1950 and went under the name Air Resupply and Communications Service (ARCS). The ARCS was



General Henry H. "Hap" Arnold.

Source: Artist: Rita Guzzi. U.S. Air Force Art Collection.

the USAF's primary special operations unit during the Korean War. The ARCS embraced many mission types, a majority of which reflect the mission types present in modern Air Force Special Operations Forces. However, as in World War II, the cessation of hostilities saw the inactivation of Air Force Special Operations units.

The Vietnam War saw the rebirth of Air Force Special Operations Forces and also the addition of new mission sets and weapon systems to carry them out. These specially trained units survive to this day as necessitated by USAF operational requirements. Aircraft losses during Vietnam gave rise to the use of special operations airmen who specialized in the rescue of downed U.S. aircrews. Specially outfitted HH-53 "Jolly Green" helicopters with aerial refueling capabilities provided by a unique C-130 aircraft and armed with multiple machine guns permitted them the ability to enter enemy-controlled regions and conduct SAR operations.

During Vietnam, a battle was also waged between the services regarding close air support (CAS). While

the air force shied away from producing a fully dedicated CAS platform, interservice rivalries forced the air force to adopt the mission, and as a result, the gunship came into being. The gunship, a modified cargo aircraft with multiple-side firing weapons of various calibers, able to bring an enormous amount of firepower onto the battlefield, first in the form of the AC-47 and later the AC-119 and AC-130, provided the needed CAS. As of 2012, the AC-130 gunship remains a basic, vital, and very popular part of the USAF Special Operations Force. Due to its highly specialized mission set and support of Special Operations Forces, the gunship falls under AFSOC rather than other CAS platforms that fall under the Air Combat Command. In the end, the Vietnam War saw the USAF codify and expand its special forces operations and assets into mission sets still used in the 21st century.

Operation Eagle Claw, the attempted rescue of hostages in Iran in 1980, highlighted the need for a unified command structure for Special Operations Forces across the services. Although the operation ended in total failure and resulted in the death of many rescue personnel, it did have positive effects. The raid, with its disorder and lack of centralized control between the various services participating in it, was one of the events that led to the passage of the Goldwater-Nichols Act, which reorganized the Department of Defense. It also led to the creation of the U.S. Special Operations Command, which would oversee the training, organization, and integration of all special forces units, including that of the USAF.

Air Force Special Forces Today

The modern-day AFSOC was activated on May 22, 1990. The command's motto is composed from the mottos of its two primary branches: "First there . . . that others may live." The contemporary air force has two primary types of special operations airmen. The first are Combat Controllers (CCTs): essentially air traffic controllers who have the ability to insert fixed-wing or rotary-wing aircraft into hostile or dangerous environments, mark landing zones for them, and guide assets in and out. The second, Pararescue Jumpers, more commonly called PJs, are special operators with the singular mission of retrieving personnel from hostile environments. Their insertion methods include



Air force HH-3E "Jolly Green Giant" (aka "Jolly Green") helicopters were used to rescue pilots downed in Vietnam or the South China Sea. The rescue craft cruises at speeds of up to 155 miles per hour and is capable of in-flight refueling.
Source: U.S. Air Force photo, 1967.

jumping or fast roping from helicopters or parachuting into dangerous and hostile environments to locate and subsequently treat friendly forces—typically a downed pilot. The training pipeline for air force CCT and PJ personnel is among the most intense and time-consuming regimens in the special operations community. It not only encompasses qualification courses for each career field but also includes multiple interservice schools as well as the navy's diving course and Army Airborne and Air Assault courses.

Air Force Special Operations also include Special Operations Weathermen—meteorologists tasked with the collection and analysis of mission-critical weather data in support of special operations. They

can be found attached to units across the branches of service. Finally, tactical air control parties also fall under the special operations rubric. Their primary role is to advise, assist, and control the use of CAS assets. The air force uses a number of specialized air assets to conduct its Special Operations Forces missions, including the AC-130 gunship, MH-53 Pave Low, MH-60 Pave Hawk, CV-22 Osprey, EC-130J Commando Solo, MC-130 Combat Talon I/II, and MC-130P Combat Shadow.

During the Panama invasion in 1989, all of the air force's special operations aircraft types participated in the invasion, and members of special tactics groups (both CCTs and PJs) were assigned as attached members with various other special operators. During the



A U.S. airman assigned to the 23rd Special Tactics Squadron, Air Force Special Operations Command, Hurlburt Field, Florida, heads toward the water after jumping from a C-130 Hercules aircraft during parachute training at Santa Rosa Sound, Florida, September 27, 2010.

Source: U.S. Air Force photo by Master Sergeant Russell E. Cooley IV (released).

invasion, the MC-130 Combat Talons air dropped Army Rangers and Combat Control Teams into drop zones at two airports, and the HC-130 Combat Shadows provided on-call aerial refueling for other rotary-wing assets during the opening night of the conflict. Numerous AC-130s provided cover as well. The MH-60 Pave Hawks shuttled conventional and Special Operations Forces around the cities and countryside, while the MH-53s provided transport as well as fire support for American troops. CCTs were also integrated with the Navy SEALs (sea, air, land) during the invasion, providing their unique capabilities for controlling air traffic in and out of Panama.

During Operation Desert Storm, USAF CCTs handled all of the air traffic at King Fahd airport during the buildup of the allied forces. They also coordinated combat SAR missions in MH-60 Pave Hawks and MH-53 Pave Lows, aiding in the rescue of several downed pilots.

U.S. Air Force Special Operations also played an important role during Operation Enduring Freedom. In March 2002, during Operation Anaconda, a

Navy SEAL team attempted to insert on top of the Takur Ghar Mountain. The aircraft was hit by a rocket-propelled grenade, causing Navy SEAL Neil Roberts to fall from the helicopter. The damaged helicopter was forced to make an emergency landing. USAF Combat Controller Technician Sergeant John Chapman immediately called for CAS and a combat SAR effort to retrieve Roberts. The special operators, including Chapman, landed and began a rescue effort by advancing on an enemy position. Intense small arms fire from all directions met the team, and Chapman was killed in an attempt to rush an enemy position. Chapman was posthumously awarded the Air Force Cross. A quick reaction force arrived a short time later. This team included four air force PJs. During the landing, the helicopter came under withering fire, including rocket-propelled grenades and machine gun fire, which killed and injured several members of the rescue force. Senior Airman Jason Cunningham administered first aid and relocated the wounded away from the helicopter, which was now in flames. During the

battle that followed, Cunningham continuously returned fire and provided on-the-scene assistance to the wounded. During the course of the firefight and while moving a fellow comrade out of harm's way, he was mortally wounded. Cunningham was posthumously awarded the Air Force Cross for his selfless act.

Most recently, in 2010, after the earthquake in Haiti, USAF CCTs coordinated all air traffic control operations at the heavily damaged Port-au-Prince airport. It is unlikely that the supplies and personnel would have accomplished their mission, or even been able to get into the country, without the skill and determination shown by the CCT members, who worked from a foldout table with portable radios in a field next to the runways. Moving into the future, USAF special operators will continue to be a vital part of all air force operations.

Brian Laslie

See also Air Force, U.S.; SEALs, Navy; Special Forces, Army; Special Operations, Strategy; U.S. Special Operations Command; Warfare, Unconventional

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SPECIAL FORCES, ARMY

The U.S. Army's Special Operations Forces comprise a multifaceted group of units tasked with missions such as unconventional warfare, reconnaissance, and counterterrorism. Their wide-ranging skills therefore make them capable of carrying out any mission outlined under the wider special operations umbrella. The army's "Green Berets," as they are commonly known, have developed over the course of the 20th century and have become an integral tool of the modern American military. After discussing the history of U.S. Army Special Operations Forces, this entry describes the seven Special Forces Groups (SFGs), 75th Ranger Regiment, and Delta Force, and their roles.

History

The Army Special Forces, while officially created in 1952, can trace their heritage back to the Second World War and the Office of Strategic Services (OSS). The OSS, the Army Rangers, and other units all conducted missions later tasked to special forces units, and many of the men involved can be directly linked with the institutional creation of special forces. The OSS conducted or assisted in unconventional warfare operations in occupied France, Burma, and the Philippines. The Army Rangers provided all forms of direct action support in every theater, from leading frontal assaults to raiding behind enemy lines and even conducting rescue missions. Men from these units would be influential in the formation of the Army Special Forces.

The 10th SFG was created in June 1952, alongside the establishment of the U.S. Army Psychological Warfare Division in the burgeoning Cold War. Its first commander was Colonel Aaron Bank, who had served with the OSS in Europe. While the 10th Special Forces Unit did not participate in the Korean War, the army raised 17 Ranger companies and established the Army Ranger School at Fort Benning, Georgia.

The special forces underwent their greatest period of growth under President John F. Kennedy, who saw to the addition of four new SFGs and the creation of the JFK Special Warfare Center and School at Fort Bragg, North Carolina. It was during Kennedy's 1961 visit to the center that the special forces revived their traditional green berets from their World War II predecessors. While giving a tour to the president, Brigadier General William P. Yarborough wore the then unauthorized headgear. The president was so impressed and enamored with the men and ideas of the special forces that he allowed the iconic beret to become their official headgear, calling it "a symbol of excellence, a badge of courage, a mark of distinction in the fight for freedom" (Simpson & Rheault, 1983, p. 32). The newly empowered special forces would become one of America's primary weapons in the burgeoning Cold War.

Vietnam served as a defining period for the Army Special Forces as they conducted a wide range of special operations missions conflictwide. The early years of the conflict necessitated the extensive development of the Green Berets into training specialists. Primarily involved in unconventional warfare training and action, the special forces constituted the direct liaisons in internal defense initiatives, serving

as the point of contact between the U.S. military and the local, indigenous populations. The special forces provided direct-action support, conducting strike missions and raids deep within hostile territory. The Vietnam version of the Rangers served the dual roles of intelligence and direct action. They were referred to as LRRPs, which stood for Long Range Reconnaissance Patrols and was pronounced “Lerps.” The special forces were heavily involved with the Studies and Observations Group, which was responsible for conducting covert and special operations within North Vietnam and across other nations’ borders.

While Vietnam represents a high mark in the evolution of Army Special Forces, the 1970s are synonymous with ineptitude. The U.S. military as a whole suffered a considerable hangover from Vietnam. This is nowhere more evident than in the failed 1980 rescue attempt of the Americans taken hostage in Iran, named Operation Eagle Claw. This operation failed due to poor cooperation between

the services, inadequate planning, and a decline in the training standards among the special forces themselves. Following the debacle of Eagle Claw, American Special Operations Forces underwent reorganization and resurgence. This shift entailed a refocus on training and the establishment of a Joint Special Operations Command, which utilized the Army Special Forces as its primary weapon. The special forces resurrected their image through critically important actions during U.S. interventions in Panama, Colombia, and El Salvador. The U.S. Army Rangers and Delta Force publicly entered Somalia in 1992, in an example of U.S. Army Special Forces acting independently of conventional forces on a larger scale. Army Special Forces were among the first U.S. military personnel on the ground in both Afghanistan and Iraq. During both of these contemporary conflicts, the special forces have been responsible for the full spectrum of special operation roles but have mainly been engaged in conducting unconventional warfare in hostile and contested territory.



U.S. Army Special Operations Command capabilities exercise, 2012.

Source: U.S. Army Special Operations Command photo.



Members of Operational Detachment Alpha 3336 of the 3rd Special Forces Group reconnoiter the remote Shok Valley of Afghanistan, where they fought an almost 7-hour battle with terrorists in a remote mountainside village. Patches and insignia may have been altered for security reasons.

Source: U.S. Army photo by Sergeant David N. Gunn (released).

Organization and Structure

Since the army institutionalized the special forces in the early years of the Cold War, the main force element has been the SFG. As of 2011, there were seven SFGs in the army—five on active duty and two National Guard groups. Each of the groups is organized similarly: one command element, three or four mainline battalions, and one support battalion. Each SFG is assigned to a specific region of the world, in which it specializes. The soldiers are put through intensive language and cultural education courses to maximize their effectiveness in their particular region.

The 1st SFG is responsible for the Pacific Region. This gives the 1st SFG a possible area of operations

stretching from Australia up to the Korean Peninsula and then over to Sri Lanka. The 1st SFG is headquartered at Fort Lewis, Washington, and regularly falls under the U.S. Pacific Command. Its motto is “First in Asia,” and it has seen recent action in the Philippines, conducting unconventional warfare missions in conjunction with the Republic of the Philippines government and armed forces in an attempt to separate the population from, and eventually destroy, the terrorist networks present in the southern islands.

The 3rd SFG is nominally assigned responsibility over sub-Saharan Africa, but recently, it has been heavily involved in Afghanistan, Pakistan, and other Central Asian nations. Its motto is “From the rest comes the best.” In 2008, soldiers from the “3rd

Group,” as they are referred to, were involved in the intense 7-hour Battle of Shok Valley. There were 10 Silver Stars awarded to participants in this action—more than any other single battle since Vietnam.

The 5th SFG’s assigned region is the Middle East and Central Asia. The soldiers refer to themselves as the “Professionals” and their group as the “Legion.” The 5th SFG is perhaps the most decorated, with members earning 13 Medals of Honor during Vietnam alone. The Legion worked extensively with the Central Intelligence Agency during the conflict, originating the army’s involvement with the now infamous Studies and Observations Group. The 5th has been very active in current conflicts—supporting the overthrow of the Taliban government in Afghanistan in 2001 and assisting in the capture of Saddam Hussein in Iraq in 2003.

The 7th SFG is responsible for Latin America and the Caribbean. The 7th SFG earned its nickname as the “Devil’s Brigade” during its service in World War II, when it was the 1st Special Service Force, giving the 7th SFG the longest lineage. The 7th SFG was critically important to Operations Urgent Fury in Grenada and Just Cause in Panama. Through both of these operations, the 7th SFG conducted reconnaissance and direct-action missions behind enemy lines. Along with the 5th SFG, the 7th SFG has spent the most time in Afghanistan, which is evident from the “Devil’s Brigade’s” suffering more casualties than any other special forces unit.

The 10th SFG was the original SFG formed in 1952. Its area of responsibility is Europe and northern Africa, and its motto is simply “The best.” Originally, the 10th SFG began training North Atlantic Treaty Organization allied militaries in unconventional warfare tactics and strategies during the early years of the Cold War. It has continued this tradition of training in more current conflicts, training the militaries of multiple African nations in support of Operation Enduring Freedom. The 10th SFG and elements of the Central Intelligence Agency were the first American units into Iraq, where prior to the invasion they trained Kurdish tribes in unconventional warfare practices.

The 19th and 20th SFGs are both National Guard units and organized as complementary to the active-duty SFGs. These two are attached to the larger regions of the Pacific (19th) and Latin America (20th), to ease the burden of the 1st and 7th SFGs. Each of these groups is made up of National Guard volunteers from a multitude of states. In addition to

serving in their specific regions, these two groups, along with all the active SFGs, have served extensively in both Iraq and Afghanistan.

Each of the groups falls under the command structure of the overall theater commands assigned to each particular region. The army created the 160th Special Operations Aviation Regiment to properly support the SFGs and other Army Special Forces in the field. The special forces also answer to the U.S. Special Operations Command, which assigns missions to Special Operations Forces from all branches and is charged with interservice cooperation and coordination.

The 75th Ranger Regiment

The 75th Ranger Regiment as it exists today was formed in 1984 and is under the authority of U.S. Army Special Operations Command and U.S. Special Operations Command. The Rangers are rapidly deployable airborne light infantry organized and trained to conduct highly complex joint direct action operations in coordination with or in support of other special operations units of all the services. The Rangers’ motto and creed are “Rangers lead the way,” highlighting their ability to be among the quickest deployable forces in the army. The regiment can deploy one of its battalions anywhere in the world in as little as 18 hours. The Rangers are capable of executing a number of special operations missions, including airborne and air assault direct-action strikes, as well as acting in support of more conventional forces.

Delta Force

The 1st Special Forces Operational Detachment-Delta (1st SFOD-D), more commonly referred to as simply Delta Force, is one of the U.S. Army’s Tier-1 Special Operations Forces. Referred to internally as “The Unit,” Delta Force is the army’s premier counterterrorism unit. The unit falls under the special jurisdiction of the Joint Special Operations Command, alongside other elite units like the Navy’s SEAL (sea, air, land) Team Six. While specializing in counterterrorism, direct-action, and national intervention operations, this group is capable of undertaking and completing any special operations task. It is a unique unit, the most capable and versatile of the Army Special Forces units.

Delta Force’s structure and organization are highly classified, with a membership numbering

somewhere between 800 and 1,000. The soldiers of Delta Force are almost universally recruited from SFGs and the Ranger Regiment, with approximately 70% coming from the Ranger ranks. A soldier who successfully survives the brutal training regimen and graduates is henceforth referred to as an *operator*, a term strictly reserved for those in Delta Force. While a large portion of the SFGs' task is the training of other nationalities in conventional warfare and internal defense, Delta Force is the army's "doer." Delta Force has been the ultimate strike weapon in operations spanning from Honduras to Grenada to Somalia. Delta Force was the first American unit in Baghdad before it was taken in 2003, and in coordination with other Tier-1 Special Operations Forces, the operators of Delta Force have captured more than 2,000 high-value targets in Afghanistan since 2001.

Current Role

U.S. Army Special Forces currently, and will continue to, play a critical role in the current War in Afghanistan and future conflicts. The task of special forces training foreign militaries and paramilitary groups in the strategies and tactics of unconventional warfare is of paramount importance when dealing with the continuing trend of hostile nonstate actors. In wartime, as well as in peacetime, these units will play a decisive role in the future of America's global presence.

James Sandy

See also Army, U.S.; Rangers; Special Operations, Strategy; U.S. Special Operations Command; Warfare, Unconventional

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SPECIAL FORCES, MARINE CORPS

See Force Reconnaissance, Marine

SPECIAL FORCES, NAVY

See SEALs, Navy

SPECIAL OPERATIONS, STRATEGY

The U.S. Department of Defense defines special operations as operations conducted in hostile, denied, or politically sensitive environments to achieve military, diplomatic, informational, and/or economic objectives employing military capabilities for which there is no broad conventional force requirement. These operations often require covert, clandestine, or low-visibility capabilities. Special operations are applicable across the range of military operations. They can be conducted independently or in conjunction with the operations of conventional forces or other government agencies and may include operations through, with, or by indigenous or surrogate forces.

Special operations differ from conventional operations in degree of physical and political risk, operational techniques, mode of employment, independence from friendly support, and dependence on detailed operational intelligence and indigenous assets. Special operations are normally undertaken by smaller forces and are usually time sensitive in nature. This widely encompassing umbrella definition covers an important and vital mode of warfare emerging in the 21st century. This entry examines the history of U.S. Special Operations Forces, their capabilities, and their current role within the U.S. military.

History

Special operations have been conducted in one form or another for the entirety of U.S. history. The first British North American colonies required groups capable of reconnoitering the foreign country around them. Men like John Smith of Jamestown and others were the first to explore inland areas.

As the colonial experience evolved, these special groups remained, acting distinctly differently from the standard militias created for colonial defense. When the Native Americans and colonists fell into conflict, special groups were created to fight using tactics parallel to those of the Native American enemy. Benjamin Church created a group of colonists and friendly Native Americans highly capable in irregular warfare, reconnaissance, and other specialized needs. This unit was formed organically by Church and worked to support and complement the militia during King Philip's War. The activities of Church's men mark the beginning of legitimized special units in American history.

As the colonies became entangled in international conflicts like the Seven Years' War and the American War of Independence, special units became vitally important in supporting conventional forces. Men like Robert Rogers and Francis Marion existed outside the conventional structures of the colonial and American militaries. They galvanized public support, executed daring raiding missions, harassed enemy supply and logistical systems, and fulfilled a number of other supporting roles. During the American Civil War, there were a multitude of units and groups on both sides that met the special operations definition. Confederate colonel John Mosby and his partisan Rangers were an irregular force in northern Virginia. They were so effective that the Union Army had to commit a large conventional force to attempt to contain their harassing and destructive raids. These early groups were all formed on an ad hoc basis and were seldom fully appreciated by their conventional military counterparts. Within the conventional American military, there existed a consistently expressed prejudice against special and elite units, which kept any tradition of special operations purely provisional and ad hoc in nature.

The Second World War constitutes a landmark in the evolution and history of special operations and the U.S. military. This conflict witnessed a veritable explosion of special units across the spectrum of the U.S. armed forces, as every branch created and experimented with specialized units. President Franklin Roosevelt created the Office of Strategic Services, which served as the standard in design, tactics, and techniques for future special operations groups. The Office of Strategic Services was in its essence an intelligence organization and would lay

the groundwork for the eventual establishment of the Central Intelligence Agency. It was formed in 1942 partly as an effort to consolidate the pre-existing situation where each branch had its own intelligence-gathering service formed along ad hoc lines. The members of the Office of Strategic Services operated in every theater of the war, training foreign nationals, providing intelligence to theater commanders, and providing assistance to resistance groups within enemy-controlled countries. Also created were the various Army Ranger companies that fought in every theater in a multitude of roles. The U.S. Navy experimented with a variety of pre-landing units, the Beach Jumpers, beginning in 1943. These units experienced impressive successes executing diversionary landings on fake target beaches for the purpose of distracting Axis intelligence. Even the U.S. Marines, who expressed the belief that no elites could exist within the already elite Marine Corps, formed the very successful Marine Raider battalions. This cornucopia of specialized units was not permanent; the vast majority of these units were disbanded before the war's end, but the Second World War broke the precedent of the U.S. military's innate prejudice against special operations.

As the United States entered the Cold War and the era of nuclear confrontation, it also continued to struggle with the idea of special operations and the question of their continued usefulness and viability. As the newly formed Department of Defense dealt with burgeoning interservice rivalries, it also had to decide if elite units had a place in the new, nuclear-armed military of the future. The Korean War (1950–1953) immediately offered a new arena for experimentation. A wide variety of special operations units were formed, including psychological warfare experts, civilian affairs groups, and the Rangers, who returned to service. The United States also experimented with attempts at inciting a countercommunist insurgency within North Korea through direct involvement of the American special forces. Following Korea, the idea of special operations became a topic of serious debate that reached a climax in 1960 with the election of President John F. Kennedy. Kennedy was enamored with the idea of elite units. Kennedy and his administration had a high opinion of special operations units and believed that the special forces soldier was destined to become the face of the modern U.S. military. The

precise approach to warfare adopted by special operations forces was seemingly tailored to the kind of limited wars that Kennedy and his administration foresaw in the future. That admiration and strong belief, along with the now burgeoning ranks of experienced special forces veterans, pushed the United States to form a permanent institution centered on special operations, the Special Warfare Center and School at Fort Bragg, North Carolina.

The 1960s saw the widespread implementation of special operations units across the branches and their immediate deployment, first across Southeast Asia and then across the globe. The Vietnam War saw extensive special operations units utilized, from Army Special Forces and Navy SEALs (sea, air, land) to U.S. Air Force Air Commandos. These units conducted all manner of missions, from raids and long-range reconnaissance to inciting insurgencies within North Vietnam. Special Operations Forces captured the public eye during domestic tours and demonstrations, which helped create a popular impression of excellence among the American people. Following Vietnam, however, Special Operations Forces and their viability would be reexamined in the face of the “imminent” threat of conventional war with the Soviet Union.

During the 1970s, special operations and unconventional warfare experienced significant trials as the U.S. military as a whole suffered a dark decade of decay and mishap, characterized by President Jimmy Carter’s infamous 1979 “Malaise” speech. Following the failed rescue attempt of Iranian hostages in 1980 and the growing communist presence worldwide, however, the U.S. military reemphasized special operations. Thus, while the 1970s saw a decline in capability, the 1980s emerged as the beginning of a “golden age” for Special Operations Forces. This shift was marked by U.S. recommitment to unconventional warfare capabilities worldwide and the successes of special forces in places like Honduras, Grenada, and El Salvador, and the more than 50 other military engagements worldwide led by Special Operations Forces.

Tasks

Special operations’ primary purpose is to support conventional forces. This is done through inflicting both moral and material damage on an enemy. The foundation of the special operations unit is

the soldier himself or herself. The individual is the weapon in a Special Operations Force, with a strict emphasis placed on the human element over hardware. This allows these units to accomplish tasks that a larger, more conventional force would be incapable of approaching and completing.

Special operations are currently categorized into nine core tasks. The first and most visible are titled direct action (DA). These are defined as short-duration strikes and other small-scale offensive actions conducted in hostile, denied, or diplomatically sensitive environments that employ specialized military capabilities to seize, destroy, capture, exploit, recover, or damage designated targets. These activities constitute perhaps the most common implementation of Special Operations Forces.

Special reconnaissance missions are the second most often undertaken jobs. Special reconnaissance tasks are detail-oriented surveillance missions geared toward collecting or verifying information of strategic or operational significance, employing military capabilities not normally found in conventional forces. On many occasions, special operations units are the eyes and ears of the conventional forces they support. This represents one of the original and fundamental military needs that Special Operations Forces are designed for and able to meet.

During the Cold War, a multitude of insurgencies and internal uprisings arose across the globe. In situations deemed unfavorable to U.S. foreign policy, special forces units could be tasked with engaging in foreign internal defense (FID). FID is defined as participation by civilian and military agencies in any of the action programs undertaken by another government or organization to free and protect its society from subversion, lawlessness, insurgency, terrorism, and other threats to its security. FID, thus, encompasses U.S. special operations personnel providing training for foreign military and civilian organizations both in foreign nations and domestically at U.S. facilities.

Related to FID is the task of waging unconventional warfare (UW), which is defined as activity that enables a resistance movement or insurgency to coerce, disrupt, or overthrow a target government or occupying power by operating through or with an underground, auxiliary, or guerrilla force in a denied area. In its application, this encompasses a more direct, but still concealed, effort by Special Operations Forces operating in a foreign country.

Contemporarily, the most discussed and visible special operations task is counterterrorism (CT). CT is defined as action taken directly against terrorist networks to render global and regional environments inhospitable to terrorist activity. These missions are perhaps the most important for the U.S. military if current trends continue. The trend of nonstate actors playing a significant international role dictates the need for forces capable of countering this more elusive enemy. This task also requires special forces units to embed and to encourage and sponsor antiterrorist sentiment in sensitive regions around the world. Special operations units executing these tasks have been and will continue to be critically important in the Global War on Terrorism, now more fittingly titled the "Long War."

The Cold War fostered a global fear of nuclear warfare; therefore, one of the fundamental missions for which special operations units were trained during the 1960s was counterproliferation of weapons of mass destruction. Originally, this task was strictly aimed at preventing nuclear weapons from reaching hostile nations and groups. While this still remains a primary focus, over the past few decades, this task has grown to include chemical, biological, and purely radiological weapons of mass destruction. This task has become of paramount importance and difficulty with the emergence of more dangerous nonstate actors. This task goes hand in hand with CT, and presents perhaps the most immediate danger of the 21st century.

With Special Operations Forces committed to countering terrorism and the spread of weapons of mass destruction on a global scale, special operations units will continue to expand their influence on the populations of sensitive or hostile regions. The degree to which these civilian populations are affected by ongoing missions can be a deciding factor in the overall success of Special Operations Forces. Therefore, many special forces units are also tasked with conducting concurrent civil affairs missions. These activities help military commanders by working with civil authorities and civilian populations in the commander's area of operations to lessen the effects of military operations on civilian populations during peacetime, during contingency operations, and during the conduct of a declared war. This mission fosters a critically important relationship between conventional military commanders and civilian leaders for both parties to function more

cohesively. This mutually beneficial relationship assists the military in achieving its goals and assists the civilian population with material, medical, and a multitude of other forms of assistance.

A more strictly military-goal-oriented task sometimes coupled with civil affairs is psychological operations. Psychological operations encompasses operations designed to convey selected information and indicators to foreign audiences to influence emotions, motives, objective reasoning, and, ultimately, the behavior of foreign governments, organizations, groups, and individuals. The main purpose of this kind of operation is to induce or reinforce behavior favorable to U.S. objectives. These missions are conducted on three levels: (1) strategic, (2) operational, and (3) tactical. This wide spectrum allows for broad, overarching information campaigns to be broadcast globally, nationwide, and even regionally and locally. These operations can be very effective in lowering the morale of an enemy force, sustaining popular support within a civilian population, and affecting the decision-making process of enemy leadership.

Psychological operations fit under the wider umbrella of information operations. This constantly evolving mission is defined as the integrated employment, during military operations, of information-related capabilities in concert with other types of operations to influence, disrupt, corrupt, or usurp the decision-making capabilities of adversaries and potential adversaries while protecting U.S. objectives. This field has undergone a massive overhaul with the advent of global communication, the Internet, and other technologies, and it will be one of the most important tasks of Special Operations Forces looking forward into a rapidly globalizing world.

Together, these nine separate yet interconnected tasks constitute the wide range of missions under the special operations umbrella. These tasks are not executed independently of one another. This array of missions is complemented by an equally diverse array of units under the category of Special Operations Forces (SOF).

Special Operation Elements

The most visible special operations units are the Army Special Forces. These units were the first true SOF created during the late 1950s and are

distinguished by their iconic moniker and headgear, the “Green Berets.” Army Special Forces are designed primarily with UW in mind and therefore are primarily tasked with UW missions and FID. Army Special Forces are organized into Special Forces Groups, which are assigned to particular regions of the world. Each Special Forces Group is trained and educated with its particular region in mind.

The 75th Ranger Regiment is a unique SOF that bridges the gap between special operations and conventional infantry designs. The regiment serves as the standard bearer for infantry excellence within the U.S. Army. This elite unit specializes in DA and can serve as either special operations support for more conventional units or conventional support for smaller, more versatile Special Operating Forces.

Critically important to many contemporary SOFs is special operations aviation support. Units like the 160th Special Operations Aviation Regiment provide insertion, extraction, fire support, reconnaissance, and any other manner of assistance to SOFs via helicopter and other aviation platforms. While the special operations soldier is the main weapon of an SOF, many of their missions would be nearly impossible without hardware support like that provided by the 160th Special Operations Aviation Regiment.

Perhaps the most famous Special Operations Force in the world is the U.S. Navy SEALs. Officially designated as the navy’s sea, air, and land teams, this highly versatile type of unit is capable of a wide variety of special operations tasks, including DA, special reconnaissance, CT, FID, and UW, and is deployable anywhere in the world. The SEALs have worked in close concert with the Central Intelligence Agency on multiple occasions, famously with the Military Assistance Command in Vietnam–Special Observations Group during the Vietnam War and during contemporary wars in Iraq and Afghanistan. This cooperation reached a highly visible climax when Navy SEALs acted on Central Intelligence Agency intelligence in the finding and killing of Osama bin Laden during a DA mission in May 2011. The Navy SEALs represent one of the most adaptable and widely utilized SOF.

The U.S. Air Force Pararescue units represent one of the more unique SOFs, tasked with personnel recovery. The Pararescue Jumpers, or PJs, as they are commonly referred to, can be attached to any military branch to serve as an elite recovery unit. They are capable of retrieving personnel in both war

and peacetime emergencies, including heavy combat situations and natural disasters. This unit is capable of serving in any region of the world and has conducted rescue operations from Alaska to Iraq.

Current Role

In today’s world, SOFs are of critical importance to the future military and foreign policy endeavors of the United States. The U.S. Special Operations Command is a unified combatant command that was formed in 1987 following the failed Iranian hostage rescue known as Operation Eagle Claw. This command oversees the various special operations commands of the different branches and fosters interservice cooperation, actively directing operations conducted by units from multiple branches of the military. Currently, U.S. Special Operations Command and the various branch commands deploy SOFs in more than 75 countries on a yearly basis, and that number will surely rise as the United States develops a broader global presence.

SOFs have been enjoying a golden age under contemporary global conditions, in which CT and UW are the order of the day. Former secretary of defense Donald Rumsfeld tapped the SOFs as the lead elements of the Global War on Terrorism after 9/11. He authorized special operations members from every branch of the armed forces to conduct both covert and high-profile missions within Afghanistan and Iraq. By placing this emphasis on special operations from the beginning, Rumsfeld put even more momentum behind a growing trend within the U.S. military. The post-9/11 world dictates that a heavy emphasis be placed on special operations as America’s enemies become less traditional in their use of force and mode of organization and operation. Conventional forces are not equipped to properly combat nonstate actors, and therefore, more and more SOFs must be trained. This represents a dilemma in maintaining the elite quality of these units while simultaneously increasing the quantity of deployable assets. This very issue has led to certain identity problems within the armed forces, especially the army, where more and more units are being tasked to undertake special operations missions, even if it is outside their originally trained military occupational specialty. The question arises of how many military personnel are required and in what capacity. This is why current special operations directives stress FID missions, which allow the

relatively small number of SOF to multiply influence by cooperating with like-minded allies. The discussion about appropriate force will remain center stage as the U.S. military moves into the future; however, the SOF will undoubtedly remain the weapon of choice on the battlefields of the 21st century.

James Sandy

See also Force Reconnaissance, Marine; Rangers; SEALs, Navy; Special Forces, Air Force; Special Forces, Army; U.S. Special Operations Command

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SPORTS

Sports have been an important aspect of U.S. military life since the early 20th century. From the Army-Navy football game to sports-associated pastimes in combat zones, the competition, physical training, and comradeship fostered by and through sports have remained a vital aspect of military life. Sports can also serve important diplomatic functions and continue to play a large role in today's military. This entry describes the history of sports in the U.S. military and examines the impact of sports, especially the Olympic Games, on U.S. diplomacy.

History

Sports play a distinctive role in American society politically, economically, socially, and culturally. Americans spend billions of dollars per year on tickets, team gear, and memorabilia for myriad

professional and collegiate sports teams. Millions of Americans maintain fierce loyalties to sports teams. Local and state governments regularly subsidize the construction of stadiums for professional teams across the country. Professional athletes in sports such as football, baseball, basketball, and hockey can command multimillion-dollar salaries and are major cultural icons. Metaphors that draw on sports terminology permeate the culture—for instance, the briefcase carrying the nuclear codes for the president of the United States to consult in the event of an attack is termed *the football*.

Sports, while a dominant part of American society, have not always played such a vital role. In fact, most sporting activities before the Civil War were largely ad hoc affairs. Until the late 19th century, the United States remained predominantly an agricultural society, leaving relatively little time for leisure, especially for farmers. Horse racing, especially among southern gentry, was the most popular spectator sport. Team sports as they emerged tended to be ad hoc, grass-roots efforts. Although attracting large audiences, until the 1920s, boxing remained illegal in most states and had a reputation for unbridled brutality.

Baseball's origins remain murky, but the game that has been termed *America's pastime* gained increasing popularity by the 1860s. During the Civil War, soldiers played baseball to relieve the boredom of camp or prison life. During Christmas 1862, an audience of 40,000 troops watched the 165th New York Volunteer Regiment play a group of selected Union regiments, reportedly the largest audience of the 19th century.

Baseball continued to be popular in the aftermath of the Civil War. Significantly, American troops fighting in the Spanish-American War played an important role in exporting the game to Cuba and other newly acquired American possessions. Cuban nationalists, eager to create a distinctive national identity, rejected bullfighting and embraced baseball. American occupation troops and Cuban civilians played baseball together. For African American troops, athletic competitions were one of the few outlets that allowed them to compete with White troops. For instance, during the Philippine insurrection, Black regiments fielded teams that regularly competed with their White counterparts in baseball and also fielded boxers.

The growing industrialization of American society sparked concern in leading figures like Theodore Roosevelt that American men were losing

their masculinity as an increasing number of men were making their living as office workers. Sports emerged as an important recreational outlet for male industrial workers as both participants and spectators. American college life witnessed a boom in organized intramural and extramural athletic competitions, especially centering around football. These contests were initially initiated by students but over the course of the 19th century were taken over by college administrations. Coaches were hired by the college authorities, and students played on fields and stadiums built expressly for this purpose.

The military academies emulated other colleges and universities. In the early 1880s, the United States Naval Academy began fielding football teams. The United States Military Academy quickly followed and, along with Annapolis, started competing with civilian universities. In 1890, the two academies competed in football and began one of the legendary rivalries in athletic history. The annual Army-Navy game attracts widespread interest not only among the student body and alumni of these two military academies but also in the entire army and navy.

A close friend of Teddy Roosevelt, General Leonard Wood, played a pivotal role in pushing the army to embrace competitive sports as a way to promote physical conditioning and build up the morale of soldiers. Under Wood's leadership, army commanders were encouraged not only to emphasize physical training but also to form athletic teams in a range of sports. Boxing became an especially favored sport, not only to encourage martial virtues among recruits but also as a spectator sport.

American entrance into World War I brought an influx of citizen soldiers into the army. Sports were viewed as one of the solutions to the growing problem of draftees partaking of alcohol and illicit sex. Voluntary organizations such as the YMCA and Knights of Columbus encouraged team sports such as basketball to provide wholesome outlets for young men in uniform. At the end of the war, the American Expeditionary Force not only staged an elaborate series of athletic matches in a range of sports but even organized a mini-Olympics that involved the troops of other nations.

During the interwar years, sports took on greater importance to an army perpetually short of funding for training and equipment. The officer corps, especially those with independent wealth, often indulged in equestrian sports. George S. Patton, who won fame as a hard-driving general in World

War II, spent much of the interwar years playing polo. Fielding winning teams remained a way for unit commanders to gain stature and success. This could have a dark side, however, as Jim Jones wrote in his novel *From Here to Eternity* (1951), describing an overzealous commander pressuring one of his men to become a prizefighter, to the detriment of his life and career.

World War II continued the pattern established in World War I. Moreover, the military made a concerted effort to publicize the service of prominent athletes drafted into the military. In many cases, athletes played on special teams, most notably football and baseball teams designed to entertain troops. The African American boxer Joe Louis fought exhibition rounds at army bases and supported bond drives. This era also represented a golden era for football for both Annapolis and West Point as these institutions attracted some of the best athletes in America, and civilian colleges lost most of their male student bodies to the draft.

During the Cold War, few professional athletes served in the military, in part because the number of draftees called up during the Korea and Vietnam Wars were fewer and there were more exemptions offered. Encouraging soldiers to participate in sports remained a hallmark of training and garrison life during this era. The rise of the all-volunteer military in 1973 led to the widespread use of print and broadcast media to encourage young men and women to enlist in the armed forces. Sporting events were a favorite place to advertise. The army established the World Class Athletic Program in 1978 to encourage and groom elite athletes to compete in the Olympics.

The continuation of the all-volunteer military during the Afghanistan and Iraq Wars made the decision by Pat Tillman to enlist in the service a source of considerable media and public attention. Turning down a multimillion-dollar contract, Tillman served with the Army Rangers and was deployed to Afghanistan. After he was killed in battle, the U.S. Army initially decorated him for bravery in the face of the enemy. Further investigation later demonstrated that Tillman had died from friendly fire.

As asymmetric conflicts, the wars in Afghanistan and Iraq presented fewer opportunities for soldiers to engage in athletic competitions since there was no clearly demarcated front line and rear. This lack of rear (safe) areas resulted in all troops in the combat zone needing to stand ready, leaving little or no ability to take part in sporting contests. But sports

continued to perform important functions, even though they were organized under difficult circumstances. For instance, in 2004, military personnel at the U.S. base outside Tarin Kowt in Afghanistan managed to stage a successful marathon despite the continuing threat posed by the enemy.

The Olympics Movement and Sports in American Diplomacy

The Olympic Games were revived in 1896 as an international amateur competition organized along national lines. The founder of the modern Olympic movement, Pierre de Coubertin, had two competing visions in promoting these games. On the one hand, Coubertin wanted to address what he saw as the growing lack of physical vigor among French youth and to ensure that they were fit for military service. On the other hand, Coubertin wanted the modern Olympics to promote harmony and peaceful relations between nations.

Shooting and fencing, sports popular among those associated with the military, were among the original sports of the first Olympics. Two additional sports would be developed by military officers and be dominated by those serving in the armed forces. In 1912, the first pentathlon was held, combining fencing, shooting, horseback riding, swimming, and track. George S. Patton competed in this inaugural event in Stockholm. Ski patrol, a sport that combined skiing and marksmanship, would be part of the Winter Games of 1924 and several additional interwar games. Renamed and formalized as the biathlon, it became a demonstration sport at the 1948 games and in 1960, became a permanent part of the Olympic movement. From 1958 to 1973, the U.S. biathlon team was sponsored by the U.S. Army, and it trained in Alaska at Fort Richardson.

Sporting events can also encompass political and diplomatic agendas. Most notably, countries have attempted to further their political agenda with the Olympic Games. The United States used sporting events such as the Olympic Games to promote democracy, while influencing peaceful resolutions on international issues. The Olympic Games also created some of the biggest sporting rivalries in history.

The 1936 Olympic Games represented the first time a country attempted to use the Olympic Games to illustrate its power to the rest of the world. Although Germany had won the right to host the games before the Nazi takeover, the Nazi regime sought to use

the games to further its racist and anti-Semitic ends. Although the president of the Amateur Athletic Union and other groups and individuals supported a U.S. boycott of the Olympics, Avery Brundage, president of the American Olympic Committee, convinced them to continue. That year, even though Germany won most of the medals, African American Jesse Owens challenged the Nazi regime's Aryan claim to dominance by winning four gold medals.

The start of the Cold War witnessed the origins of the biggest sporting rivalry in Olympic Games history. Joseph Stalin saw the 1952 Summer Olympic Games as a chance to showcase the strength of his communist government. Special trainers were sent out to look for talent in schools and on the streets. The Soviets showcased their training and demonstrated their strength by winning 69 medals, only 7 fewer than the American athletes.

Diplomacy also played an important role in the 1956 Olympic Games, which witnessed a number of controversies. The Soviet Union's involvement in the Hungarian Revolution, the Israeli military's invasion of the Suez Canal, and the International Olympic Committee's decision to allow Taiwan to compete independently of the People's Republic of China (PRC) caused significant discord. This caused several countries to boycott the 1956 games, including the PRC, Spain, Switzerland, the Netherlands, Cambodia, Egypt, Iraq, and Lebanon. These events again highlighted the connection between sports and diplomacy.

Boycotts became more common in later years. For instance, several African nations boycotted the 1976 Olympics in response to Western support for the apartheid government of South Africa. To protest the Soviet Union's invasion of Afghanistan in 1979, President Jimmy Carter called on U.S. athletes to boycott the 1980 Moscow Olympic. Four years later, the Soviets reciprocated by refusing to participate in the 1984 Olympics held in Los Angeles.

Sporting events can also build diplomatic relations between countries with bad relationships. The United States is notable for using sports to foster new diplomatic ties. Most notably, in 1971, President Richard M. Nixon sent U.S. table tennis players to the PRC. This was the first time Americans were setting foot in the PRC capital since 1949. Although China defeated the U.S. team, a new relationship between the PRC and the United States began.

The United States has begun using sports to target youth for future diplomatic ties with other countries. The creation of the Sports United program

in 2007 resulted in ties between U.S. and Iranian youth through the FINA (Fédération Internationale de Natation) Men's Junior World Water Polo Championship in Long Beach, California. Iran responded by giving U.S. athletes a standing ovation at the Takhti Cup wrestling championship.

Karen Hughes, who served as undersecretary of state for public diplomacy and public affairs from 2005 to 2007, became a leading advocate for using athletes and sports to promote U.S. public diplomacy. During her tenure, she worked to increase sporting programs and events grants to create diplomatic ties. On November 9, 2006, the Department of State Bureau of Public Diplomacy and Public Affairs opened positions for U.S. Public Diplomacy Envoy for athletes. This created a window of opportunity for athletes to increase the world's understanding of America's culture and its citizens. Athletes such as Michelle Kwan, Cal Ripken Jr., Juwan Howard, Dikembe Mutombo, and Nikki McCray have all served as sports ambassadors for U.S. sports, teaching discipline, leadership, determination, and respect for one another.

As the U.S. government increasingly looked to sports and athletes to promote diplomatic relationships, government funding followed. This has allowed the U.S. military to fund the use of sports in its branches. This funding of sports for diplomatic reasons, while keeping soldiers physically fit, has evolved into a worldwide success for the United States and its military.

Tyler Thomas McDaniel

See also Army-Navy Game; Physical Fitness; Recreation; U.S. Military Academy

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SQUAD LEADERSHIP

The infantry squad is the basic working element of the U.S. military's ground forces. It is the most versatile and widely utilized element in the U.S. military arsenal. At the squad level, forces are capable of effectively executing the fundamental tactic of fire and maneuver. Squad members and their leadership are capable of carrying out a variety of missions that include patrols, ambushes, and other prepared attacks. The leadership of the squad possesses an ever-expanding skill set that can be applied to the abstract nature of the modern battlefield. In essence, the leadership of the squad is replicated in every level of the hierarchy of military leadership.

Throughout the past century, the role of the squad has been radically redefined. Modern advancements in technology and tactical innovations stress the role of small units more than in previous conflicts, making the squad indispensable on today's battlefield. The composition of a squad has been dictated by military doctrine and has thus changed with time. Today, a U.S. Army squad is composed of eight soldiers commanded by a squad leader. A Marine Corps squad has 12 marines commanded by a squad leader. The squad is further divided into four-man fire teams (two fire teams in an army squad and three in a Marine Corps squad), each commanded by a fire team leader. The squad leader and team leaders are traditionally noncommissioned officers. This entry describes the responsibilities of the squad

leader, the team leader, and the remaining squad members.

Leadership Positions

Squad Leader

The squad leader controls the entire squad, its movement, formation, security, and consequent action on contact with the enemy. Assignments for mission-specific duties (aid and litter, care of enemy prisoners of war, demolitions, etc.) are designated by the squad leader. The squad leader is expected to lead by example and retains responsibility for the welfare of the entire squad.

The squad leader must react to frequently changing circumstances on the battlefield. Negotiation of obstacles, danger areas, and enemy forces are among the situational responsibilities of the squad leader. The leadership of the squad leader is most critical when the squad makes contact with the enemy. At this point, the squad leader reacts to the situation by determining how the squad will respond to the threat. Once in contact, the squad leader must decide whether to continue to engage the enemy, either by suppression or by maneuver, or to break contact and disengage. Terrain, enemy position and composition, casualties, and mission objectives influence the squad leader's decisions. When the squad leader decides that the situation requires the division of the squad (as in a case of fire and maneuver), the squad leader will typically move with the maneuvering element. The situation will, however, dictate which element the squad leader stays with.

Team Leader

The fire team leaders are directly subordinate to the squad leader. They are responsible for the well-being and conduct of their fire teams. When directed, the team leaders will maneuver their teams in accordance with the orders of the squad leader. This is particularly important when the mission forces the squad leader to leave a fire team by itself. In the absence of the squad leader, the fire team leader assumes complete control of his fire team. When all fire teams are present but the squad leader is absent, the senior fire team leader assumes control of the entire squad. This might occur when the squad leader leaves the squad, or elements of the squad, to conduct reconnaissance or maneuver another portion of the squad, or if the squad leader becomes a casualty. In the event that the

squad leader and the senior fire team leader are not present, command of the squad falls with the next senior fire team leader.

Remaining Squad Members

In addition to their designated positions as riflemen, grenadiers, or automatic riflemen, and additionally assigned duties determined by the squad leader, the remaining squad members are responsible for assuming command and control of the squad in the absence of their leaders. Just as the fire team leaders will step into the position of squad leader in the squad leader's absence, the senior member of the fire team will assume command in the absence of his fire team leader. As the absence of the squad leader or a team leader makes control of the squad difficult, it is essential that every member of the squad understands how to carry out the responsibilities of the position above him so as to effectively adapt to the changing environment and carry out the mission.

Kyle P. Bracken

See also Ambush; Arms, Small; Company; Leadership; Noncommissioned Officers; Small Unit Cohesion

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STAFF RELATIONSHIPS

A commander's staff is a group of officers and non-commissioned officers that assist the commander with making and implementing decisions. This entry describes the functions, responsibilities, and organization of a commander's staff in the U.S. military.

The staff aids the commander by anticipating decision points in an operation and providing relevant information so that the commander can make and implement better decisions faster than the enemy can. The coordinating staff, commonly referred to as the primary staff, consists of personnel, intelligence, operations, logistics, plans, and communications officers. Special staff includes fire support, civil-military, and psychological operations officers, among others. Commanders also have a personal staff that usually consists of the senior enlisted member and

a chaplain, but the personal staff is designated at the commander's discretion. The number of special staff positions varies based on the command's level of organization and its specific organizational function. Staff sections, and the officers that lead them, are designated by letter and number codes. The Department of Defense uses "A" for the air force, "G" for the army and Marine Corps, "N" for the navy, and "J" for Joint Headquarters. Below the division or equivalent level, the designation "S" is used. The number code corresponds to the particular staff section. The personnel section is "1," intelligence "2," operations "3," and so forth. For example, the navy's senior intelligence officer is designated "N2." Staff members are experts in the subject matter of their designated fields and provide expert advice in the formulation and execution of operational plans.

Background of the General Staff

During the late 19th century, the U.S. Army and U.S. Navy instituted measures to professionalize their forces. Senior American military officers observed the role of the Prussian General Staff in that army's stunning success in the Franco-Prussian War of 1870–1871. As a result, General William T. Sherman established what would become the Command and General Staff School in 1881 at Fort Leavenworth, Kansas, modeled on the Prussian system, to provide a similar capability for the U.S. Army. At the turn of the 20th century, Congress created the General Staff Corps, charging the newly created institution with planning national defense measures and mobilization timetables. The navy created the Naval War College in Newport, Rhode Island, to instruct senior officers in grand strategy and staff functions. All of these measures affected the higher institutional levels of the U.S. military. Following World War I, General John J. Pershing formalized the staff functions down to the battalion level, a system still used today. The 1986 Goldwater-Nichols Act established the current senior staff relationships. The Joint Staff reports to the chairman of the Joint Chiefs of Staff, but this staff does not have operational control over combat units. Combatant commanders maintain control over those units but report through the Joint Staff. The size of a commander's staff at all levels has grown over the past decade as a result of the U.S. military's emphasis on building joint, modular forces and incorporating increasingly complex technologies into command networks.

Modern Staff Relationships

At the brigade or equivalent level and below, the primary staff consists of the personnel (S1), military intelligence (S2), operations (S3), logistics (S4), plans (S5), and communications (S6) officers. The staff is led by the second-in-command, designated as the executive officer (XO). In the army, air force, and Marine Corps, the S1, S2, S4, and S6 are usually a captain and the S3 a major. At the brigade level, majors usually serve as primary staff officers and are led by a lieutenant colonel XO. Lieutenant colonels usually hold staff positions and report to a colonel chief-of-staff (COS) at the division level.

The navy organizes its staff at two levels. Senior staff are designated by "N" and the corresponding number code. At the tactical level, a ship's commanding officer (CO) focuses on decision making and is supported by a second-in-command, the XO, who coordinates all the functions of the ship. The ship is organized into departments that include specialties like weapons deck, engineering, and operations, for example. The department heads report to the XO, who, in turn, reports to the CO. The functions of these officers are similar to those of ground force staff officers, but their organization is different due to differences in mission requirements and physical environments.

The personnel officer at any level of staff is responsible for all the administrative aspects of the unit. This includes personnel status reports, awards, retirements, and pay inquiries, among others. During wartime, the personnel officer manages casualty replacement operations in addition to his or her normal responsibilities. The intelligence officer is responsible for advising the commander on the current enemy situation and capabilities. The logistics officer is responsible for all logistical operations, including vehicle and weapon maintenance, supply ordering, field feeding service, and oversees personnel and medical operations. The supply and personnel officers work closely during wartime as some of their functions overlap. The communications officer is responsible for all command and control equipment, including computers, satellite receivers, radios, and Blue Force tracking systems, among others.

The senior member of the staff is the operations officer, who is responsible for the everyday operations of the organization, including training objectives. Training includes weapons qualification, tactical exercises, mobilization proficiency, and both noncommissioned officer and officer education. The operations officer produces and issues tactical orders

to subordinate units during deployment. Depending on the level of organization, the XO, deputy commander (DCO), or COS ensures unity of effort among the staff members.

Staff members follow the military decision-making process as a guide for analyzing problems and producing options for the commander to solve them. The military decision-making process consists of seven steps: (1) receipt of mission, (2) mission analysis, (3) course of action (COA) development, (4) COA analysis, (5) COA comparison, (6) COA approval, and (7) orders production. Each of these has numerous substeps, and each staff member has distinctive responsibilities in the process. The COS establishes and maintains a strict timeline for staff members based on the amount of time available between receipt of mission and mission execution. At each step of the process, the staff convenes for an in-progress report to share information and ensure that each staff officer is working toward the same objective. Ideally, the staff presents three COAs to the commander, but two are more common in practice due to time constraints. Once the commander has decided on a COA, the staff produces the mission order for subordinate units. Each service conducts its own version of this basic model.

David Glenn Williams

See also Command and Control; Command and General Staff College; Goldwater-Nichols Department of Defense Reorganization Act; Military Command Staffs; OODA (Observe, Orient, Decide, and Act)

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STARS AND STRIPES (NEWSPAPER)

Stars and Stripes is a daily military newspaper that dates back to Union soldiers during the Civil War.

Continually published since World War II, the paper offers four daily print editions covering the Mideast, Europe, Japan, and Korea; it exists online at *Stripes.com*. *Stars and Stripes* provides information on matters affecting members of the U.S. military community, including military families, and has a daily readership of about 420,000. Authorized by the Department of Defense Directive 5122.11, *Stars and Stripes* is the only military news outlet guaranteed First Amendment rights as an organization that exists “without news management or censorship, *Stars and Stripes* is the only military news outlet guaranteed First Amendment rights, though its website notes that those rights are “subject to Congressional oversight.” Since the 1990s, the *Stars and Stripes*, at the direction of the U.S. Congress, has employed an ombudsman to ensure the editorial independence of the newspaper from Defense Department censorship or interference. This entry discusses the history and scope of *Stars and Stripes*.

The paper was founded on November 9, 1861, in Bloomfield, Missouri, by 10 Union soldiers from three Illinois regiments. Noticing the abandoned *Bloomfield Herald* offices, the 10 soldiers entered the building on the evening of November 8, and by the morning of November 9, a newspaper named *Stars and Stripes* was printed and distributed among the 2,000 troops in the area. The number of original copies is not known. A total of four issues were produced during the Civil War.

This early history set the precedent for the newspaper's reappearance in subsequent wars.

Pre-1945

On February 8, 1918, the World War I edition of the paper went to print, continuing publication on a weekly basis until June 13, 1919. Published by an all-military staff under the orders of General John J. “Black Jack” Pershing, the paper during this era aimed to promote unity and boost the morale of doughboys scattered across Europe. The readership reached some 526,000 military personnel.

By most accounts, the history of the modern-day *Stars and Stripes* began during World War II. Setting up in a London print shop, a few U.S. servicemen revived the paper on April 18, 1942, selling copies for the equivalent of 5 cents. The popularity of the paper prompted expanding the content from four pages to eight and printing daily instead of weekly. Over the course of the war, 32 editions of the paper would be printed, with 25 printing locations

established across Europe, the Middle East, North Africa, Asia, and the Pacific, and issues of the paper would run up to 24 pages. An official Pacific edition was launched on May 8, 1945.

The World War II *Stars and Stripes* catered to combat soldiers, its staff of enlisted men following the war as it unfolded on the battlefield and flying on bombing missions. Several staff members were killed covering combat. When the war ended, *Stars and Stripes* decided to continue publication as long as the United States had military personnel stationed abroad.

Post-1945

After World War II, the paper changed from staffing enlisted men to employing a higher number of civilian journalists to support the military photographers and management. Continuing publication through the wars in Korea and Vietnam, *Stars and Stripes* staffers would follow combat units to provide independent news coverage of all aspects of military life. The paper's staff would also embed during Operation Desert Shield, Operation Desert Storm, and Operation Provide Comfort, setting up a bureau in the Middle East, which helped double the paper's circulation. *Stars and Stripes* was also a presence during the American involvement in Bosnia in 1995.

Stars and Stripes reporters have been in Afghanistan since the war began in 2001, and in November 2004, the paper moved print operations from Europe to new facilities in Kabul. The ability to print locally ensures that servicemen will have reliable access to the daily paper. During the war in Iraq, *Stars and Stripes* staff not only embedded with ground forces but also joined naval ships patrolling the area. The paper continues to provide coverage from Iraq, even though Operation Iraqi Freedom ended in 2010 and the last troops left Iraq in mid-December 2011. The Mideastern edition of the paper delivers roughly 52,000 copies across Afghanistan, Kuwait, Bahrain, Egypt, and the rest of the region.

Modern Operations

With one of the widest print distributions of any newspaper, *Stars and Stripes* covers more than 40 countries with a U.S. military presence. In addition to the online, mobile, and four print editions, *Stars and Stripes* publishes weekly and monthly special issues and supplements. The Mideastern edition is available at no charge for the combat forces stationed there, while the other editions are for sale on

base and at military exchanges. Home delivery is available in a number of countries.

Typically, today's paper publishes more than military-related content, with the inclusion of sports, horoscopes, comics, and opinion pieces in addition to news. The original *Stars and Stripes* content is now complemented by stories from organizations like the Associated Press, Knight-Ridder, and *The Washington Post*. *Stars and Stripes* staffers are highly regarded within the journalism world, having won a number of prestigious awards in the past decade.

As of 2012, *Stars and Stripes* maintained three offices: one each in Europe and the Pacific and one in Washington, D.C. Each office has its own reporters and editors, as well as business and support staff. Web operations and newspaper layout are handled at the central office in the National Press Building in Washington. Each day's editions are transmitted to print sites in Germany, Italy, Spain, Japan, Kuwait, South Korea, Iraq, Afghanistan, Bahrain, Djibouti, Kyrgyzstan, Guam, and the United Kingdom.

Stars and Stripes launched its online edition at Stripes.com in 1999, giving the paper the ability to reach a broader audience more readily and offer additional services such as archives.

Kate Achille

See also Armed Forces Radio and Television Service; Censorship; Journalists, Embedded; Media Relations, Military

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STEALTH TECHNOLOGY

Stealth, or low-observable (LO), aircraft are designed to bypass an enemy's radar system, thus gaining the ability to attack targets without alerting the enemy to the aircraft's presence. This entry discusses the history, technology, and missions of LO aircraft.

History

The idea of a radar-defeating aircraft is as old as radar itself. Although other services have looked into stealth technology for ships and vehicles, the technology refers almost exclusively to use in aircraft. During World War II, the Nazi regime attempted to build the Horton 229, a bomber containing many of the aspects of stealth technology found on today's LO aircraft. The advent of a true LO aircraft, however, did not occur until the post-Vietnam War era. American losses to surface-to-air missiles during Vietnam as well as the losses suffered by the Israeli air force in the 1973 Yom Kippur War showed the need to find an alternative to the brute force of flying through the coverage of Integrated Air Defense Systems. While certain tactics and weapons, including aircraft specifically tasked to engage and destroy enemy surface-to-air tracking and targeting systems and weapons—known as the “Wild Weasel”—proved effective against surface-to-air missile sites, some scientists looked for a way to bypass this threat altogether.

In the late 1970s, the Defense Advanced Research Projects Agency (DARPA) began to look at the possibility of building an aircraft with a low enough radar cross section to render it nearly invisible to modern radar systems. DARPA was on the hunt for the first true LO or stealth platform. It is important to remember that low observability does not equate to invisibility on radar. Simply stated, an LO aircraft combines aspects of aircraft design and, most important, the shaping and geometry of the aircraft with specialized coatings called radar-absorbent material. Used in conjunction on an aircraft, these technologies will lower its overall radar cross section, making it extremely difficult, but not impossible, to detect.

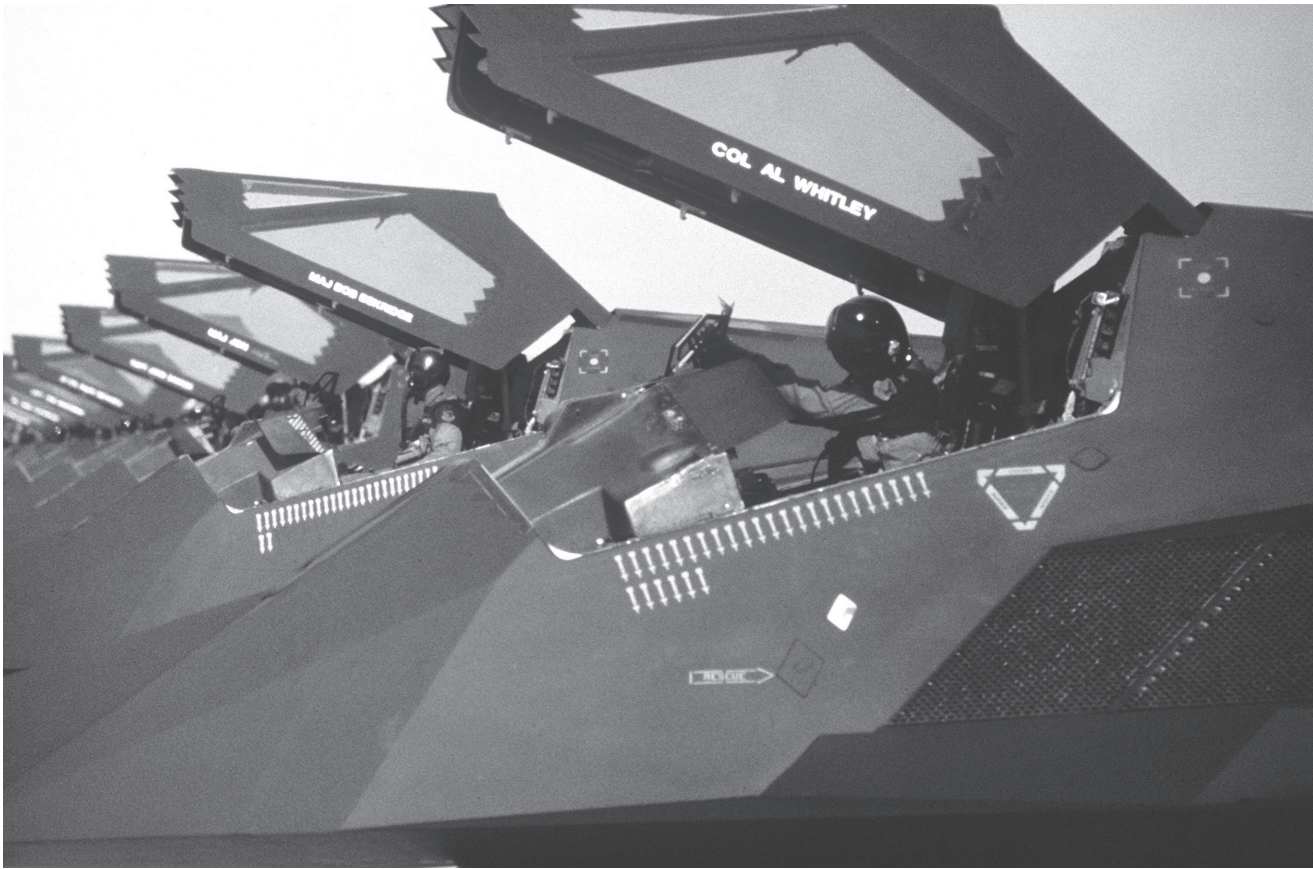
The F-117 Program

The U.S. Air Force in conjunction with DARPA took the lead in the development and advancement of LO technology. In 1975, DARPA sent requests to five aircraft-manufacturing companies (Northrop, McDonnell Douglas, General Dynamics, Fairchild,



A 37th Tactical Fighter Wing F-117 stealth fighter aircraft stands on a runway during Operation Desert Storm.

Source: Technical Sergeant Rose Reynolds.



F-117 stealth fighter aircraft of the 37th Tactical Fighter Wing stand on the flight line with canopies raised following their return from Saudi Arabia, where they took part in Operation Desert Storm.

Source: Sergeant Mike Baquette.

and Grumman) to gauge interest and ability in producing an LO aircraft. It was said the LO studies went under the name of “Project Harvey,” in homage to the invisible rabbit from the movie starring Jimmy Stewart.

DARPA’s initial request required the aircraft companies to determine the feasibility of an aircraft design that would place its radar cross section below a predetermined threshold. Ironically, Lockheed Martin was not initially asked to participate and had to gain approval from the Central Intelligence Agency to brief DARPA on LO projects, including the A-12, which Lockheed had already produced. The A-12 was the predecessor to the SR-71 and incorporated many aspects of LO technology needed in the proposed aircraft. Already behind the other companies, Lockheed designers hustled to produce the necessary plans for their LO aircraft. The design and first aircraft went by the code name “Have Blue.” The Have Blue design was a multifaceted aircraft with radar-absorbent material coatings

on it that both absorbed radar and directed/transferred its energy away from the aircraft, thus giving the Have Blue an extremely small radar cross section. With the success of the Have Blue prototype, Lockheed was given the go-ahead to build five aircraft for test and evaluation, with a follow-on of a full-scale production run of 20 aircraft in the initial batch. Air Force Systems Command brought the project under the protection of the Special Access Program/Special Access Required world of air force classification and black programs. The Have Blue aircraft itself and all those involved in the continuing project now came under the code name Senior Trend.

The full-scale development of the Have Blue program led to the production of the world’s first true LO platform, the F-117. Aerodynamically, it was a poor aircraft; the initial concept had been called the “hopeless diamond” because many did not believe that it was capable of actual flight. Thanks to fly-by-wire technology—replacing physically connected



The U.S. Navy variant of the F-35 Joint Strike Fighter aircraft, the F-35C, conducts a test flight over the Chesapeake Bay near Naval Air Station Patuxent River in Maryland. The F-35C is distinct from the F-35A and F-35B variants, with larger wing surfaces and reinforced landing gear for greater control when operating in the demanding carrier take-off and landing environment.

Source: U.S. Navy photo by Lockheed Martin Corp. (released).

control systems with electronic interfaces—the jet not only became capable of flight but also handled it very well, according to the pilots. The shaping of the F-117 along with its radar-absorbent coatings made it virtually invisible to the radar technology of the time. Many theories exist as to why the F-117 was given an “F” designation—meant to denote a fighter aircraft. Since the 117 only carried two bombs and no defensive armaments, it can hardly be considered a fighter aircraft, but it doesn’t fit into the categories of a bomber or attack aircraft either. The reality in the late 1970s is that the U.S. Air Force had already produced a new attack aircraft in the A-10, and the B-1 program had just been cancelled. Attaching an F designation to the 117 probably made it more palatable to Congress.

Stealth Aircraft in Combat

The F-117 saw its first operational use during Operation Just Cause in Panama but produced

negligible effects. Since Panama had no integrated air defense system, the applicability of the F-117’s stealth platform could not be debated. In 1991, the U.S. Air Force deployed F-117s to Saudi Arabia for Operation Desert Storm. The Nighthawks led the way into Iraq and were the only aircraft to operate directly over the skies of Baghdad.

Since that time, continuous advancements in LO technology have led to the production of other aircraft, including the B-2 Spirit and the F-22 Raptor. The B-2 entered into combat in the late 1990s and has since then flown combat missions over Yugoslavia and Afghanistan from its home station at Whiteman Air Force Base, Missouri. The F-22 has distinctive requirements that set it apart from legacy LO platforms. These include an expanded fleet several times larger than the F-117 or B-2 and a high-performance (9G, thrust vectoring, 60K ft, super cruise) flight envelope necessary for a modern fighter. As of 2011, the F-22 had yet to see combat, although it has been deployed overseas on multiple

occasions. The coming years will also see the production of the F-35 Lightning, the first LO platform to be operated by the U.S. Air Force as well as the U.S. Navy and Marine Corps.

The first challenge to the 30-year dominance of the United States in LO technology came in 2010. Both Russia and China produced flyable prototypes of new fighter aircraft, demonstrating their advances in stealth technology. The Russian aircraft, known alternately as the PAK-FA (Prospective Airborne Complex—Frontline Aviation/*Perspektivny aviatsionny kompleks frontovoy aviatsii*) or T-50, appeared in 2009 and made its maiden flight in January 2010. On December 22, 2010, China's Chengdu J-20 made its first public appearance while accomplishing a series of high-speed taxiing tests outside the Chengdu Aircraft Design Institute. In early 2011, the J-20 made its first confirmed flight. Both aircraft show the use of aircraft shaping and internal weapons bays to decrease the radar cross section, but it remains to be seen just how LO each will be in the long run. Of the two, the J-20 is considerably larger than its Russian counterpart as well as the F-22. Many media outlets in the United States made mention that the J-20 design is based on technology acquired from a downed F-117 from the Balkan wars of the 1990s. This is highly unlikely as the F-117 technology was already dated; its use as a “new” LO platform simply does not make sense, and a modern high-G fighter would not survive on the decades-old technology used on the F-117. That being said, both countries have made huge strides toward fifth-generation capabilities; whether they will equal the F-22 in performance, flight envelope, and internal avionics components remains to be seen.

Brian Laslie

See also Aircraft, Bomber; Aircraft, Fighter; Research and Development

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STOP-LOSS

Stop-loss is a Department of Defense (DOD) procedure that kept service members on involuntary active duty beyond their otherwise scheduled date of separation. It ended on March 1, 2011.

Stop-loss was first used during the Persian Gulf War of 1990–1991 and was invoked during the various peacekeeping and combat operations in the Balkans throughout the 1990s. However, it has only been applied to large numbers of military personnel over a long period of time since September 11, 2001. All four Department of Defense military services used stop-loss in the initial stages of post-9/11 military operations, but the U.S. Navy, Marine Corps, and Air Force all ended their stop-loss programs by June 2003. The U.S. Army, on the other hand, has used stop-loss on a massive basis since 9/11, not only for the active army but also for the Army Reserve and Army National Guard. Although, by the direction of the Secretary of Defense, the army ended the application of stop-loss on January 1, 2010, this suspension was not retroactive. Soldiers affected by it thus remained on active duty until March 1, 2011, when the last units that deployed under stop-loss returned to the United States and completed 90 days of postdeployment duty. (The legal authority for stop-loss has no expiration date and remains in effect.) Legislation enacted in 2008 and 2009 provided special pay for military personnel affected by stop-loss, eventually making these payments retroactive to 9/11 and extended them to June 30, 2011, although, as noted, the program ended on March 1, 2011.

Stop-loss was initially used by all four military services to keep individuals with critical skills on active duty, particularly in the immediate post-9/11 period and during the “major combat operations” phase of the Iraq War, during the spring and early summer of 2003. However, after June 2003, only the army used it to keep people in units scheduled for deployment to Iraq or Afghanistan. In general, stop-loss “froze” soldiers from leaving units up to 90 days before deployment, lasted through the deployment period

(usually 12 months, although the army maintained a 15-month deployment period in 2007–2008, and 2012 reduced Afghanistan deployment lengths to 9 months), and continued for up to 90 days after the unit returned home. Soldiers could therefore be kept on active duty for up to 18 months past their originally scheduled separation date.

The army apparently did not keep a running total of soldiers affected by stop-loss. In 2009, to determine the potential costs of stop-loss special pay, it estimated that approximately 185,000 had been stop-lossed since 9/11, but knowledgeable individuals believe that this may have understated the total due to recordkeeping problems. Other estimates, however, are lower, centering around 140,000–145,000 soldiers. This figure is comparable to a total, as of July 31, 2012 (the most recent figures available), of approximately 1,233,000 army personnel (active, Army National Guard, and Army Reserve) deployed to OIF and OEF since 9/11. Given the uncertainties and disparate dates, it would thus appear that about 15% of the soldiers deployed have been affected by stop-loss.

The need for stop-loss thus derived entirely from the army's policy of rotating entire units into and out of Iraq and Afghanistan rather than deploying units, keeping them there, and rotating individuals after their unit deployment periods were over. In the absence of the unit rotation policy, there would have been no need for unit-based stop-loss. The army used individual rotation and replacement for the nation's modern prolonged wars, from World War I (1917–1918) through the Vietnam War (1965–1973). The need for a policy approximating stop-loss had thus never arisen before. However, in some previous wars, individuals whose voluntary enlistments would otherwise expire were involuntarily kept on active duty for the duration of the conflict, and retirements from a military career were suspended.

Stop-loss did engender some controversy. In particular, the involuntary extension of active-duty commitments has been called a "back door draft" by some. In legal terms, this is not the case. The statutory authority for stop-loss derives from a 1984 statute (codified at 10 USC 12305) that authorizes the president to suspend all laws pertaining to "promotion, retirement, and separation" of military personnel if a national emergency has been declared or if a reserve mobilization has taken place. The courts have upheld the legality of this statute and the use

of stop-loss. More broadly, the term *draft* would appear to be inapplicable. Military personnel who were stop-lossed all enlisted voluntarily. Enlistment contracts have always included references to contingencies that could be construed as including stop-loss. However, in 2006, in response to congressional findings that the contract language related to stop-loss was too vague, the Department of Defense included revised wording in enlistment contracts that more explicitly stated what stop-loss was and how enlistees could be subject to it.

Some have conflated stop-loss with the involuntary mobilization of members of the Individual Ready Reserve, although the two are completely different. All individuals who enter the armed forces incur a statutory military service obligation of 8 years, any part of which not spent on active duty must be spent in a reserve status. Unless service members leaving active duty voluntarily enter a reserve unit that trains regularly and are paid for their training, they are assigned to the Individual Ready Reserve until their total 8-year military service obligation is complete. Individual Ready Reserve activation thus involves an individual not on active duty being called to active duty, whereas stop-loss involved an individual already on active duty having his or her active-duty service extended.

Stop-loss does not appear to have generated any morale or discipline problems appreciably affecting military operations or combat capability. There are no analytical or impressionistic indications that stop-loss affected recruiting or retention to any appreciable extent. Stop-loss did disproportionately affect noncommissioned officers and, by doing so, ensured that army units deployed with their full complements of these key enlisted leaders. Special pays to encourage soldiers who would otherwise have left active duty to stay with their unit when it deployed did not have many takers in the active army and Army Reserve, although they were accepted by more than half of eligible Army National Guard members. It would appear, therefore, that stop-loss, however unpleasant for some of the individuals involved, was of material assistance in readying army units for war, and the army never arrived at an adequate replacement for it. As the total proportion of army manpower deployed in a combat zone has declined, especially after all U.S. troops left Iraq as of December 31, 2011, the need to use it declined as well. For instance, between November 2004 (the first month for which statistics

are available) and November 2009, the number of soldiers stop-lossed at any one time fluctuated from a high of 16,000 in March 2005 and a low of about 8,500 in May 2007. However, in December 2009, it began a steady decline until the end of the program on March 1, 2011. Stop-loss, therefore, was a temporary expedient related to maintaining readiness of units deploying to a war zone. Whether it will ever be instituted again depends on the size of the force deployed relative to the size of the total force and whether sufficient personnel in key skill areas are available.

Robert L. Goldich

See also All-Volunteer Force; Army, U.S.; Conscription; Discharge and Separation; Iraq Insurgency (2003–2011); Morale; Noncommissioned Officers; War in Afghanistan

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STRATEGIC AIR COMMAND

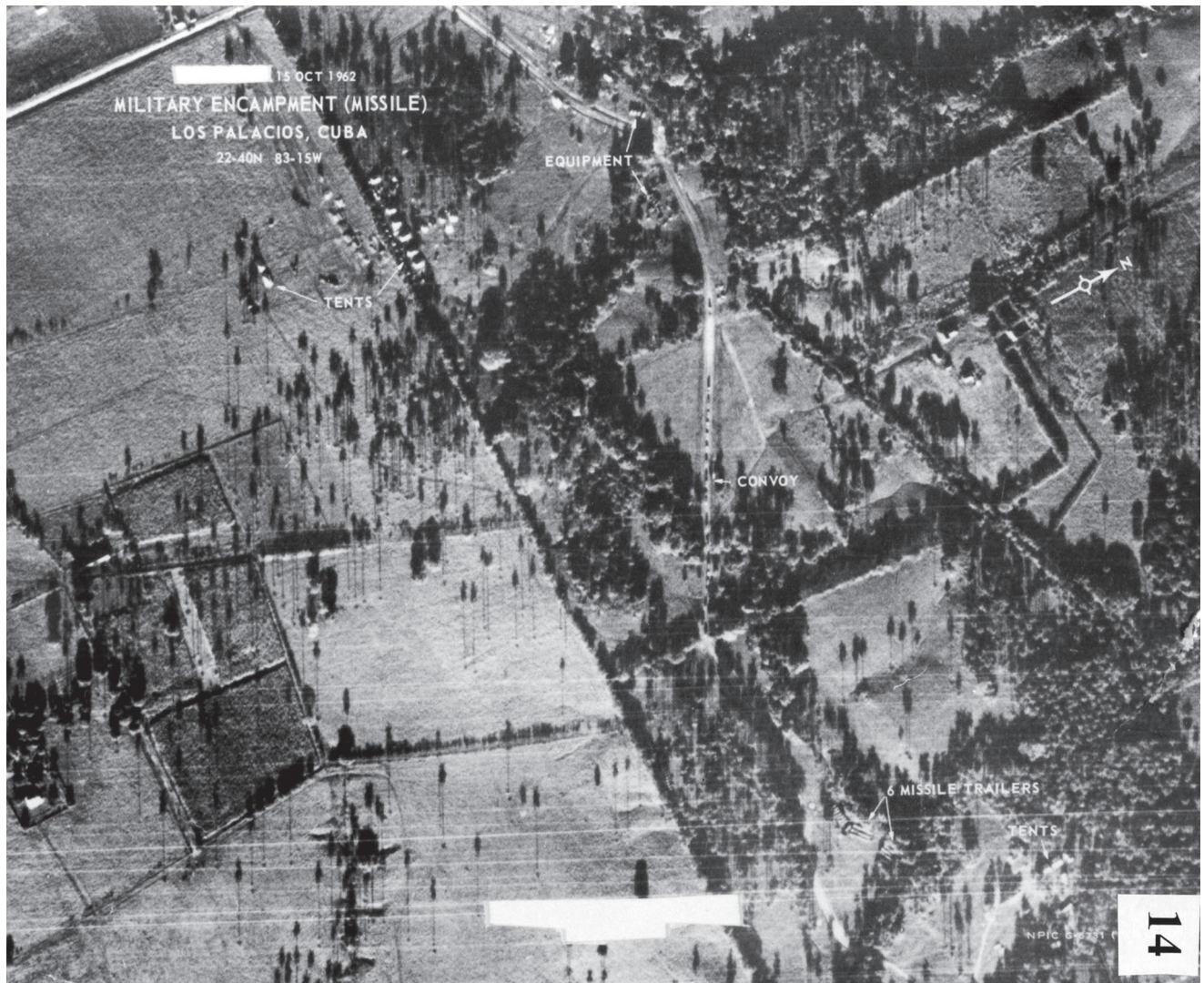
The Strategic Air Command (SAC) was the organization tasked with the responsibility of managing the U.S. arsenal of nuclear weapons from 1946 to 1992. From its headquarters located at Offutt Air Force Base outside Omaha, Nebraska, SAC managed the fleet of nuclear bombers, ballistic missiles, and related nuclear warheads. Additionally, SAC provided aerial reconnaissance, electronic intelligence, airborne refueling, and, for a time, fighter escorts. In short, SAC provided a mobile, flexible, and powerful force dedicated to preventing nuclear war, while retaining the power to conduct it as well. At the end of the Cold War, SAC was decommissioned, and the

mission of nuclear deterrence was incorporated into the newly formed U.S. Strategic Command. This entry describes the history, missions, aircraft and equipment, and missile systems of SAC.

SAC emerged out of the post–World War II landscape. SAC was designed to have an offensive presence so powerful that it deterred other nations from attacking the United States. Originally part of the Army Air Forces, SAC became part of the U.S. Air Force with the National Security Act in 1947. After World War II, the War Department sought to bolster air defense over the continental United States, which resulted in the creation of three commands: (1) Tactical Air Command (air force tactics), (2) Air Defense Command (defense of U.S. airspace), and (3) Strategic Air Command. SAC's specific mission was to manage the U.S. nuclear arsenal and prevent nuclear war. It also had responsibility for global reconnaissance, aerial refueling, and conventional weapons bombing. SAC also developed the Joint Strategic Target Planning and Single Integrated Operational Plans, which in case of war determined when nuclear weapons were to be used and at what targets. For the first years, and for most of its existence, SAC went through a significant amount of organizational reconfigurations, continually adding and subtracting units as the mission and technology changed. General George C. Kenney was the first commander in chief of SAC. However, the figure most associated with SAC is General Curtis LeMay. LeMay, the often outspoken champion of SAC, took over in 1948 and turned the organization into a professional fighting force. During LeMay's tenure as commander in chief of SAC, SAC made many advances in strategic bomber development and tactics, aerial refueling, intercontinental ballistic missiles (ICBMs), and command and control systems.

Historical Significance

SAC played a crucial role in many of the crises and events of the Cold War. Three squadrons of SAC B-29 bombers were put on alert in Europe during the Berlin Blockade of 1948–1949, providing a deterrent against potential Russian invasion. Shortly after the North Koreans invaded South Korea in 1950, SAC bombers responded by eliminating nearly every strategic target north of the 38th parallel. Throughout the rest of the Korean War, SAC provided both tactical offensive operations and support for ground forces. SAC's reconnaissance capability played a



Soviet truck convoy deploying missiles near San Cristobal, Cuba, on October 14, 1962. This photo, taken by Major Steve Heyser in a USAF U-2, is the first picture that proved Russian missiles were being employed in Cuba. The image is dated the day it was printed.

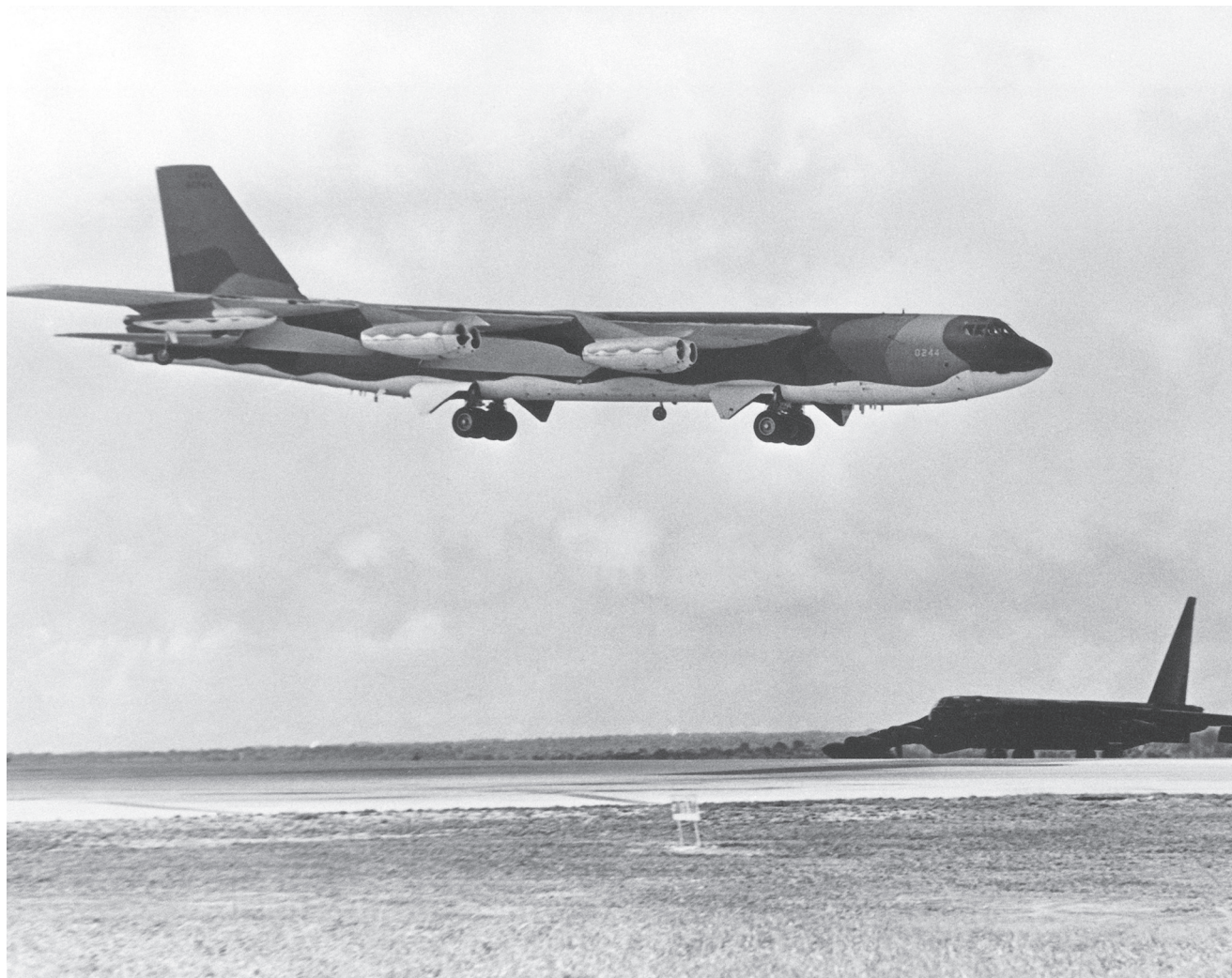
Source: U.S. Air Force photo.

critical role in the Cuban Missile Crisis. It was an SAC U-2 plane that brought back photographic evidence of Russian missiles in Cuba. Throughout the crisis, SAC operated in full-alert status with round-the-clock missions. During the Vietnam War, SAC provided aerial refueling, reconnaissance, and airborne command and control services. Additionally, SAC bombers conducted conventional bombing missions throughout the duration of the war.

Aircraft

A variety of aircraft supported the SAC mission over the years. The first fleet of SAC bombers

consisted of B-29s left over from World War II. The propeller-driven B-29 was the same aircraft that delivered the atomic bombs on Hiroshima and Nagasaki, Japan. Eventually, the B-47 Stratojet, a swept-wing jet-propelled bomber, entered SAC service in 1951. Starting in 1955, the B-52 Stratofortress became the centerpiece of the SAC bomber force. The B-52 traveled at 630 miles per hour, flew as high as 55,000 feet, and had a range of more than 4,000 miles. For non-bombing-related tasks, the Boeing KC-135, built on Boeing's 707 passenger fuselage, became the SAC workhorse. The KC-135 became the primary aircraft used for aerial refueling. The KC-135 airframe was also converted into



A B-52D Stratofortress aircraft waits beside the runway as a B-52G approaches for landing after completing a bombing mission over North Vietnam during Operation Linebacker. The aircraft are from the Strategic Air Command.

Source: Department of Defense photo.

the EC-135 and the RC-135. The EC-135 was fitted with communications equipment that allowed it to become an airborne command post. The RC-135 was fitted with a variety of electronic surveillance and communications equipment to support electronic surveillance and information gathering. For aerial reconnaissance, the SAC's U-2 aircraft could fly slowly at high altitudes over long ranges to gather intelligence. The SR-71 Blackbird replaced the U-2 as the primary reconnaissance aircraft. The SR-71 traveled at nearly 2,000 miles per hour and could fly as high as 80,000 feet. The equipment on these aircraft included a variety of high-tech photographic, video, and electronic intelligence-gathering

equipment, as well as sensors to detect airborne nuclear debris from nuclear bomb detonations. This allowed SAC to gather and analyze this information on enemy defenses, capabilities, and targeting of nuclear weapons.

Ballistic Missiles

In addition to maintaining and operating the nuclear bomber force, SAC had responsibility for the U.S. arsenal of nuclear ballistic missiles. Starting in February 1958, SAC brought online the Atlas ICBM. In subsequent years, SAC deployed and managed the Titan, Minuteman, and Peacekeeper

ICBMs. SAC also managed the Thor and Jupiter intermediate-range ballistic missiles. Support for all the missile silos, associated military bases, support staff, and communications required to operate the ICBMs and intermediate-range ballistic missiles also fell to SAC.

Post–Cold War

The downsizing of the U.S. military assets throughout the 1990s, resulting from the end of the Cold War, brought the end of SAC. The U.S. Strategic Command emerged after SAC's decommission in 1992, to take on the duties of managing the nuclear deterrent and strategic striking capability. The U.S. Strategic Command's mission expanded to include space operations, electronic warfare, computer information operations, missile defense, and intelligence. Meanwhile, SAC's aerial refueling, reconnaissance, bomber, and ICBM duties were transferred to other air force commands.

Conclusion

SAC's motto was "Peace is our profession," and for nearly 46 years SAC did its part to ensure peace in a world of proliferating nuclear weapons. The men and women of SAC stood watch against the threat of nuclear war. While the duty of preventing nuclear war has been transferred to a different organization, the means to achieve it remain modeled on the organization of and lessons learned by SAC.

Hugo Evans

See also Air Force Command; Aircraft, Bomber; Aircraft, Reconnaissance; Bombs, Nuclear; Missiles, Nuclear; U.S. Strategic Command

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STRATEGIC ARMS LIMITATION TREATIES

Strategic arms limitation treaties represent a series of international agreements designed to limit the spread and use of nuclear, chemical, and biological weapons. The unique properties of these weapons make their testing and deployment an international issue, as they encompass a nearly unlimited capability for destruction. The continuing development of strategic nuclear weapons has led to a successive number of treaties trying to limit the use of this weaponry in the name of international stability and environmental protection. The treaties limiting strategic armaments began with the Limited Test Ban Treaty (LTBT) of 1963 and continue into present-day negotiations.

Strategic weapons are designed to attack civilian production and population centers in addition to military targets, as an effort to eliminate a rival nation's ability to make war or deter it from launching a similar attack. Strategic weapons are large-scale versions of tactical nuclear weapons; the latter are designed to destroy primarily military targets in smaller, more contained, explosions. What differentiates these weapons from conventional armaments is the scale of their potential destruction combined with lingering environmental after-effects. The atomic bombings of Hiroshima and Nagasaki by the United States in August 1945 embodied the first use of strategic armaments, as these individual bombs demolished entire cities and the radioactive fallout poisoned life in the area for years afterward. Since that time, the size of the bombs and the scale of the destruction have increased exponentially. Coupled with the development of intercontinental bombers and ballistic missile delivery systems, these weapons are capable of striking any location in the world. The total power of the world's nuclear arsenals, specifically those of the United States and the USSR during the Cold War, were sufficient to encompass the whole world. Widespread use of strategic nuclear weaponry would result in heavy loss of life and devastation of the world.

There are two different types of nuclear weapons and three means of delivery. Nuclear weapons are deployed either in gravity bombs or in warheads. Nuclear gravity bombs are deployed by aircraft.

The size of strategic nuclear bombs prevents their deployment from smaller planes. Nuclear warheads are applied to missiles launched either from land-based missile silos or from submarines. The former provide hardened facilities that might survive enemy attack, while the latter provide an invisible deterrent; silos are easy to detect and survey, but submarines are stealthy and can be deployed significantly closer to the enemy's critical areas.

When the Soviet Union developed its own strategic capabilities, it became apparent that only two limitations prevented the outbreak of nuclear warfare. The technological sophistication required to build these strategic weapons meant that few countries could cultivate this expensive capability. The resources and technical skill to develop the launcher technology provided further deterrence. Second, the political will to create, test, and deploy these armaments was, and is, dependent on international toleration of their existence. International treaties attempted to limit the spread and use of these strategic arms, as they represented a long-term menace to environments and populations.

Controlling Nuclear Tests and the Spread of Nuclear Technology

The LTBT of 1963 was the first international treaty created to regulate the testing of strategic armaments. The treaty prohibits the testing of nuclear weapons that could result in the spread of radioactive material into extraterritorial environments, such as the atmosphere, the seas, and outer space. As a model for future strategic arms treaties, the trilateral treaty was signed by the United States, the Soviet Union, and Great Britain, with additional signatories joining through the United Nations. This voluntary treaty contains no mechanism for supervision or enforcement, so sovereign governments had no formal obligations to adhere to its clauses.

In 1967, the Outer Space Treaty specifically banned the positioning of strategic weapons in a particular environment. The treaty bans the placement of nuclear weapons in installations orbiting the earth or other planets as these areas are reserved for peaceful scientific exploration. Unlike the LTBT, the Outer Space Treaty contained provisions for verifying compliance through international observers, and states were legally responsible to the international community if violations occurred.

The Latin American Nuclear Free Zone Treaty (Treaty of Tlatelolco), also concluded in 1967, is unique in representing a regional rejection of nuclear armaments. The countries of South America agreed to avoid acquiring strategic weapons as this would keep their region free from the liability of a nuclear conflict. Involvement in the treaty was mandatory for all nations within the geographic limits of South America, and an independent organization was set up to ensure acquiescence.

The Nuclear Non-Proliferation Treaty of 1968 was the first treaty to address the growing number of nations with strategic capabilities and the need to limit the spread of this technology. The treaty prohibited the sharing of nuclear armaments between nations and restricted the spread of fissionable material. The International Atomic Energy Agency would enforce the technology ban, and all established nations with nuclear weaponry were required to attend a review conference by the UN Security Council every 5 years.

In 1971, the Seabed Arms Control Treaty (Seabed Treaty) was a direct outgrowth of growing international concern over the deployment of strategic weapons on the seabed. Similar to the Outer Space Treaty, the treaty prohibits strategic weapons deployment on the sea floor in deference to oceanographic research. An international committee would review enforcement of the treaty in the same manner as for the Nuclear Non-Proliferation Treaty.

The 1972 Biological Weapons Convention was the first disarmament treaty to proactively confront a new strategic capability. The development of biological and chemical weapons had reached a point where they became comparable to nuclear armaments, but the unpredictable nature of these arms made them dangerously unstable. No system of international supervision was instituted; however, the treaty stipulated that any violations would be investigated under the UN Security Council.

The Threshold Test Ban Treaty limited underground testing of nuclear weapons in terms of destructive yield. The LTBT had banned most forms of nuclear weapons testing, but by 1974, the United States and the Soviet Union agreed to limit the underground testing of strategic weapons to fewer than 150 kilotons (the atomic bomb detonated over Nagasaki was 21 kilotons). The bilateral treaty did not completely forbid these two nations from testing strategic armaments underground, yet it required

both countries to pass a strict scientific verification process for all testing.

Limiting the Numbers: The Strategic Arms Limitation Treaties

The first comprehensive attempt at wide-scale strategic disarmament was the Strategic Arms Limitation Treaty (SALT) of 1972, which represented the combination of two separate treaties. In an attempt to halt the continuing nuclear arms race between the United States and the Soviet Union, the two powers agreed to limit the development of defensive anti-ballistic missile systems, so that mutually assured destruction would provide the main deterrence against the use of nuclear weapons. Two anti-ballistic missile sites were allowed to each signatory, one to defend the capital city and another to defend a land-based silo of their choice. The second treaty dealt directly with the number of launchers each side was able to construct. Current numbers of launchers were frozen, and new silos and submarine missile launchers were not allowed to be constructed, though previously built launchers could be modernized. This second half of the SALT Treaty was known as the Interim Agreement on the Limitation of Strategic Offensive Arms. These bilateral agreements were enforced by a commission from both countries and only applied to the United States and the Soviet Union, the two nuclear superpowers.

The SALT treaty was rendered ineffective by the development of multiple independently targetable reentry vehicles (MIRVs). MIRVs allowed for multiple warheads to be placed on a single missile, greatly increasing the power and lethality of each individual missile and creating a new form of nuclear arms race. Early models had 3 warheads, but development led to the creation of MIRVs armed with up to 12 warheads. Thus, while launcher and missile numbers remained the same, the nuclear arsenals of the Soviet Union and the United States were steadily increasing, and lethality was growing. MIRVs also provided a quick-strike capability; a few missiles could do a great deal of damage before the other side was able to counterattack.

The second SALT treaty, signed in 1979, was designed to deal with the numbers of MIRVs as well as the number of launchers. A key failure of the first SALT treaty was the fact that bombers were not termed *launchers*, favoring the U.S. nuclear bomber

force. The SALT II Treaty took this into account, providing a maximum number of 2,400 launcher systems, encompassing land-based silos, submarines, and bombers. The maximum number of MIRV-equipped missiles was capped at 1,320. Having created a ceiling, it was hoped that the arms race would now slow down.

The Soviet Union's invasion of Afghanistan in 1979 served to strain relations between the superpowers, leading to questions about whether the United States would comply with the treaty in the face of Soviet belligerence. American actions, such as Ronald Reagan's Strategic Defense Initiative, primarily grew out of fear that the Soviet Union was working to upset the nuclear balance of power. The SALT II Treaty also led to a different form of arms race. Given the limited number of missiles and MIRVs, this race focused on increasing the size and survivability of the missiles.

Targeting the Numbers: The Strategic Arms Reduction Treaties (START), Strategic Offensive Reduction Treaty, and New START Treaty

Among the failures of SALT and SALT II was the fact that neither of the treaties dealt with reduction of the numbers of launchers or warheads. Begun in earnest in 1985, negotiations for the Strategic Arms Reduction Treaty (START) concluded in 1987, and the treaty was signed in 1991 by President George H. W. Bush and General Secretary Mikhail Gorbachev. Under the terms of START, both sides agreed on a limit of 1,600 launchers, encompassing silos, submarines, and bombers, with a ceiling of 6,000 warheads attributed to the launchers. A time limit of 7 years was established to oversee the disarmament process. Measures were also put in place to limit throw-weight, the weight of all non-fuel-based components of a missile, incorporating the MIRV, warheads, guidance system, and countermeasures.

START was followed rapidly by START II, lowering the number of deployed warheads to 3,000–3,500 per side. However, America's refusal to renew the Anti-Ballistic Missile Treaty, which had expired in 2002, caused Russia to cancel this treaty. The Strategic Offensive Reduction Treaty (SORT), also known as the Moscow Treaty, was rapidly negotiated in the aftermath. Signed in 2002, the treaty sought to lower the number of missiles

to 1,700–2,200 by December 31, 2012. The United States worked to meet its limits by removing warheads from missiles, decommissioning missiles and the removal of missiles, launchers, and bombers from operational service.

The New START Treaty (NST) was signed in 2010 to renew the START treaty, set to expire in 2009. Continuing on the progress of the Moscow Treaty, the NST fixed another 7-year goal to reduce numbers to 800 deployed and nondeployed launchers and heavy bombers. No more than 700 can be deployed. Attached to this is a limit of 1,550 deployed warheads. Under this treaty, deployed launchers are those equipped with missiles or bombs. Test and training facilities are not counted in the total. The treaty allows for the transformation of deployed materiel to be reused for nonnuclear purposes, such as the modification of nuclear bombers into conventional bombers. In addition to disarmament, the treaty also allows for inspection of nuclear missile and bomber sites, as well as examination of those sites declared as nondeployed. In addition, biannual meetings of the Bilateral Consultative Commission take place to resolve any questions regarding compliance of the treaty.

Radu Venter and Darren Ergezinger

See also Bombs, Nuclear; Deterrence; Missiles, Nuclear; Nuclear Proliferation; Strategic Air Command; Strategy, Nuclear; Weapons, Nuclear

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STRATEGY, AIR POWER

Air power tactics include the skills and art of flying aircraft for military purposes, including aerial combat, reconnaissance, air-to-ground attack, movement of personnel and cargo, and all of the other purposes to which aircraft and aerial weapons such as missiles or combat drones may be put to use to achieve immediate military goals. Air power strategy involves more sweeping questions. To what uses can aircraft and aerial weapons be effectively and appropriately put? Do the capabilities of modern aircraft and weapons technologies open up new possibilities for strategic thought and planning, possibilities previously unavailable to land- or sea-based forces without access to the third dimension? How does air power strategy fit into military planning in a modern world where ethical, political, and economic factors often limit large-scale use of ground and sea forces but, perhaps, still allow for the utilization of air power? Conversely, are there factors of the modern military world, perhaps especially the rise of nonstate actors and the emphasis of many groups on asymmetrical warfare, that limit the effectiveness of air power? How do air power strategists balance these and other conflicting forces, which seem at times to simultaneously enhance the importance and centrality of air power to the modern military enterprise while also limiting the effective uses of air power? An answer to these more contemporary questions must arise from an understanding of the historical roots and development of air power strategy.

The Early Years

The development of air power doctrine and strategy, like the development of all military theory, had multiple foundations, including not just the exigencies of combat but political and social factors; diplomatic developments; perceived issues of morality, ethics, and law; and technological advancements. The last has loomed particularly important with regard to air power doctrine. Perhaps no aspect of military thought before the advent of the

information technology era was so closely intertwined with scientific and engineering trends and discoveries. At least as far back as the work of Leonardo da Vinci, the prospect of manned flight has been married to the needs of warfare. One of the first actions taken by Wilbur and Orville Wright after their 1903 flight was to approach the U.S. Army and Navy about the possibility of military contracts.

The earliest theoretical uses of aircraft were for reconnaissance and observation. Balloons had proven useful for this in the 19th century and would continue to serve such a purpose in the 20th. It was not surprising, then, that with the advent of World War I, the first uses of aircraft were concentrated on the mapping of territory, the identification of enemy lines, and tracking the movement of armored bodies and supplies. There is, however, no greater spur to technical development and human ingenuity than war, since there is no other activity in which demands are so critical and so rapidly changing. Along with improved wing and engine design and improved environmental protections for pilots and passengers, counterefforts to prevent aerial reconnaissance also saw a vast evolution. The most important of these was the invention of a synchronizing mechanism that allowed the pilot to fire bullets through his plane's propeller arc, thus transforming the aircraft into an aerial fighting machine. Armies began to send up these pursuit craft to chase observers from the skies, while their opponents sent up their own planes to protect the reconnaissance aircraft. Thus dawned the day of the dogfight.

Although these developments excited the public imagination and brought forth new celebrities such as Manfred von Richthofen, the famed Red Baron, the thinking of military experts went well beyond the jousting of airborne knights. The potential for airplanes to deliver explosives was readily apparent. The development of bomber aircraft proceeded rapidly. The contribution of airborne bombs to the war was minimal when compared with artillery, mines, and grenades, but it seemed to foreshadow momentous changes in the nature of war. The bombing of cities such as London by airplanes and zeppelins raised panic among the civilian population, and suddenly the specter of war spreading beyond the forward zones into the very hearts of struggling nations began to preoccupy military and political leaders.

This concern found its first powerful voice in the works of Giulio Douhet, an Italian former artillery officer, whose book *The Command of the Air*,

completed in 1921, set the terms of the conversation in air power theory for many decades, arguably even into the present. Douhet observed that the evolution of air power created a third dimension in war, a dimension that allowed forces to move quickly through vast spaces toward their targets. This would seem to have been a fairly obvious observation, but Douhet combined it with lessons drawn from the experiences of the First World War to create a complete vision of future warfare.

Douhet saw in air power a way of breaking the stalemate that had come to characterize land warfare. He envisaged an age in which fleets of bombers would sail effortlessly over the grinding surface battle to strike hard at the enemy's cities and logistical structures. Douhet believed that an air war would be, by its very nature, offensive and oriented to the attack, as opposed to the defensive characteristics that had dominated most of the European land campaigns of the First World War. A "counter-air" battle, in which airplane fought airplane, would be impossible as it would be incredibly difficult to trace and intercept the movements of an oncoming air force. The use of pursuit aircraft such as the one that had appeared during the Great War to defend fixed targets was made impractical by the impossibility of keeping enough of these craft in the air and ready to repel a bombing force that might suddenly appear over a target. Thus, the advantage would go to the side that struck first and struck quickly. If all sides were to maintain large air forces capable of striking and retaliation, then peace would be maintained by fear of the enemy's use of its air power in response.

To us in the 21st century, this seems a strange, indeed mystifying, misunderstanding of the nature of the air power instrument. But Douhet was writing before the appearance of radar or even man-portable radios. An effective system of early warning, whether by radar or by teams of observers linked by radio, was not yet possible. It is, perhaps, more puzzling that an artillery officer such as Douhet could not envisage the development of effective anti-aircraft guns, which could be kept manned and ready at all times for defense of fixed targets.

Nothing about Douhet's thought impeded the evolution of either pursuit aircraft or anti-aircraft guns, which was more guided by technical and scientific breakthroughs and the exigencies of national budgeting. However, his emphases did have a major impact. Douhet had seen air power as an instrument of war that was fundamentally different from

land or sea power and that should, therefore, have its own institutional organization as well as its own doctrines and strategic ideas. This was enthusiastically taken up by European and American air power advocates in the wake of the war. Douhet's ideas about the importance of strategic bombing, that is, the use of air power to attack the enemy's cities and infrastructure as well as armed forces, likewise found a receptive audience.

The experiences of bombing during World War I, although relatively limited compared with what was to come later, had left national leaders with little faith in the ability of civilian workers and the general civilian population to endure in the face of an airborne attack. This pessimistic attitude was, perhaps, enhanced by the great success of British forces in using air power to police restive civilian populations in its imperial holdings. Douhet's belief in the impracticality of an air power defense also affected some in the popular and political culture, if not in military and arms production circles. Fear of aerial attack of large population centers had existed even before the First World War, as illustrated in such stark visions as H. G. Wells's *The War in the Air*, first published in 1908, which told of a fictional air war of apocalyptic consequence. When combined with the experience of the war and after, this led to some holding dire forebodings of the effect of a future war on the large cities of the world, subjected to aerial bombardment. This was perhaps best summed up in the British prime minister Stanley Baldwin's gloomy utterance in 1932 that "the bomber will always get through."

Strategic Bombing and World War II

In terms of thinking about air power strategy, the British Royal Air Force, which had obtained status as an independent arm of military service on April 1, 1918—while World War I was still under way—contributed much through the ideas of Marshal Hugh Trenchard, 1st Viscount Trenchard (known as the father of the Royal Air Force), and his protégé Marshal Sir John "Jack" Slessor, author of an influential volume titled *Air Power and Armies*. Trenchard was an enthusiastic advocate of strategic bombing as the primary means of prosecuting a war. He became particularly known for the oft-misunderstood doctrine of morale bombing. Trenchard's enemies tended to accuse him of advocating the deliberate targeting of the civilian population for the

purpose of causing terror and revolt; however, his ideas were more sophisticated than that. Trenchard believed that a policy of targeting industrial facilities and infrastructure would inevitably have a profound effect on the morale of the civilian population, a belief many felt was borne out by the experience in the Great War. He held that this effect had to be acknowledged and factored into calculations of the possible benefits of a strategic bombing campaign, even if the infliction of misery on civilians was not the primary purpose of the campaign.

Slessor agreed with his mentor on the importance of strategic bombing, but he tended to emphasize that this was but one aspect of an air campaign that had to be waged in close coordination with land forces (and, to be fair, Trenchard had also never seen an air campaign as being completely divorced from land war). Slessor was keenly aware of developments in areas such as communications, armor, and infantry tactics, developments pressed by figures such as J. F. C. Fuller in England, Erwin Rommel and Heinz Guderian in Germany, and Charles de Gaulle in France. These new weapons and techniques held the promise of breaking the defensive stalemate that land war had exhibited during the First World War. Slessor believed that the air weapon must be flexible and integrated strategically and tactically with the land effort.

In America, the development of air power was dominated by a steady campaign for an air force independent from the army. This campaign was led by figures such as Mason Patrick, Benjamin Foulois, Henry "Hap" Arnold, and William "Billy" Mitchell, and it culminated in the air corps being granted a large degree of autonomy, although not complete independence, as the U.S. Army Air Forces in 1941. The development of thought at the Air Corps Tactical School was heavily influenced by this search for independence, as the advocates of air power made strenuous arguments for a separate and specialized mission requiring separate and specialized organizations and institutions. Strategic bombing was a heavy component of this new mission, although the American advocates tended to de-emphasize morale effects and speak of economic and logistical disruption to the enemy brought about by high-accuracy bombing of industrial and military targets.

In terms of sea power, arguments over the use of air assets were raging as well. Organizationally, this battle tended to emphasize the unity of the sea mission, with the new air and submarine surfaces

remaining integrated with the more classic surface navy (although the British did briefly experiment with other forms of organization). In terms of strategy and tactics, the arguments tended to come down between those favoring air power as the wave of the future and those who saw the powerful surface fleet, including the battleships, as still being the key players in naval warfare.

Answers of a kind to those controversies were given by the events of World War II. The importance of air power to sea warfare was decisively illustrated. In terms of land warfare, the joint missions of coordination with ground troops and strategic bombing proved crucial. The history of joint warfare, that is, of coordination between air and ground units, had begun in World War I. But it was in the Second World War that this relationship flowered. Although the level of cooperation between the Luftwaffe and the German army in the early stages of the war has often been exaggerated, the blitzkrieg did provide an important step of continuity in the development of air-ground tactics. By the end of the conflict, especially in arenas such as the invasion of and battle for Normandy, the critical nature of close air support missions, with air power assets directly aiding ground troops (and giving nearby aid in the form of strikes against the enemy's immediate rear and supply lines), had become clear. However, strategic bombing was in the end not a campaign of pinpoint strikes but mass obliteration, often with mixed or disappointing results. Air power strategists often engaged in the basic strategic mistake of mirroring, that is of assuming that the enemy resembled oneself, rather than gathering independent evidence about the actual state of affairs on the ground. Allied air planners often displayed ignorance of the fact that, for instance, German industrial processes and supply chains were organized and physically laid out in ways different from similar industrial conglomerations in Britain or the United States. For instance, Allied planners initially showed ignorance of the fact that German oil refineries and chemical processing plants were often centralized and colocated, unlike the more dispersed and individualized plant facilities in Britain or the United States, and thus missed the fact that oil refineries were even more valuable targets than they would have been otherwise. Similarly, the planners initially missed the fact that ball bearing production was a crucial choke point in the manufacture of German war materiel. Once these mistakes of understanding and intelligence were rectified and

appropriate targets chosen, the results of the strategic bombing campaign improved dramatically. Battles such as Kasserine Pass showed what could go wrong in the absence of sophisticated and integrated ways of commanding and controlling air power assets. The use of the atomic bomb at the end of the war introduced an era in which destruction on a global scale was possible. The threat of nuclear war, particularly after Soviet development of the weapon, raised strategic, diplomatic, political, and moral issues that proved extremely difficult to resolve.

The Nuclear Era

Institutionally, the primary development for air power in the United States was the creation of a separate U.S. Air Force by the National Security Act of 1947. The new air force, like the rest of the nation, soon found itself gripped by the bloody conflagration on the Korean Peninsula and the more long-term issues of a grinding, bitter Cold War with an adversary that was feared and respected, albeit in some ways little understood. The overwhelming issue facing the air force, an issue embodied in the Strategic Air Command, an organization that came for many to embody the ideals of the Cold War military, was that of nuclear war. Issues of nuclear delivery and strategy spurred technological and doctrinal development; with the gradual result that nuclear strategy came to dominate almost every aspect of air force thinking and activity. Even the "tactical" units within the air force found themselves planning and training for the exercise of air power in the context of a nuclear conflict.

A new and for many a terrifying twist came in 1957 with the *Sputnik* crisis. This illustrated the importance of space and missile technology for the future of the United States in general and the U.S. military and its strategic plans in particular. It also seemed an object lesson in the deficiencies in scientific and technical achievement in the United States and the other Western powers. The air force, like the rest of the U.S. military, became deeply involved in the development of missile and space technology. Missiles armed with nuclear warheads became an integral part of the air force arsenal, as well as those of the army and navy (in the latter case, mounted in submarines).

The Vietnam conflict revealed the traps into which Cold War thinking had led the United States. An air force dedicated primarily to the nuclear mission proved ill equipped to deal with the

exigencies of an irregular war fraught with political and military restrictions on the full use of military force. Coordination between the air power of the air force, marines, and navy proved poor. Perhaps the most famous example of this was the practice of dividing Vietnam, both North and South, into route packages—regions where air operations were the sole responsibility of a given service. Thus, the efforts of the different services were automatically disparate in space, and often also in time, as there was little consultation or coordination as to the timing of attacks. More important, there was no unified strategic intent; attacks against industrial targets, communication and supply routes, and fielded enemy forces were conducted with little overall plan or overarching military goal. The lack of coordination became even more pronounced as the military leadership in Vietnam moved into an attrition model of warfare designed to wear down the enemy. This decision has been one of the most controversial in the history of American warfare. In terms of air power strategy and tactics, it led rapidly to a war of statistics, in which each service was in a race with the others in terms of numbers of sorties, numbers of bombs delivered, and other parameters that often had little relationship to either immediate or overall military effectiveness.

The widespread use of the helicopter, first extensively used in the Korean War, added a new dynamic to the mix of air power planning and operations. Until this development, personnel and cargo had been transported through three main methods: by land, sea, and fixed-wing aircraft. Sea and fixed-wing transport required a massive infrastructure and relatively fixed routes. Land transport, although more flexible, was also the least efficient in terms of large-scale mobility and certainly the most vulnerable to disruption by enemy action. The arrival of the helicopter married land, sea, and air transport into a flexible, relatively durable web. Air mobility and air assault became as crucial to the planning of army and marine units as land mobility and assault had been in previous eras. Finally, all branches of the service faced stringent adjustments with the end of compulsory military service.

The military rallied to these challenges with vigor. Several developments proved crucial in the recovery from the Vietnam experience. New tactical developments had begun even before the end of the Vietnam War. The navy's Top Gun School and, later, the air force's Red Flag exercise specialized in

realistic training against forces designed to emulate real-world enemy equipment and tactics.

The Modern Era

Along with this came a new doctrine of air power command and control. This doctrine, which was embodied in a massive military reorganization mandated by the Goldwater-Nichols Act of 1986, held that all air power in a given area of responsibility was to come under the operational control of a single commander, the Joint Force Air Component Commander, who—would be responsible under the overall operational commander, for the planning and conduct of air operations, thus grouping the air power assets of the different services under a single entity. This allowed the flourishing of a new kind of thinking in the area of air power, or perhaps it is better to say that it is a new emphasis on older ideals. This approach emphasized systems, with air power as part of one system of intelligence gathering, planning, logistics, and operations aimed at the disruption of enemy systems.

This kind of thinking was exemplified in the work of John Warden. A colonel in the U.S. Air Force, Warden developed a model of planning an air campaign that sketched the enemy in terms of concentric circles, from command and control through infrastructure and energy to the general population and finally fielded forces. Warden held that strategic air power should concentrate on disruption of the inner rings, or command and control and energy, while supporting the land forces in their attack on the outermost ring, the enemy's forces. Another exemplar of this kind of systems approach was the work of another U.S. Air Force colonel, John Boyd. Boyd emphasized the loop of decision making that rests at the heart of complex systems, a decision loop he labeled OODA (for the steps of observation, orientation, decision, and action).

These models came together during Operation Desert Shield/Desert Storm, along with three key technological and organizational developments: (1) the rise of ever more sophisticated precision-guided munitions, which allowed much greater accuracy and exactness in targeting enemy forces and installations; (2) the development of stealth technology, which effectively thwarted many of the enemy's radar and warning systems; and (3) the Air and Space Operations Center, an organization that sought to bring together all elements of air power

planning, command, and control in a single entity connected to field events through modern information technology. The final ingredient in the air power campaign in Desert Storm was the concept of effects-based operations, which emphasized that the success or failure of an attack should be measured not in absolute standards of destruction but rather in the effect the attack had on disabling the enemy's ability to conduct military operations.

The success of the air campaign during Operation Desert Storm was followed by continuing operations in the Middle East as well as in Bosnia, Kosovo, and Serbia. However, with the commencement of Operation Enduring Freedom and Operation Iraqi Freedom, American air power faced a new set of priorities. Now air power had to operate in the context of a messy and immensely complicated counterinsurgency regime, an arena in which friend and foe were often indistinguishable until the last moment and where intelligence was often more important than pure offensive capability. It was this aspect of air power, combined with the continuing importance of precision guided munition and stealth technology, that promised to shape the future of air power strategy.

Future Challenges

Basic trends and structural facts that seem sure to have an impact on the development of air power strategy in the 21st century are already in place, although doubtless other factors not even imagined will arise to have great impact on a field of strategic thought barely a century old. Nevertheless, the position of the United States as the sole remaining world superpower sets the basic strategic parameters of development, as does the rapid modernization of other military forces, such as those of China and India. This is only the basic field of play, where several strategic factors—technological, operational, and economic—will interact to determine the future evolution of air power strategy. The most obvious technological development is the ability to access, transfer, and process large amounts of digital information rapidly and accurately. This capability underpins the advances in precision targeting that enable much of modern air power's most impressive weaponry. It also allows for electronic fly-by-wire and remote control architecture, which has enabled the construction of superior aircraft and the explosive growth of unmanned aerial vehicles or drones as features of the three-dimensional battlefield.

But the capability to process such information comes with challenges. The technological networks that enable this digital processing are themselves vulnerable. In a physical sense, the networks constitute valuable infrastructure that must be secured and guarded with the same rigor as aircraft, installations, or weaponry. However, the technology itself creates a new kind of space, cyberspace, in which threats develop, operations play out, and, in short, warfare commences. Operations within cyberspace, whether offensive or defensive, crucially affect more classic air power operations and increasingly are seen as inseparable from them. Operations within cyberspace call for special knowledge and expertise, which air forces will increasingly have to develop, along with the physical infrastructure and organizational support to plan, prepare for, and execute such operations.

The physical infrastructure required by modern data processing extends beyond the boundaries of the earth, including beyond the boundaries of the atmosphere. Much of the data-gathering and transfer capability on which modern air forces rely is located in satellites in various orbits about the globe. Air forces, and militaries in general, have long relied on satellites for intelligence and basic data processing, and the capabilities of the Global Positioning System are crucial to the modern economy as well as to academic and scientific endeavors, governments, and militaries. The importance of outer space to air power strategy will continue to increase in the coming century, once again calling for expertise and organizational flexibility. The role of air forces in outer space activities seems natural, as outer space borders the atmospheric regions in which air forces operate. Although outer space is not simply an extension of the atmosphere, and although all military forces, not just air forces, have a profound interest in and dependence on this region, the crucial importance of space activities for air power strategy will probably mushroom as the century progresses.

All of these technological changes, however, must deal with the continued importance, and likely greatly increased prevalence, of asymmetrical warfare in the future. Open clashes between and among major air power forces are unlikely in the foreseeable future, but situations in which air power must be deployed against insurgent forces hidden in difficult terrain and among local populations will likely proliferate. The capabilities of data-gathering and precision munitions, and of drone aircraft, will be called on to deal with these difficult operational realities

even as enemy insurgent forces constantly adjust to make the application of modern technology more difficult. Current operations in Afghanistan and Iraq are illustrative of this. The ongoing conversation between strategy and operational needs is as old as warfare itself, but the speed with which that conversation plays out, the rapidity of action and reaction, and thus the pace of overall change have accelerated dramatically over the past few decades and will likely continue to do so through at least the midterm future.

But these developments must also take place in a milieu of rapidly escalating costs. The price of military technology has continued to climb well beyond general rates of inflation, even as air forces, particularly in the developed world, face mounting challenges from personnel costs reflective of education expense and health care costs, among other factors. Even as the demands for new technology grow greater, and as the demands for older technology continue and also increase, the economic challenges of meeting these demands will grow, meaning that air power strategy must inevitably become economic and budgeting strategy as well, as nations and militaries must make agonizing choices among pressing needs.

Robert Oliver

See also Air Force, U.S.; Aircraft, Bomber; Aircraft, Fighter; Close Air Support; Cyberwar; Global Positioning System; Helicopters; Luttwak, Edward N.; OODA (Observe, Orient, Decide, and Act); Space; Strategic Air Command; Strategy, Nuclear; Tactics, Air; Unmanned Aerial Vehicles

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STRATEGY, GROUND WAR

Ground war strategy is the collective action that articulates how the ground campaign will achieve the goal of fighting and winning a war. Ground war strategy is implemented when there is a commitment of land forces. This should not be confused with operations or tactics. Operations are a sub-component that is conducted to achieve the strategic goal. Tactics are those actions taken to maneuver or countermaneuver an opposing force. Ground war strategy has evolved over the past 2,000 years due to changes in technology and revelations in operations and tactics. It can be observed in history where technology outpaced the tactics, for example, the American Civil War. There are instances where the tactics were moving forward and forcing technology to keep pace; an example of this is World War I and the use of combined arms tactics forcing technology to keep up. Both of these instances had a tremendous impact on the ground war strategy. Yet there are principles that will be perpetually present. Sun Tzu articulated standards and theories for the conduct of war in the 6th century BCE that are still read and studied today by military strategists.

Background and Development of Ground War Strategy

The structure of the U.S. military has forced changes regarding how strategy is implemented. Each major conflict in the 20th century before the end of the Cold War saw a surge in manpower for the U.S. military. The idea that overwhelming force was a key to decisive victory was the prevalent thought prior to the end of the Cold War. Another key component of the U.S. strategy is the enemy; and during the Cold



Military personnel are transported in an M-113 armored personnel carrier armed with an M-2 .50-caliber general-purpose heavy machine gun during Operation Desert Storm.

Source: Department of Defense.

War, this was easily definable. This component, the enemy, steered training and capability requirements. The United States prepared, trained, and equipped the military to fight the Soviets. While these are important aspects, the development of strategy is not exclusive to technology, tactics, and the enemy but is geared to achieving the goal of fighting and winning a war.

The Army War College defines the development of strategy as “ends, ways, and means.” This construct is used in developing strategies to identify gaps and overcompensation. The “ends” identify the goal or objective. During the 1990s and into the post-9/11 era, this became a more difficult task. The “ways” tell how the military achieves these goals. The “ways” are articulated in plans that are built around scenarios for different regions in the world. The “means” provide the capability to achieve the “ways” and “ends.” As this simple construct is observed, breaches and overlap can be recognized, and the strategy can be developed.

One of the most important developments in the U.S. military that had a profound impact on ground war strategy was the Goldwater-Nichols Department of Defense Reorganization Act of 1986. During the Vietnam era, all the services had independent command structures, leaving room for miscommunication and a lack of coordination. During World War II, the command structure was even more splintered, with the appointment of a secretary of the navy and a secretary of war. With the advent of the air force after World War II, interservice rivalry became worse. All the branches of the service were competing for funds and justifying their capabilities independent of each other. The Goldwater-Nichols act established a command structure that allowed a unified combatant commander to report to the secretary of defense and then to the president. The service chiefs of each branch filled an advisory capacity and became responsible for the training and equipping of their

respective branches. This had an enormous impact on the ground war strategy, which became a joint effort rather than an independent endeavor by land forces. When deploying a force over strategic distances, the operation becomes a joint enterprise and requires the necessary planning. The ground war strategy would now become a unified venture under one combat commander, and the first to lead this undertaking was General H. Norman Schwarzkopf, commander of the U.S. Central Command during the Persian Gulf War.

Post–Cold War to Desert Storm

The end of the Cold War was a pivotal point for the U.S. military. Until then, the armed forces had a well-defined enemy with a set of tactics that were studied and well-known throughout the military. The military's capabilities were built to defeat the Soviets, and overseas bases were positioned to provide a quick response to the Soviet threat. The ground war strategy fell into line. Plans were set, and the military was prepared, strategically, to fight and win a war with the Soviets. Commanders had grown up in a military where the enemy's strategy was as predictable as the sun rising.

The first formidable enemy the United States faced post–Cold War (taking into account the Panama Intervention in December 1989) was Saddam Hussein and the Iraqi army. The construct of the Iraqi army was much like what the U.S. military had prepared to face. Iraq had capabilities similar to the Soviets, although most of its equipment was outdated, was not maintained, or lacked trained personnel to operate it. On August 2, 1990, the Iraqi army invaded Kuwait, which drew condemnation and sanctions imposed by the UN Security Council. On January 17, 1991, the air campaign of the Persian Gulf War began, and more than 100,000 sorties were flown. Once the ground campaign began, a cease-fire was declared 100 hours later, giving it the nickname “100-Hour War”; and on February 27, 1991, President George H. W. Bush ordered the cessation of military operations.

The ground campaign represented the outworking of the ground war strategy. In the Persian Gulf War (1991), the ground campaign composition was primarily heavy-armor divisions and mechanized infantry. This was the capability set that the military had prepared to use against the Soviets during the Cold War. The ground war strategy was built

around employing these heavy forces. Tanks and mechanized infantry (armored personnel carriers) utilize a markedly different strategy from light forces. Additionally, the logistical “tail” that is needed to maintain the heavy forces is significantly larger than for the light forces. Light forces are those units that consist of primarily infantry soldiers, who can be transported to the battlefield through parachute drop or rotary wing (helicopter) assets.

Building a ground war strategy around employing heavy forces requires tremendous logistical support, transportation assets to move the equipment to the battlefield, and trained operators for the equipment. This strategy, for defeating a conventional heavy army, was coming to an end. It was what the U.S. military prepared for, but the Persian Gulf War would be one of the last conventional efforts they faced for the next 20 years.

The 1990s and Strategy Outside Major Combat Operations

After the end of the Persian Gulf War, American ground war strategy was in a state of flux. The size of the army (the U.S. land force) had been drastically reduced. The future was less certain than it had been in the past 50 years. The army continued to train to fight a Cold War era enemy. At the National Training Center, Fort Irwin, California, U.S. tanks faced off with Soviet-style tanks and tactics. The commanders were fighting the last war—the war they had been preparing for nearly 50 years. Meanwhile, some members of the army began to talk about the need for a more flexible force. The talk was of a ground force that can maneuver like a heavy unit with some of the firepower, yet be lighter and more flexible. There was a growing need to send fewer soldiers to respond to a threat quickly, while maintaining some of the attributes of a heavy unit. This brought about the advent of the Interim Brigade Combat Team. The Interim Brigade Combat Team required a new vehicle, and it went to the drawing board. The outcome was the Stryker, a wheeled vehicle that could be easily deployed and had some of the firepower and survivability of a tank.

The Interim Brigade Combat Team became the Stryker Brigade Combat Team (SBCT), which became a segue unit in the ground war strategy. The SBCT was not to be used as an early-entry or forcible-entry unit. The SBCT was to be used as a force to bridge the gap between the time interval of

heavy and light units. The SBCT was intended to put a brigade combat team anywhere in the world within 96 hours of liftoff and a division on the ground in 120 hours. This would fill the gap between survivability and time. Light units could be deployed quickly but lacked survivability compared with the heavy units, which could not be deployed quickly but retained survivability. While this was a feasible solution to responding to a Soviet-style enemy, it was not effective for an unconventional, irregular force the United States would face in the near future.

The 1990s produced more independent military operations than in any other decade in U.S. history. The beginning was the Persian Gulf War (1991). Shortly after that was a U.S.-led multinational effort to assist the war-torn country of Somalia (1992). This effort produced a tremendous amount of media coverage and forever changed the idea of ground war strategy in the minds of military commanders. The United States was not involved to win a war or repatriate people; it was to provide protection so that food and other resources could be delivered to famine-stricken people. This would be a recurring theme throughout the 1990s—providing humanitarian assistance and disaster relief. This is where the departure from current ground war strategy occurred. Military commanders had to provide assistance to a local population, meanwhile protecting themselves and the population but limiting their use of force. The enemy was not well-defined and had no identifying uniform or marking. The strategy the enemy used was unpredictable, and the weapons were a mix of Soviet-style to new, high-tech implements. From Haiti to Bosnia, the face of the enemy changed and changed quickly. The ground war strategy needed to catch up and meet the growing need to defeat a nonuniformed adversary who could employ a multitude of weapon systems and is not subject to international law and agreements.

Redefining victory or the “ends” in developing the ground war strategy became a key component to defeating the adversary, as well as providing the “means” and determining the “ways.” This gave way to the introduction of counterinsurgency (COIN) operations. General David Petraeus was the lead proponent of this strategy, the COIN campaign. The roles and responsibilities of soldiers and commanders became a spectrum as opposed to narrowly defined duties. On the ground, tactical decisions had strategic effects, and success was not decisive but rather measured in degrees.

Post-9/11 and COIN

September 11, 2001, had a tremendous effect on the United States of America. The ripples were felt throughout society, but a wave was made in the U.S. military as it became clear that the U.S. ground war strategy needed to change. The National Training Center at Fort Irwin transitioned from training units in tactics, to defeating Soviet-style armies with tanks, to engaging with civilians in villages and identifying roadside bombs or improvised explosive devices. The military had invested in technology and became increasingly reliant on high-tech devices, only to be defeated by relatively primitive mechanisms. The ground war strategy was being shaped by a reaction to an ill-equipped, untrained force with little to no central leadership. That decisive victory and unconditional surrender were not an option became all too apparent.

During Operation Iraqi Freedom (Iraq) and Operation Enduring Freedom (Afghanistan) commanders had varying degrees of success. Some commanders approached the ground war strategy with a conventional, regular-warfare mind-set. Other commanders saw the necessity of unconventional warfare and of utilizing a hybrid of offensive, defensive, and stability operations. This approach became known as COIN operations. The field manual for the joint endeavor between the army and marine corps became known as COIN FM 3-24/MCWP 3-33.5 and was published in December 2006. The following is an extract from the first paragraph of the manual:

This manual is designed to fill a doctrinal gap. It has been 20 years since the Army published a field manual devoted exclusively to counterinsurgency operations. For the Marine Corps it has been 25 years. With our Soldiers and Marines fighting insurgents in Afghanistan and Iraq, it is essential that we give them a manual that provides principles and guidelines for counterinsurgency operations. Such guidance must be grounded in historical studies. However, it also must be informed by contemporary experiences.

This changed the position and outlook for the ground war strategy. The strategy was now being constructed around completely different “ends.” The ends were to stabilize the host nation by providing security force assistance and building partner capacity. The last two terms, security force assistance and building partner capacity, became hallmark expressions in the U.S. military. Because the ends



An Iraqi interpreter known as Mr. Washington, right, serving with the U.S. Army 155th Brigade Combat Team, Mississippi Army National Guard, helps U.S. Army Sergeant 1st Class Dennis Adams, left, with 5th Platoon, 1st Squadron, 98th Cavalry Regiment, question an Iraqi man after literature on chemical explosives and supporting insurgency were found in his home in Hasawa, Iraq, on June 19, 2005. U.S. military service members and Iraqi forces are conducting counterinsurgency operations.

Source: U.S. Marine Corps photo by Lance Corporal Jon Dior Ferrell (released).

had drastically changed, the “ways” and “means” needed to be completely overhauled. The ways were being defined by identifying groups of people by religion, race, and ethnicity and how supportive they are to the host nation or insurgents. This was done to predict reactions to U.S. intervention and operations in different regions and to determine the level of support to the host nation. COIN FM 3-24 indicates that the assessment of counterinsurgents’ perceptions can begin to answer the following questions:

Are counterinsurgents exhibiting Western or American values that the populace does not appreciate?

Are embedded American beliefs preventing the unit from understanding the host nation population or its multinational partners?

Is what the intelligence and command staff perceives really what is happening?

Does the populace believe what the unit believes?

Is there something that is part of the populace’s (or a subgroup’s) perception that can be detrimental to the unit?

Ultimately, the ground war strategy has shifted from fighting and winning war to stabilizing nations. The way the U.S. military is employed can be better described as a spectrum rather than a specific function. In past conflicts, the U.S. military was utilized as a force to defeat an armed enemy through offensive and defensive operations. In what are called full-spectrum operations, the U.S. military conducts offensive, defensive, and stability operations independently or simultaneously. Stability operations are

nontraditional but recently are being conducted the most often. Since the end of the Cold War, the United States has faced fewer peer and near-peer competitors, but it has seen more nonstate adversaries, failing states, and states that sponsor terrorist activities. These adversaries pose a different threat and require a different ground war strategy, a strategy that continues to require the application of force but with markedly different goals—specifically, a move away from unconditional surrender and/or territorial control toward goals like ending insurgencies and stabilizing regimes. This is not entirely different from the approach Carl von Clausewitz took to viewing war. Clausewitz's idea that there is "pure war" and "war to achieve limited aims" is a dialectic approach, and the reality is somewhere in between. The ground war strategy still requires the application of force, however, to achieve different goals that are not as easily defined as unconditional surrender.

The post-9/11 ground war strategy is a joint operation that incorporates a variety of actors. The "battlefield" is not symmetric with regard to physical space and front lines. The battlefield looks more like spheres of influence than a front line pushing forward to an objective. Additionally, it is not symmetric with regard to the enemy. The enemy could be operating through local nationals or could appear as a host nation force with ill intentions. Other factors that are taken into account when surveying the ground war strategy are private contractors, tribal and religious affiliations, and the global landscape. The need to support a protracted war with an all-volunteer force will inevitably require outside assistance. This has often occurred in the form of private companies being contracted by the United States to provide assistance with logistics and security. The least stable countries in the world frequently have large tribal communities with more allegiance to the tribe or religion than the country. Global relationships have profound impact on the ground war strategy, particularly when tribes or insurgencies receive support from outside regimes.

In the foreseeable future, the traditional construct of front lines and conventional forces fighting conventional wars will not be the basis for the ground war strategy. The basis for a strategy will consist of projecting forces over strategic distances to conduct security force assistance operations in order to provide stability for states where there are U.S. interests. This will often occur as a COIN operation. While seemingly simple, this is a much more complex

strategy where tactical operations can have strategic effects, victory lacks a definition, and the ends are measured by local national support and stability of the nation. Yet the ground war strategy will always retain some of the principles communicated by Sun Tzu and Clausewitz.

Chris Williams

See also Afghanistan; AirLand Battle Doctrine; Asymmetric Warfare; Bosnia Intervention; Clausewitz, Carl von; Combined Arms; Counterinsurgency; Goldwater-Nichols Department of Defense Reorganization Act; Guerrilla Warfare; Haiti, U.S. Intervention in; Humanitarian Intervention, Foreign; Iraq Insurgency (2003–2011); Liddell Hart, Basil; Logistics; Nation-Building; 9/11 (2001); Panama, U.S. Intervention in; Persian Gulf War; Petraeus, David; Somalia Intervention; Sun Tzu; War in Afghanistan

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STRATEGY, NAVAL

Alfred Thayer Mahan, the preeminent American naval strategist of the late 19th and early 20th centuries, explained that naval strategy simply denoted "the proper use of means to attain ends" or the disposition of a nation's naval resources to attain agreed-on national objectives. For over a century, the primary strategic objective of the U.S. Navy was the protection of American commerce. Only secondarily did the navy conduct blockades or attempt to protect the homeland from invasion. On rare occasions, during the Mexican-American War and the Civil War, the navy supported its sister service in amphibious operations. Beginning with the 1898

Spanish-American War, the U.S. Navy, because of its increasing might and the influence of Mahan, sought command or control of the seas. This remained an overriding strategic priority during World War II and the Cold War. Since 1989, the navy's strategy has increasingly focused on supporting sister services in regional conflicts such as the Persian Gulf War and the Iraq War, protecting commerce from pirates, providing humanitarian aid, and conducting both offensive and defensive operations as part of the Global War on Terrorism.

From the Revolution to the Spanish-American War

America's first naval strategy developed alongside the small fleet of the 13 colonies and the Marine Corps, which General George Washington requested for the purpose of harassing the British. Far from being a dominant force, the infant American fleet thought little of achieving command of the seas and, instead, played the role of spoiler. At Yorktown, command of the seas proved critical in America's decisive victory, but control of the waters off the Virginia coast was won by a fleet flying the French tricolor rather than the 13 stars and stripes.

Disbanded with independence, the navy was reborn when Congress saw the need for a permanent navy to protect American commerce and, in 1794, appropriated funds for six frigates ranging in size from the 44-gun USS *Constitution* (popularly known today as Old Ironsides) to the 38-gun USS *Constellation*. These six frigates saw extensive service against the Barbary pirates, and while successful in fulfilling their primary strategic role, commerce protection, they encountered insurmountable difficulties when pitted against the Royal Navy beginning in 1812. For most of the war, the British blockaded the U.S. coast and raided targets with impunity.

During the 1846–1848 Mexican-American War, the navy briefly, and successfully, embraced a new strategy, supporting an amphibious attack on enemy shores, when it landed a force of some 12,000 men at Veracruz, Mexico. A little more than a decade later, the navy again focused its resources on protecting American commerce from Confederate raiders while simultaneously blockading the South's ports. The latter strategy, which formed part of the Anaconda Plan, presented daunting challenges in as much as no blockade of such a scale had ever been attempted. The blockade, and the closing of

the Mississippi River, succeeded in ruining the Confederate economy by 1865.

In the interval between the Civil War and the 1898 Spanish-American War, the U.S. Navy underwent fundamental changes that laid the foundations for the emergence of a first-rate maritime power. First, Congress approved funding for three new cruisers, which formed the cornerstone for the "New Navy" of the late 19th century. Two years later, Secretary of the Navy William E. Chandler established the Naval War College, where Captain—and later Rear Admiral—Alfred Thayer Mahan's lectures and writings revolutionized U.S. naval strategy. Mahan forcefully maintained, most notably in his 1890 tour de force, *The Influence of Sea Power on History*, that the United States must build a battle fleet capable of dominating the seas and strategically located choke points, establish overseas or forward bases for the fleet, and create an isthmian canal to facilitate the fleet's rapid movement from one ocean to the other. Perhaps most important, Mahan pressed for a "forward strategy" in which the U.S. Navy would concentrate its forces far from American shores and seek to destroy the enemy in a decisive battle.

The Navy Comes of Age, 1898–1945

The 1898 Spanish-American War both vindicated and acted as a catalyst for the propagation of Mahanian strategy. In the short and decisive conflict, naval strategy focused on securing the waters around the Philippines and the Caribbean, as well as transporting and supplying ground troops in combat far from home. In two pivotal encounters, American commanders put Mahan's decisive battle doctrine to the test. Commodore George Dewey's Asiatic Squadron contended successfully in the May 1 Battle of Manila Bay for control of the waters surrounding the Philippines and, after securing the seas around the archipelago, cooperated with the U.S. Army to transport the ground forces needed to wrest the islands from the Spanish. Half a world away, during the July 3 Battle of Santiago de Cuba, Rear Admiral William T. Sampson's North Atlantic Squadron and Commodore Winfield Scott Schley's Flying Squadron defeated their Spanish opponents, secured the Caribbean, and transported army and Marine Corps units to the battle in Cuba. Victory, and the ensuing Treaty of Paris, provided a new forward base not only in the Caribbean but in Guam and the Philippines as well.

Following its success over Spain, the U.S. Navy took on the strategic obligation of protecting America's new global empire and expanding commercial interests primarily through deterrence, a strategy normally associated with the Cold War. President Theodore Roosevelt used the navy to deter Germany during the 1902–1903 Venezuelan Crisis, and in 1907 he sent the fleet to visit Japan in order to impress Tokyo with American naval power.

While Theodore Roosevelt used the navy as an instrument of deterrence, his distant cousin, Assistant Secretary of the Navy Franklin D. Roosevelt, facilitated convoy and antisubmarine warfare, as well as assisting the British Royal Navy in continuing its command of the Atlantic after the United States entered World War I in April 1917. While it was the British, rather than the U.S. Navy, that employed Mahan's time-honored strategy of fleet concentration at Jutland in May 1916, the United States played a key role in Germany's defeat. By the war's end, the U.S. and British navies safely transported just over 2 million American military personnel to France, which proved crucial in blunting Germany's 1918 spring offensive and allowing the Entente forces to go on the offensive later that summer.

During the interwar period, naval strategy remained firmly within the Mahanian orbit. The 21 fleet-problem exercises that the navy conducted during the interwar years, in which the bulk of available personnel and equipment participated, focused on winning a decisive encounter with an enemy capital ship force to deny the opponent use of the sea. Various versions of War Plan Orange, the plan to fight Japan, were tested, combining Mahan's strategy of fleet concentration in preparation for a climactic naval battle in the Pacific with a blockade of Japan and attacks on the Ryukyus.

During World War II, U.S. naval strategy mirrored both the interwar fleet exercises and the experiences of World War I. The navy, for example, pursued extensive convoy and antisubmarine warfare duties and conducted increasingly successful submarine and, later, surface fleet blockades against Japan. The navy's primary wartime strategy, however, remained securing dominance of the seas. Unlike World War I, the German navy never seriously contended for control of the Atlantic, although its U-boat fleet posed a serious challenge to Allied shipping during most of 1942 and early 1943. In the Pacific, however, the Japanese navy was the dominant naval force from the war's beginning at Pearl Harbor through the

Battles of the Java Sea and the Coral Sea. Only at Midway in June 1942 did the United States, through its destruction of four Japanese aircraft carriers, secure dominance over its Japanese counterpart.

The Cold War

Throughout the Cold War, the U.S. Navy facilitated the nation's overarching grand strategy—containment—and, increasingly, after the Soviet Union acquired nuclear weapons in 1949, a second and related strategy—deterrence. Europe remained the center of conflict throughout the Cold War, and here, the U.S. Army, rather than the navy, had primary responsibility for successfully containing the USSR. The navy, however, had the primary responsibility for keeping the sea lanes open between the members of the far-flung North Atlantic Treaty Organization (NATO) Alliance, and therefore, it developed a strategy for neutralizing the Soviet submarine threat. This strategy envisioned traditional antisubmarine warfare and also the use of nuclear weapons to destroy Soviet submarines before they could put out to sea. Especially during the Eisenhower presidency (1953–1961), the navy embraced a forward strategy in which carrier task forces would strike the Soviet periphery and threaten the flanks of any Warsaw Pact invasion by landing Western forces far behind the advancing enemy. Carrier-borne and, later, submarine-launched missiles also supported nuclear deterrence and the concept of mutually assured destruction by presenting the Kremlin with a credible retaliatory capability.

During the early 1980s, in response to the growth of the Soviet blue-water fleet, Navy Chief of Operations Admiral James Watkins and Navy Secretary John Lehman developed a new comprehensive maritime strategy designed to deter and, failing that, defeat the Soviet navy in a traditional maritime conflict. Key to this strategy was a 600-ship navy made up, in part, of 15 carriers and 100 attack submarines. This preponderance of power would bring victory in the Barents and Norwegian Seas, home to a large force of surface ships and nuclear missile-equipped submarines. The navy also would play a substantial role in a conventional war through the use of new, advanced weapons, including the Tomahawk cruise missiles and "smart bombs" delivered by naval aircraft operating from any number of powerful carrier battle groups. Naval strategists envisioned deploying both weapons in

support of army and marine ground troops defending NATO countries in the event of a concerted Warsaw Pact assault.

During the final years of the Cold War, the Navy returned to pursuing its traditional strategic role of protecting American commerce. The ongoing Iran-Iraq War of 1980–1988 threatened vital oil supplies as Iran laid mines and raided tankers in the Straits of Hormuz. The navy provided an escort for Kuwaiti tankers and took part, along with army, Marine Corps, and air force units, in Operation Praying Mantis, in April 1988, which undertook retaliatory strikes on the Iranian navy for its attacks on neutral shipping. While tensions soon lessened with the end of the Iran-Iraq War, the navy would soon find itself once again deeply immersed in the region.

Persian Gulf War and Post-Cold War Conflicts

In the Persian Gulf War, the navy fulfilled three primary strategic objectives: command of the seas, the use of offensive power in support of operations on land, and sealift of men and materiel. During Operation Desert Shield, the August 1990 to February 1991 military buildup in Saudi Arabia, the navy spearheaded the transporting of nearly 500,000 American troops to the region, successfully blockaded the Iraqi coast, and confused Iraqi strategists by apparently planning a massive amphibious assault along the Kuwaiti littoral. With the beginning of Desert Storm, the February 1991 liberation of Kuwait, naval ships supported ground operations and launched more than 100 cruise missile attacks during the war's first 24 hours alone, while carrier-based aircraft flew 15% of U.S. sorties.

During Operation Enduring Freedom, the assault on the Taliban and al Qaeda sanctuaries in Afghanistan following the September 11 attacks, naval carrier-based aircraft flew three quarters of all sorties in support of ground operations and also undertook extensive efforts to destroy communications and disrupt air defense systems. After the fall of Kabul in November 2001, the U.S. Navy had primary responsibility for the interdiction of terrorists fleeing Afghanistan by sea.

During Operation Iraqi Freedom in 2003, the U.S. Navy once again provided command of the seas, the use of offensive power in support of operations on land, and sealift of men and materiel. With the start of hostilities in March 2003, the navy launched Tomahawk missile strikes against command-and-control centers in Baghdad as part of the “shock and

awe” campaign, designed to show overwhelming power to intimidate the Iraqi forces. Aircraft from the five carrier battle groups assigned to Operation Iraqi Freedom also flew some 14,000 sorties against targets in Iraq and in support of coalition forces.

Post-Cold War Strategy

With the end of the Cold War, U.S. naval strategy shifted from a focus on controlling sea lanes in a global war to fighting regional conflicts, deterring potential enemies, and providing relief. Additionally, strategists since 1990 have focused on littoral or close-to-shore combat, rather than traditional blue-water combat. In terms of potential enemies, strategists have focused on emerging naval powers such as China, regional threats such as that posed by Iran in the Persian Gulf and Straits of Hormuz, and non-state actors such as al Qaeda.

Concerning China, strategy envisions using the navy to blockade the coast in order to deny China access to imports such as oil and, simultaneously, to its many lucrative overseas markets. While ship- and air-launched weapons may be used to target critical military and civilian command-and-control centers, few see a major land war on par with the long-dreaded NATO/Warsaw Pact clash of the Cold War years.

As for Iran, while the navy will play a role in deterring a nuclear strike should Tehran acquire nuclear capability, planners see navy-launched ordnance as an integral part of any campaign to disrupt Iranian command and control, as well as the lead element in a successful blockade of Iran's extensive coastline. The navy would also play an equally critical role in keeping open the narrow but vital Straits of Hormuz, the gateway to the West's crucial oil imports.

In terms of nonstate actors, the navy will do yeoman's service, suppressing piracy in the Horn of Africa as well as off the Indonesian coast in the narrow Straits of Malacca. This focus on pirates, terrorists, and regional state actors such as Iran has, in turn, led the navy to focus on the production and deployment of a new type of vessel, the littoral combat ship (LCS), which will replace America's aging frigates. The new LCS come in two classes, the *Freedom* and *Independence*, and top out at 3,000 tons. Although smaller than the *Knox*-class frigate, the LCS has a maximum speed in excess of 40 knots and is equipped with the navy's new flexible mission packages, which allow for the quick addition

or substitution of specialized equipment to counter various threats, as well as an enhanced, primarily defensive missile capability. Both classes of LCS will counteract submarines, fast-moving small surface craft, and mines. The U.S. Navy had deployed one vessel from each class as of 2012.

In addition to the development of new warships, post-Cold War strategy has placed a much greater emphasis on joint navy/Marine Corps operations and the deployment of carrier battle groups with amphibious strike forces and embedded marines. Strategists foresee the possibility of navy-supported ground forces occupying small portions of the Iranian coast to safeguard navigation through the Straits of Hormuz or to definitely neutralize distant terrorist sanctuaries.

More recently, naval strategy had evolved as part of an effort to integrate naval forces into “global joint operations” in order to effectively combat both regional and nongovernmental threats such as international terrorism. This new strategy rests on three pillars: Sea Strike, Sea Shield, and Sea Basing. Sea Strike envisions using naval power as an offensive weapon, while Sea Shield foresees the navy defending the United States from a host of threats, including cruise and ballistic missiles. Sea Basing emphasizes prepositioning and the use of advanced technology to facilitate the employment of either Sea Strike or Sea Shield. Strike, Shield, and Basing will in turn rely, in part, for success on the many technological advances presented by the information age and will utilize information from a variety of sources, both civilian and military, to identify, track, and target threats worldwide. The navy’s emphasis on harnessing information age advances is embodied in FORCEnet, the navy’s plan for waging network-centric warfare in the 21st century.

In the Cold War era, the U.S. Navy was often seen as complementing rather than leading containment and deterrence; in the 21st century, the navy can play both a leading and a unique role in fulfilling the nation’s grand strategy. Writing in the journal *Orbis*, Swarthmore Professor James Kurth compellingly maintained that in the new century the navy is uniquely suited not only to provide for command of the seas but also to ensure *command of the commons*, the “commons” meaning the seas, “air space, outer space and even cyberspace.”

To carry out this new mission, the navy seeks to maintain a fleet of 313 ships. In 2005, Chief of Naval Operations, and soon to be named Chairman of the Joint Chiefs of Staff, Admiral Mike Mullen

emphasized that given the common danger posed by rogue states, pirates, and terrorists, the United States should seek the formation of an “alliance navy” made up of 1,000 ships from friendly nations.

Conclusion

The strategic objectives of the U.S. Navy have evolved alongside the maturing American republic. From commerce raider and spoiler in the American Revolution, the navy matured in just over a century into a force capable of seeking out the enemy fleet and engaging it in a decisive clash to secure mastery of the seas. Guided by the strategy of Alfred Thayer Mahan and supported by a growing battle fleet and widely dispersed forward bases, the navy has continued to seek mastery of the seas, while simultaneously denying the same to enemy powers. In the two World Wars, and the regional conflicts that followed, the navy has also transported the men and women of its sister services to distant battlefields, supplied them, and protected them with carrier-borne aircraft and precision-guided missiles. In the 21st century, naval strategy has evolved further as the United States seeks to contain new adversaries and deter new threats on the seven seas, in cyber space, and even in outer space.

Sidney Pash

See also American Revolution; Antisubmarine Warfare; Civil War, American; Deterrence; History, Naval: Approaches to; Mahan, Alfred Thayer; Mexican-American War; Naval War College; Navy, U.S.; Strategy, Nuclear; War of 1812; Warfare, Amphibious; Warfare, Submarine; World War I; World War II

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STRATEGY, NUCLEAR

Soon after the use of atomic weapons at Hiroshima and Nagasaki on August 6 and 9, 1945, nuclear weapons occupied a special position in the arsenal of the United States. Nuclear weapons quickly became disassociated from “conventional” ordnance. The field of nuclear strategy within national military strategy became paramount in national security policy throughout the Cold War. During the early Cold War, the new uncharted reality of a nuclear-armed enemy capable of devastating the United States brought planning of nuclear strategy into the hands of civilian “defense intellectuals.” Although the United States deployed tremendous numbers of warheads, and military leaders advocated their use on occasion, the utility of nuclear weapons in war has vexed every presidential administration as a de facto taboo emerged over their first use in war. Strategic deterrence became the central tenet of nuclear strategy; however, strategic defensive systems and nuclear arms control also were important aspects of strategy.

Prior to World War II, “strategic bombing” doctrine advocates believed that air power could independently affect—even win—a war by destroying key industrial targets. After Hiroshima and Nagasaki, the prestige, tremendous fire power, and coercive potential of atomic bombs quickly devolved into a nuclear arms race. The USSR detonated its first atomic weapon in 1949, and the Cold War took shape. With the USSR as the primary threat, U.S. war plans called for a strategic bombing campaign wielding atomic weapons against military and industrial targets with as many bombs as possible at the war’s beginning.

During the Korean War (1950–1953), President Harry S. Truman withheld the authority to use atomic weapons, to keep the war limited and avoid escalation to a nuclear World War III with the Chinese-Soviet bloc, relegating strategic bombers to dropping conventional ordnance. The Pentagon explored the use of tactical battlefield atomic

weapons; however, the armistice negated the need. After the United States tested a more powerful thermonuclear hydrogen bomb in 1952 and the USSR exploded its own thermonuclear device a year later, a strategy of deterrence took hold.

The Eisenhower administration oversaw a large buildup in the stockpile of nuclear warheads. The phrase “Pentomic Era” is associated with the 1950s and refers to the buildup of small tactical atomic weapons for army battlefield use. The United States also deployed small nuclear weapons for strategic air defense against enemy bombers. Nuclear strategy centered on the public policy of threatening a campaign of “massive retaliation” utilizing large thermonuclear weapons to deter aggression by the Chinese-Soviet bloc. The strategic “nuclear triad” coalesced by 1960 was composed of long-range heavy bombers, intercontinental ballistic missiles, and submarine-launched ballistic missiles. A joint targeting plan, the Single Integrated Operational Plan, derived from the National Strategic Target List, also came into effect over concerns of targeting overlap and overkill. Should deterrence fail and the enemy launch a “first strike,” the Single Integrated Operational Plan envisioned a massive retaliatory “second strike,” although the United States never publicly ruled out a preemptive first strike due to concerns over whether American retaliatory forces could survive a Soviet “first strike.”

The strategic question “What if deterrence failed?” implied the difficulty in determining what success there would be in any U.S. retaliatory strike. Defining “victory” in a nuclear World War III troubled policymakers. The United States would face devastation from an enemy’s first strike regardless of U.S. retaliation, and even if the United States struck first, the few remaining enemy forces would still cause unacceptable losses. The high-stakes nature of nuclear war with its world-shattering “exchanges” of nuclear firepower, and no historical record to guide planners, highlighted the many unknowns in nuclear strategy. With no clear answers on what constituted “minimum deterrence,” continuing the arms race appeared the only answer.

Rise of “Defense Intellectuals”

The critical importance of nuclear strategy induced the rise of “defense intellectuals”—primarily mathematicians, scientists, and social scientists—in the making of nuclear strategy. They derived their work

from “operations research” during World War II to gauge conventional strategic bombing efforts and the maritime commerce war. The academics performing studies of strategy, which came to be known as “systems analysis,” partnered with government to think about the unthinkable—global thermonuclear war—and to advise military and civilian decision makers. The U.S. Air Force took especial interest in such studies and funded the Research and Development Corporation, which became a symbol of the academic-government partnership in strategic studies.

The civilian academics developed “game theory” for nuclear strategy. Notably used by Professors Thomas Schelling and William Kaufman, game theory reduced multiple variables to mathematical formulas. Complex war games could be played out to simulate and produce strategies for nuclear conflict. In the well-known 1960 book *On Thermonuclear War*, Herman Kahn famously argued that in a crisis the best course of action may be a preemptive first strike that limited damage to the United States. This highlighted what many critics saw as flaws in game theory and the mathematical-scientific approach that assumed rational decisions amidst the horrors and unknowns of nuclear war. The defense intellectuals represented by the Research and Development Corporation and many other academics such as Bernard Brodie, author of *Strategy in the Missile Age* (1959), and Henry Kissinger, in *Nuclear Weapons and Foreign Policy* (1957), defined an era where academics held great sway in strategic discussions.

Into the late 1950s, critics often attacked the credibility of a plan for massive retaliation, asking if U.S. leaders would initiate nuclear war in response to a nonnuclear aggression. This criticism stemmed from the concern that U.S. leaders would hesitate to respond to aggression from a communist country because of U.S. heavy investment in strategic nuclear forces and cutbacks in conventional forces. U.S. planners thus designed strategies for limited nuclear war that called for using tactical atomic weapons accompanied by ground troops to respond to a conventional attack by communist forces with greater manpower. By the early 1960s, the Kennedy administration sought options other than relying on the threat of massive retaliation. A buildup of conventional military power offered one solution, but reformers sought a way out of the “nuclear dilemma” that made the United

States vulnerable to unacceptable destruction in any crisis scenario. An “escalation ladder” offered options that sought to coerce a rational enemy to terminate hostilities before the start of a “general nuclear war”—a disaster for all. A public policy of city avoidance by a “counterforce strike” against only enemy nuclear forces could limit the damage to urban population center. The threat against countervalue targets—enemy cities—could then be used to coerce the enemy to end hostilities. Despite these attempts to offer the president more strategic options, most nuclear strategists and military leaders were forced to acknowledge how difficult it would be to stop escalation and accepted that Cold War peace rested on mutual deterrence through second-strike capability, or the ability to respond to a nuclear attack with a similarly powerful nuclear attack. Mutually assured destruction constituted the U.S. strategy—a delicate nuclear balance of terror with “strategic stability” and “stable deterrence” being the goal.

The 1970s brought more complexities to the nuclear dilemma as new technical developments in missile accuracy and payload, such as the multiple independently targetable reentry vehicle, could create instability by posing a threat to the survivability of retaliatory forces. Additionally, the development of anti-ballistic missile (ABM) defenses—utilizing small nuclear devices—exposed the country to the impact of retaliatory forces. Finally, the U.S. strategy faced the challenge of Soviet parity in the arms race.

The 1970s saw a thaw in relations between the United States and the USSR, which was known as détente and resulted in arms control agreements. The Strategic Arms Limitation Treaty (1972) capped the number of warheads and platforms for strategic nuclear forces, and the Anti-Ballistic Missile Treaty (1972) banned most deployments of ABM systems. From the U.S. perspective, the Strategic Arms Limitation Treaty limited damage to the United States, and the Anti-Ballistic Missile Treaty kept stable deterrence in place. The Chinese-Soviet rift and indications in the 1970s that other communist states might not follow the Soviet line in a crisis, prompted planners to offer the president options to delete certain nations from the target list.

The unraveling of détente in the late 1970s following the Soviet invasion of Afghanistan brought renewed calls for strengthening U.S. nuclear forces. The Reagan administration accelerated the nuclear buildup in the early 1980s. Challenging the strategy

of mutually assured destruction, new strategic plans called for the United States to “prevail” in a nuclear war. The strategy defined prevailing as a political result that favored the United States at war’s end. The United States also began researching not just a new ABM system but a missile shield over the entire country, known as the Strategic Defense Initiative, or “Star Wars” in public discourse. By deploying new tactical nuclear forces, NATO sought to assure the Soviet Union that any conventional ground attack on Europe risked escalation to a general nuclear war. The U.S. buildup and Star Wars research reinvigorated the arms race and fueled criticism that the U.S. strategy upset the nuclear balance.

Post–Cold War Nuclear Strategy

The Cold War ended in 1991 due to the Soviet Union’s failing economy and the collapse of the Berlin Wall. The end of the Cold War brought a series of arms control agreements with the new Russian Federation—the Strategic Arms Reduction Treaties. Although tensions with Russia lessened considerably, the focus of nuclear strategy continued to be deterrence by threat of retaliation as the ultimate guarantor of U.S. sovereignty.

The new strategic environment in the aftermath of the September 11, 2001, attacks by the al Qaeda terrorist organization brought new concerns about the effectiveness of deterrence. Deterrent strategy rested on instilling fear in the minds of rational enemy leaders. However, the terror attacks of September 11 were suicide missions conducted with religious fanaticism and designed to kill thousands in a surprise attack. If such an enemy could acquire nuclear, chemical, or biological warheads—weapons of mass destruction—then the old question of “what if deterrence fails” has new meaning. In the administration of President George W. Bush, there were concerns over nuclear proliferation to “rogue” states that might connect with terrorist organizations. Concerns over secret weapons of mass destruction development programs and unsecured “loose nukes” from the former Soviet Union propelled efforts to stop proliferation and to secure nuclear facilities around the world. The United States has the capability to use “bunker busting,” small nuclear weapons to destroy storage facilities for weapons of mass destruction, but it faces the same taboo on nuclear first use that has always muted the utility of nuclear weapons.

Defense against attack by “rogue states” with crude long-range missile capability also revived the National Missile Defense shield into a “Global Missile Defense” system aimed at limited strike capability from small hostile states such as Iran and North Korea. In 2002, the United States withdrew from the Anti-Ballistic Missile Treaty with Russia. This has brought criticism over destabilizing the strategic balance and undermining the new arms control agreements. The contemplated, though now cancelled, attempt in 2008 to base part of the ABM system in eastern Europe among the former communist states further strained relations and brought fears of a new nuclear arms race, though the Cold War had long been over.

Nuclear strategy in broad terms has changed little since 1945. Studied by legions of defense intellectuals, nuclear weapons developed a taboo on their use in war and derived their importance more from deterring large-scale conflict between the superpowers—thus preventing World War III. Deterrence posed the risk of unacceptable destruction to both sides in a future conflict. Despite the new strategic environment after the end of the Cold War, the advent of the Global War on Terror, and the actual deploying of a limited Global Missile Defense, threat of retaliation remains a key part of U.S. nuclear strategy.

David M. Walker

See also Bombs, Nuclear; Deterrence; Missiles, Nuclear; North American Aerospace Defense Command (NORAD); RAND Corporation; Schelling, Thomas; Single Integrated Operational Plan; Strategic Air Command; U.S. Strategic Command; Weapons, Nuclear

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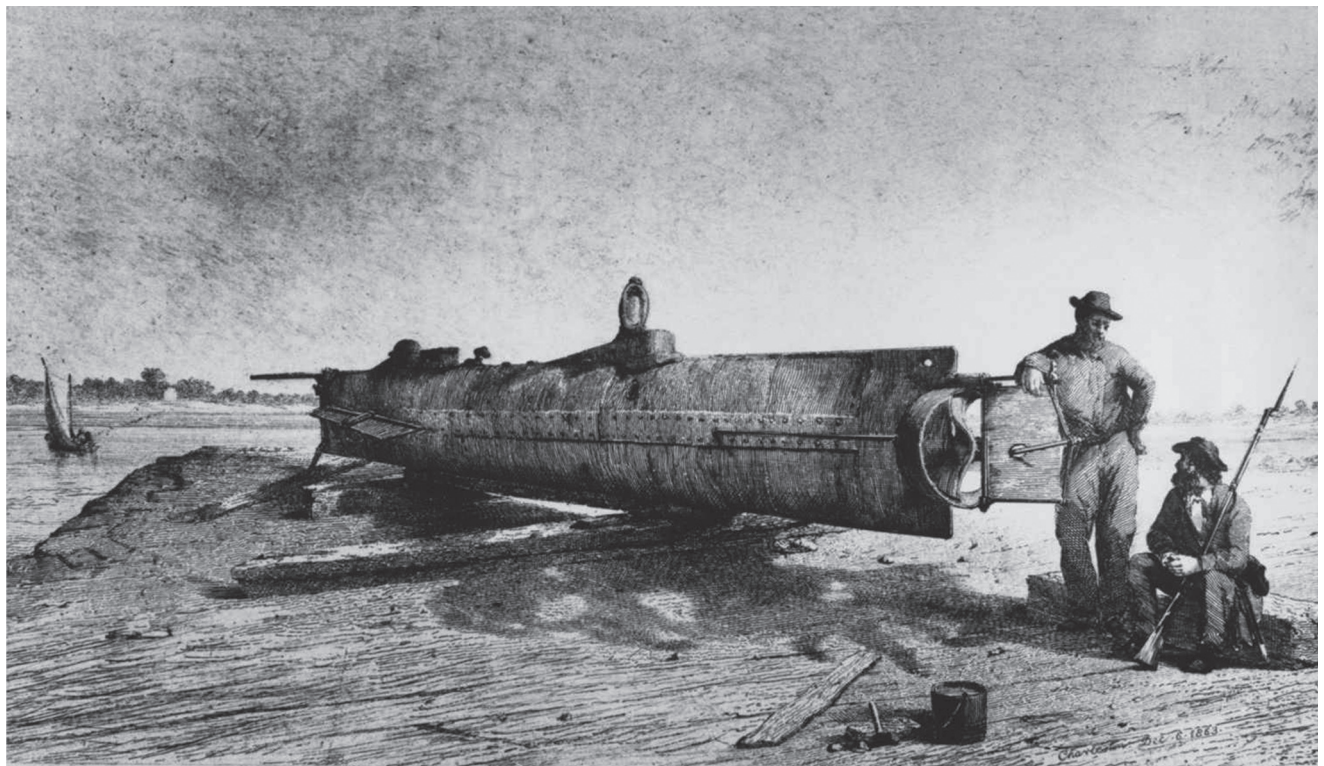
SUBMARINES

The idea of an underwater vessel capable of attacking an enemy ship has been around for some time, but it was only in modern times that it came to fruition as the submarine. Modern submarines can submerge and surface at will. It was only after World War II that modern submarines were built—nuclear vessels that never need to surface to operate over long periods of time under the seas. In today's maritime security environment, navies use both diesel-electric and nuclear submarines for all the missions traditionally performed by fleets throughout history—sea control, power projection, and sea denial—and also as nuclear deterrents for those nations equipped with nuclear weapons. Additionally, nonstate entities like narco-traffickers

and smugglers use them to move illicit cargo on an increasing basis every year.

History

The idea of an underwater boat had been around for centuries, if not millennia. From the realm of legend comes the story that Alexander the Great ventured under the water in a “glass case” in 332 BCE. The study of the history of the submarine is closely tied to another technology—the underwater explosive. Any history of the submarine must include a parallel history of its intended “punch.” Through the centuries, these ideas developed concurrently, and it was during the American Civil War that the first true submarine warship was deployed. The Confederate-sympathizing Horace L. Hunley decided to produce a vessel that could break the Union blockade of the South. The result was the CSS *Hunley*. On a fateful night in February 1864, the submarine sank the USS *Housatonic* in the vicinity of Charleston, South Carolina. It was the first such successful attack in history; however, the *Hunley* and its entire crew were subsequently lost.



The Confederate submarine *H. L. Hunley*.

Source: U.S. Navy.

It was only with the development of the compressed air-propelled torpedo that a weapon commensurate with the promise of a submerged warship was realized. The Irish inventor John P. Holland produced a submersible boat in June 1900, initially to use against the British. Holland took his ideas to America, where he eventually became a citizen. He decided to play on American fears and entered a competition for his design to become the standard design of the U.S. Navy. Holland won, and the Navy decided to buy his invention.

Holland's boat was truly revolutionary. It included all of the elements that were standard on submarines until the advent of nuclear power: torpedoes and tubes, a small deck gun, a periscope system, battery power for underwater propulsion, and an oil-fuel engine for surface use and for recharging the batteries. Holland's company, Electric Boat, was not restricted in its sale of the technology, and the weapon was so revolutionary that it was not long before all the major navies, including the British Royal Navy, were buying submarines. Their first use, though, was as a sort of underwater manned mine delivery vehicle meant to protect harbors and harbor approaches. Its initial low speed of 4–6 knots (especially underwater) prevented its practical use elsewhere. This first modern submarine's purpose was essentially defensive.

With the advent of the Great War in 1914, the submarine blossomed into something more. Its use in combat, as foreseen by naval visionaries like Admiral Jackie Fisher, was as a submersible torpedo boat whose principal job was to serve as a manned, stealthy vessel that would force a hostile opponent to navigate very carefully around the coastal waters of an adversary. Soon the British submarine force was ranging far and wide, to the very gates of the German High Seas Fleet near the Jade River. The Germans put the new weapon to its most effective use during the war as a stealthy commerce raider (U-boat) that stalked its prey at night in the approaches to the British Isles. The key German advance in submarine technology included the use of multiple diesel engines as both the primary propulsion system for the vessel and the recharger for the batteries, which were used only underwater. Recharging usually occurred under the protection of night. Use of the submarine in this role was allowed by international law as long as submarines followed the rules of cruiser warfare: a request to board, a proper search, and ensuring the safety of the crew. In

following these rules, however, the submarine gave up its biggest advantages, stealth and surprise. The German U-boat campaign started out conventionally, but before long mistakes by overeager captains and the fog of war led to accusations and incidents of violation of the laws of war. In 1917, the desperate Germans launched an all-out unrestricted U-boat campaign meant to win the war. Only the U.S. entry into the war kept the Allies on their feet long enough to recover and win.

Also serving as a U-boat commander in the Mediterranean was a young *Kapitan* named Karl Doenitz. After defeat and the elimination of the German U-boat fleet by the Treaty of Versailles, the peace treaty at the end of World War I between Germany and the Allied Powers, Doenitz was among the few officers retained by the tiny *Reichsmarine* of the Weimar Republic. Doenitz realized that the Allies had won against the U-boat by massing their merchant ships with destroyers in convoys. He decided that the best tactic to defeat them would be to mass his U-boats in "Wolfpacks," and he practiced his new tactics using torpedo boats since Germany was not allowed to have submarines under the terms of the Treaty of Versailles. When Adolf Hitler came to power, Doenitz was able to build U-boats, and in 1939, the U-boat war began again, leading to a 6-year battle between German submarines and British-American convoys. The tactics, techniques, and procedures developed during the Battle of the Atlantic became fundamental to how submarine warfare was practiced until the end of the Cold War, especially the use of sonar and radar-equipped patrol aircraft as well as Anti-Submarine Warfare task groups built around small aircraft carriers.

In the Pacific theater of World War II, the U.S. Navy's submarine force proved the concept that an unrestricted submarine campaign could be a component of a war-winning maritime strategy, in its war with the empire of Japan. *Gato*-class fleet submarines, meant for screening and picket duties for the battleships, were given new mission orders on December 7, 1941, to conduct unrestricted submarine warfare against the "dastardly" Japanese. The "silent service" managed to sink more than 6 million tons of Japanese shipping by the war's end.

The submarine came out of World War II as one of the most effective weapons a navy could build. During the later war years, the German use



U-boat stranded on the south coast of England after surrender. Crowds, some in rowboats, gather around the beached submarine while others congregate on the submarine's deck. Photograph taken sometime between 1914 and 1918.

Source: Courtesy of the Library of Congress.

of a snorkel system that allowed the submarine to recharge its batteries below the surface had partially solved the issue of submarines having to surface; however, submariners still wanted complete autonomy, and the Germans experimented with a hydrogen fuel cell submarine. Meanwhile, after the war, the Americans pressed ahead with nuclear propulsion, a true revolution in military affairs for submarine propulsion, under the leadership of visionaries such as Captain Hyman Rickover and Admiral Arleigh Burke. In 1954, the United States produced its first nuclear-propelled submarine, the USS *Nautilus*. During the Cold War, the primary role for submarines was changing from the hunted

to the hunter of submarines. From this point on, the United States led the world in nuclear submarine design and development. The naval revolution continued with the addition of nuclear-tipped ballistic missiles (Polaris) aboard the USS *George Washington* in June 1959. The transformation of the partial submarine into the self-contained nuclear strategic weapon it is today was complete. The submarine could not only blockade, it could now destroy cities. The history of much of the Cold War involved the United States, its allies, and the Soviet Union in a nuclear submarine arms race that came to a head during the Reagan administration in the 1980s with the immense *Ohio* class (United



Divers and crewmen of the U.S. Navy's seagoing tug *Ortolan* fasten a midget Japanese submarine to the side of their ship, July 1943.

Source: U.S. Navy.

States) and *Typhoon* class (USSR) of ballistic missile submarines. These classes of submarine are still in the active inventories of U.S. and Russian navies today.

Submarines Today

Since the end of the Cold War, the submarine remains a primary tool in the arsenals of all modern fleets. In the U.S. Navy, the end of the war resulted in greater integration of the entire submarine force into operations with the surface forces. Russia still maintains a formidable, but aging, nuclear submarine force, as does the People's Republic of China. Russia's arsenal includes ballistic missile submarines of the *Typhoon* class, as well as a wide variety of diesel and nuclear attack and cruise missile submarines. Most infamous among these was the nuclear cruise missile submarine *Kursk*, which exploded in 2000, destroying the submarine and killing the entire crew. China's People's Liberation Army Navy now has the

largest number of submarines in the world, although most of them are of the diesel variety, of the *Song* and *Ming* type classes. The *Songs* are not much different from the 1980s-level technology and are classified as a diesel attack submarine (SS), while the *Ming* are armed with antiship cruise missiles similar to the French *Exocet* designs. This large diesel force composes the bulk of the Chinese navy and is designed to do what the original submarines of Holland were intended to do—defend harbors and coastal waters.

However, the undersea world is developing new technologies such as air-independent propulsion, especially in Sweden, which lent one of these types to the U.S. Navy to work with in the first decade of the 21st century. This technology makes for a quieter submarine than even the quietest of diesels. Among the newest of these quiet submarines is U-31 of the German *Bundesmarine* (Federal Navy). It is a double-hulled vessel and also uses air-independent propulsion like the Swedish submarine mentioned earlier. The double hull makes it both quieter and more survivable.

These quieter, nonnuclear propulsion technologies pose real challenges to the nuclear behemoths that are still the backbone of the world's most modern submarine force—that of the U.S. Navy. The U.S. Navy employs three types of nuclear submarines: (1) the fast-attack boat, (2) the ballistic missile submarine, and a new type known as the nuclear-powered cruise missile submarine, or SSGN—denoting submarine, guided missile and nuclear powered. The fast-attack types (SSN), the older *Los Angeles* and newer *Virginia* classes, perform the types of mission most people associate with submarines, attacking surface ship targets, launching Tomahawk land attack cruise missiles, or hunting other submarines. The nuclear ballistic missile submarines (SSBN) are the capital ships of any major navy when it comes to nuclear deterrence, and once one of the *Ohio* class puts to sea, it has as much nuclear “throw weight” as any nation besides the United States, Russia, or China. Finally, the SSGN class is a true undersea “arsenal ship” that can carry miniature submarines for naval special warfare insertion (involving members of the Sea, Air, and Land teams, or SEALs) as well as more than 100 Tomahawk land attack cruise missiles. These missiles can attack targets hundreds of miles inland by using satellite guidance. Additionally, SSGNs can perform all of the missions a fast-attack



The USS *Nautilus* was the world's first nuclear-powered submarine.

Source: U.S. Navy.

submarine can by using the latest in smart torpedo technology.

Other nations, too, continue to build nuclear submarines. Great Britain recently completed the first in a new class of nuclear attack submarine—the HMS *Astute*—in 2010. China, too, is building newer nuclear missile and attack submarines to replace her aging *Han* (SSN) and *Xia* (SSBN) submarines.

Submarine warfare recently flared up when a probably North Korean *Yeono*-class miniature submarine, not much different from the Japanese miniature subs that attacked Pearl Harbor, sank the South Korean naval vessel *Cheonan* (PCC-772) in the Yellow Sea in 2010. Most recently, in Libya (2011), North Atlantic Treaty Organization submarines launched Tomahawk land attack cruise missiles, a mission called strike warfare in joint U.S. military doctrine, attacking Muammar Qaddafi's

air defense systems. Because of their stealth, submarines remain one of the most effective warships a modern navy can acquire, although training and keeping the readiness of submarines high is an expensive and time-consuming process. Captain Henry Hendrix of the U.S. Navy recently wrote that “submarines have become the international flavor-of-the-month with regard to nation-state security.” Naval combat in the 21st century will likely include submarines, probably as the major component in most engagements. The submarine may have in fact become the “coin of the realm” for sea power in the 21st century, perhaps replacing aircraft carriers and surface ships.

John T. Kuehn

See also Antisubmarine Warfare; Missiles, Conventional; Missiles, Nuclear; Navy, U.S.; Warfare, Submarine; World War I; World War II



The Russian navy's nuclear-powered cruise missile submarine OMSK (K-186).

Source: U.S. Navy.

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SUICIDE

Suicide, the intentional taking of one's own life, has traditionally been condemned by Judaism, Christianity, and Islam. At the same time, in some circumstances societies embracing the traditions of the world's three major religions have sometimes encouraged suicide. In the 19th and early 20th centuries, German military officers facing disgrace and court-martial were often encouraged by senior leaders to commit suicide. Many Islamic extremist groups in the Occupied Territories of Palestine have recruited individuals to carry out suicide attacks against Israeli civilians and military targets.

In the Eastern tradition, there are instances in which suicide has been embraced. Until the practice was suppressed by British colonial officials, Indian widows traditionally immolated themselves in the funeral pyre of their husbands. The Japanese

military inculcated a warrior code, Bushido, that viewed surrender as dishonorable and last-ditch suicide attacks in the island campaigns of the Pacific in World War II as honorable. By 1944, when the Japanese strategic outlook worsened, the Japanese navy and airforce had created specialized suicide units, kamikazes, to attack American forces with human-guided torpedoes and airplanes.

The U.S. Military

Suicide has never been embraced by the American military, and norms in this regard reflect those of the wider American society. For instance, the United States never created suicide units, and military commanders have surrendered to enemy forces when the situation became hopeless. During the War in Afghanistan and the Iraq War, the increased rate of suicide among American military personnel, especially those serving with the army, has raised concerns among military leaders, the families of combatants, and the wider public. Between 2001 and the middle of 2012, more than 2,676 military personnel have died from suicide, compared with 1,950 combat deaths in Afghanistan and 4,486 in Iraq. According to preliminary estimates from the Pentagon, there were 349 military suicides in 2012, the highest number since the Pentagon began tracking suicides in 2001 and greater than the number of combat deaths in Afghanistan (see Figure). Although suicide rates among male military personnel have historically been lower than those for the general population, they increased during the wars in Iraq and Afghanistan and now surpass the rates for society at large (Ruiz, 2012).

While they make up 85% of the military, men constitute 95% of those who commit suicide. Those who take their own life are most likely to be enlisted personnel, White, and below the age of 25. Suicides caused by guns are the most common (true for the military and the civilian sector), with drug overdose coming second and the cutting of one's veins or arteries third. Suicide tends to be attempted in home environments.

The stress faced by a frontline soldier is certainly a frequent cause of suicide, but a substantial percentage of victims do not witness combat. Moreover, most suicides do not take place during actual deployments abroad, and experts posit that small-unit cohesion plays a role in this regard. Comradeship when deployed serves to limit alienation for those with a propensity for suicide and reinforces the feeling that they must not let their buddies down. Mental health issues are most prevalent among the members of the National Guard and Reservists, in part because they lack access to the mutual support that active-duty personnel have in a regular unit.

Posttraumatic stress disorder has been shown to play a role in a significant portion of suicides. Studies show that one out of five U.S. combat personnel who served in their nation's most recent wars in Iraq and Afghanistan reported signs that indicated the presence of posttraumatic stress disorder on their return home. Many returning soldiers engage in alcohol and drug use, often to self-medicate, rather than seeking professional assistance. Marital strain and difficulty reintegrating back into family life play a role in some instances, but many families of those committing suicide have complained that the military has not paid enough attention to larger,

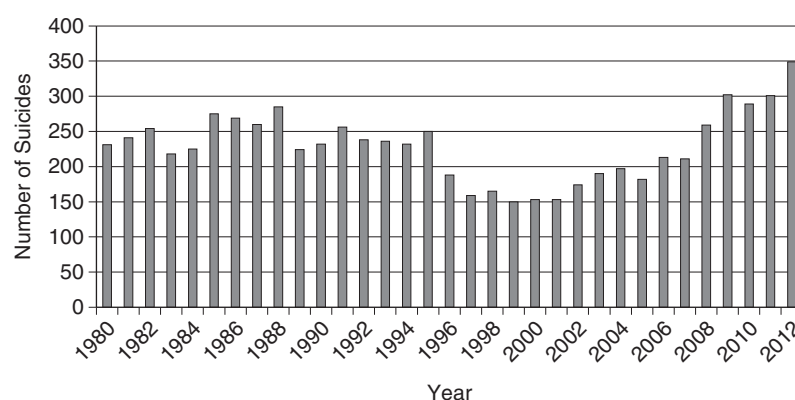


Figure 1 Number of Military Suicides per Year

systemic causes, such as posttraumatic stress disorder and the lack of adequate support systems.

Cultural norms and attitudes toward mental health care have traditionally discouraged servicemen and servicewomen from availing themselves of mental health care. With limited success, senior leaders have sought to discourage the stigma attached to psychological counseling. To prevent soldier suicides, the army started a program formerly called Battlemind, now called Resilience Training, to prepare soldiers for the mental pressures of serving on the front lines. In addition, family members are prepared for long separations; likewise, soldiers are taught how to reintegrate themselves back into society after serving in combat. The primary thrust for Battlemind was not to prevent suicide, and the army has not collected information regarding whether the program prevents soldiers from killing themselves. The army has recast this program as "Resilience Training," though the core concepts and goals remain largely the same.

Recently, the Pentagon has provided more funding for in-depth screening procedures; once a psychopathology has been detected, the individual can receive therapy. The Department of Defense utilizes a postdeployment health assessment as well as postdeployment health reassessment programs, both of which are designed to identify any physical and/or mental difficulties in soldiers returning home after serving in combat.

Warning signs for soldier suicide include reliving traumatic events through recurring bad dreams and/or disturbing memories, the complete evasion of anything affiliated with the experience, and a heightened state of awareness (e.g., inability to sleep, irritability). A strong social network can help alleviate some of the stress soldiers feel on returning home.

The contemporary high rates of suicide offer another reflection of the human toll of the wars in Afghanistan and Iraq. In contrast to the conscript wars of the 20th century—World War I, World War II, Korean War, and Vietnam War—only a small percentage of the American population has borne the burden of multiple deployments into combat zones in the most recent conflicts. In both World Wars, the American military faced staggering numbers of soldiers who experienced what has been termed battle fatigue and shell shock. The numbers plummeted dramatically when the military implemented rotation of service personnel out of combat and provided better health care. But the current high rates of

suicide suggest that the military needs to devote more resources and find new ways to assist servicemen and servicewomen to cope with the mental toll of war.

Cary Stacy Smith and Li-Ching Hung

See also Medicine, Military; Medicine, Veterans; Posttraumatic Stress Disorder; Psychiatry, Military; Small Unit Cohesion

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SUN TZU

Despite his fame as the reputed author of *The Art of War* and an extensive biography in China's first comprehensive history, Sun Tzu (the Shiji, Sunzi, or Master (zi) Sun of the late 2nd century BCE) remains an enigma. Moreover, the absence of his name in any of the records that chronicle the late Spring and Autumn Periods (722–481 BCE) has not only stimulated doubts about his activities and achievements but also prompted questions about his very existence.

A contemporary of Confucius, Sunzi apparently numbered among the early itinerant political advisors and military strategists who sought employment with the era's increasingly despotic monarchs. When he suddenly appeared in the troubled southeastern state of Wu about 512 BCE, Holu, the usurper, retained him as part of his efforts to revitalize the state and prevent its annihilation by its nemesis, the powerful state of Chu to the west. The key factor in his appointment was a highly melodramatic (and no doubt apocryphal) demonstration of improved

organizational methods that promised to magnify the army's power.

Pressed for proof, Sunzi arrayed the palace's female attendants into a drill formation before appointing the king's two favorite concubines as group captains. When, despite repeated instruction, the women continued to laugh rather than implement his orders, he had the captains executed, instilling the terror necessary to parade the other attendants about at will. Despite being enraged, the king perceived the potential of draconian military discipline and refrained from beheading him.

Judging from *The Art of War's* contents, Sunzi directed his efforts toward core concepts, organization, operational tactics, and fundamental strategic issues rather than the formulation of national strategy. Living at the end of a period of increasingly lethal internecine strife that saw dozens of proto-states extinguished and the gradual emergence of 12 strong entities that coexisted in an unremitting state of enmity, Sunzi was acutely aware of the need to consciously examine the patterns of warfare. Survival depended on insightful leadership, economic prosperity, increasing the populace, and sound military measures. Furthermore, because of the multiparty nature of the threat, any engagement, whether successful or not, might fatally weaken the state. Thus, *The Art of War* commences by proclaiming, "Warfare is the greatest affair of state, the basis of life and death, the Dao to survival or extinction."

Rather than being a discursive treatise, China's oldest surviving military writing was created by compiling hundreds of laconic pronouncements written on individual bamboo strips, the media of the era, into thematic chapters under general rubrics such as strategic power, maneuver, and configurations of terrain. It remains unknown whether it was largely composed by Sunzi, compiled by his disciples in the century after his death, written by Sun Pin, one of his distant descendants, or written by other unknown persons. Already noticeably influential late in the Warring States period (403–221 BCE), it soon acquired numerous commentaries, including the earliest known by the obstreperous Cao Cao, and underwent centuries of editing.

The Art of War reflects evolving concerns inherent to increasingly lethal Spring and Autumn warfare: mobility resulting from chariot multiplication, segmentation and deployment, battlefield control, escalating infantry forces, martial professionalization, and extended campaigns resulting in clashes

between tens of thousands. Nevertheless, the concepts, principles, and tactics have generally transcended historical limitations.

Within China's lengthy tradition of military science, *The Art of War* initiated rational speculation on martial principles and concepts, transforming combat into an art or proto-science rather than a mere exercise in force and brutality. It not only became the progenitor for all subsequent Chinese military thought but also remains a key resource in the People's Republic of China's quest to develop military science with unique Chinese characteristics. The book's teachings continue to affect every realm of modern endeavor; its concepts and pronouncements, such as "Know the enemy and know yourself," pervade contemporary Chinese life and media.

Despite its pastiche nature, the book embodies a primary vision that might be summarized as the practice of efficient warfare. Thus, in accord with the behest that "subjugating the enemy's army without fighting is the pinnacle of excellence," Sunzi believed that "the highest realization of warfare is to attack the enemy's plans; next is to attack their alliances; next to attack their army; and the lowest to attack their fortified cities." However, whenever an enemy must be engaged in battle, every action should be devoted to achieving victory.

In accord with the fundamental tenet that victory must be achieved before initiating combat, extensive intelligence must be gathered to accurately assess the prospects for success. Opponents should then be manipulated through lures and enticements, and deceit and deception to weaken, dispirit, and enervate them. Their forces should be dispersed and the battlefield structured so as to produce the localized but significant tactical superiority that will ensure an "easy" victory.

Several significant concepts underlie *The Art of War*, including configurations of terrain, deception, strategic power, and the highly complex idea of the unorthodox. Commonly recurring physical features need to be recognized, their constraints observed, and their limitations exploited. Tactics need to be constantly varied, the army needs to be formless, and the general should be unfathomable to compel the enemy to plan for every contingency. But it is deception that is the very "Dao of warfare" as well as a crucial factor in implementing unorthodox (*qi*) measures that, in conjunction with wisdom and planning, provide the means to unexpectedly vanquish significantly stronger foes.

However, ultimately *shi*—the “strategic configuration of power”—must be employed to defeat the enemy. A concept that entails not just simple might but instead integrates positional advantage, weapons, leadership, training, and combat spirit (*qi*), it is imagined as a “millstone crushing an egg” or a roiling river carrying stones before it.

The Art of War also contains two focused chapters, the infamous “Employing Spies,” on the nascent practice of spycraft, and “Incendiary Attacks,” on the principles and tactics of incendiary warfare. The first theoretical manuals on these subjects, their inclusion clearly stemmed from the importance of spies in acquiring intelligence and spreading disinformation and from incendiaries being the only vehicle for inflicting extensive damage in an era of singular combat.

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See also China, People’s Republic of

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SUPPORT GROUPS FOR MILITARY SPOUSES

All members of the military branches of service—army, navy, marines, air force, and Coast Guard—need more than uniforms, meals, arms, and other military equipment. They also require psychological, familial, and social support and the knowledge that their families are being supported as well.

Origin of Support Groups

During wartime or peacetime, troop members carry with them family concerns, problems, issues, and commitments just as nonmilitary workers do. The national government, through the armed services, supplied equipment for keeping the troops at their tasks but did nothing for their nonmilitary needs until recently. Support for military families has been traditionally the task of the private sector. Families, private organizations, and individuals historically

have provided services, both material and psychological, to the fighting forces. In years past, single men were preferred as military recruits. Men who married while in the service were discouraged from reenlisting. Spouses and other family members who trailed after the army were called “camp followers.” It was they who provided services to the troops. Only in the mid-20th century did the national government recognize that military families outnumbered the members of the armed forces. The government finally acknowledged the vital role that military families filled in providing psychological well-being as well as physical comfort to members of the armed services. In addition, better communication technology provided access to link military families to one another.

Just prior to World War II, at the request of President Franklin D. Roosevelt, the United Service Organizations (USO) was founded to provide recreation and entertainment for the military. Roosevelt believed that the social needs of the armed services could be best provided by private organizations rather than by the federal government. Several organizations joined together to form the USO. The six civilian agencies were the Salvation Army, Young Men’s Christian Association, Young Women’s Christian Association, National Catholic Community Services, National Travelers Aid Association, and National Jewish Welfare Board. After 30 years, the USO expanded its services to include involvement with local community groups in order to offer assistance to soldiers returning to civilian life. A decade later, the USO was active in promoting civilian interest in the welfare of the military.

The Department of Veterans Affairs, earlier called the Veterans Administration, was established in 1930, but its primary mission was directed toward the veterans themselves. It is only recently that the families of veterans received services.

Internet Creates Change

During Operation Desert Storm, the USO established a “mobile canteen program” on four-wheel-drive vehicles carrying refreshments, books, magazines, video and compact disc players, and other resources for recreational pursuits. In addition, the USO established a Family Support Fund to support military families who suffered hardships from the deployment or death of a service member.

The National Military Family Association (NMFA) is among the more prominent of the organizations providing support services. NMFA was founded in 1969 during the Vietnam War as the Military Wives Association because a small number of military wives wanted to ensure that their widowed friends were properly cared for. On its website, the group proudly describes itself as military families supporting military families. It also speaks up on behalf of military families and empowers husbands, wives, and children to understand and access their benefits.

The webpage has many links offering assistance via information on benefits, mental health care, deployment, and spousal education, among other topics. While providing these programs and other facts, this organization offers a way in which families can get involved more actively by participating in policy issues. Interested individuals, as well as military families, may join the organization for a modest annual membership fee.

In addition to the NMFA, there are various membership-run groups, such as the Internet-based Military OneSource, which offers assistance tailored to active-duty personnel and families in each branch of the service, the army, navy, marines, air force, and Coast Guard, as well as the National Guard and reserve. In addition to the family and traditional social services assistance provided by Military OneSource, social networking is also included: There are links to Facebook, Twitter, Pinterest, Flickr, and YouTube on the NMFA website. Free online courses are available on topics such as Internet safety for kids, retirement planning, battle-mind training for spouses, money matters, and managing deployment.

Military.com began in 1999 and boasts an association of 10 million in its no-fee membership roster. The website includes links to the Armed Services Vocational Aptitude Battery preparation, benefits information, and military associations.

Since 1950, the Association of the United States Army, a private, nonprofit educational organization, has supported America's army comprising active-duty personnel, the National Guard, the reserve, civilians, retirees, government civilians, wounded warriors, veterans, and family members. The Association of the United States Army provides professional development opportunities at a variety of local and national events. There are similar organizations for other service branches: the Air

Force Association and the Association of the United States Navy.

Conclusion

The term *military* may conjure up rows of service people in identical uniforms, indistinguishable from one another. Often this sameness obscures the fact that each one is an individual with social, family, psychological, physical, and spiritual needs. There are several organizations that reach out to military families via the Internet. Now it is much easier for military families to find and communicate with each other. All the electronic means of communication have made it possible to do away with the isolation of military families.

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See also Association of the United States Army; Family Readiness; National Military Family Association; Recreation; Women

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SURGE, IRAQ WAR

In the 2006 U.S. midterm elections, the Republican Party lost control of both houses of Congress, largely because of voter dissatisfaction in the “swing” states with the conduct of the Iraq War up to that point. Soon after, President George W. Bush took the advice of a cohort of retired general officers and security intellectuals, several of whom were affiliated with the American Enterprise Institute, a conservative think tank, and initiated a “surge” of U.S. forces in

Iraq. These individuals had argued that to create the fundamental preconditions for an orderly U.S. liquidation of the Iraq War—"reconciliation" between Iraq's Shia and Sunni political leaders and demobilization of their associated militias—the president needed to *temporarily* increase the number of combat brigades in Iraq from 15 to 20 and task them with suppressing the militia-driven intercommunal violence in Greater Baghdad. The five additional brigades increased American troop levels from 137,000 to 168,000 between December 2006 and November 2007.

The surge depended, for whatever success it may have achieved, on five mutually supporting factors, in addition to the Bush administration's decision to temporarily increase troop levels. These were the reorientation of U.S. Army and Marine Corps commanders within Iraq toward a counterinsurgency posture; the Shia cleric Moktada al-Sadr's decision to cease armed resistance to the occupation; the Sunni Arab "Anbar Awakening," which neutralized al-Qaeda in Iraq; Syrian, Saudi, and Iranian reduction of the flow of "foreign fighters" into Iraq and, in the case of Iran, reduction of its material support to Shia militias within Iraq; and, finally, the cumulative decision of thousands of Iraqi security force members to cooperate with the coalition forces despite the appalling risks and to operate as national, not sectarian, servants. After 2006, virtually all actors throughout the region decided that the surge's objective would serve their various interests better than an indefinite U.S. occupation, with the near-term possibility of an irreversible fragmentation of the Republic of Iraq. Indeed, the increase in the troops deployed to Iraq may have been the *least* important factor in the reduction of intercommunal violence. Less easily quantifiable factors such as the Anbar Awakening or the decisions reached in Damascus and Tehran may have been of equal or greater importance. Furthermore, those factors probably began to operate well before President Bush announced the surge on January 10, 2007.

During 2006, a team of soldier-scholars met at the behest of Lieutenant General David Petraeus in Fort Leavenworth, Kansas, to review the foundational studies of David Galula, Roger Trinquier, and Sir Robert Thompson and distill the fundamental principles of a successful counterinsurgency (COIN) campaign. These are as follows:

- The counterinsurgent government's goal must be a politically and economically viable nation-state with a reasonably effective and honest central administration.
- The government's security forces, both military and police, must operate within whatever legal structures preexisted the outbreak of the insurgency: Justice must apply equally to both detained insurgents and security personnel suspected of illegal violence.
- The government must integrate all civil and military functions that address the causes of the insurgency into a single, unified national effort.
- Security operations must center on dismantling insurgent networks; killing individual insurgents is secondary.
- Finally, the government must secure the districts in which its authority is strongest, its "base areas," before transitioning to clear and hold operations to pacify insurgent strongholds; military units must never leave a "cleared" area without transitioning the "hold" mission to loyal police forces.

These five principles synergistically support the single, overarching objective in COIN: the separation of the insurgency from the population and the protection of the population against insurgent remobilization. Fortuitously, Petraeus, after overseeing the process that resulted in Field Manual 3-24, *Counterinsurgency*, December 2006, was selected by Bush to put that revised doctrine into effect as commander, Multi-National Force-Iraq, during the surge, supported by Lieutenant General Raymond Odierno as commander, Multi-National Corps-Iraq, who supervised daily security operations.

In terms of specific techniques, the surge witnessed a dispersion of combat battalions away from large, forward-operating bases, or "FOBs," to a larger number of smaller, company- and platoon-sized combat outposts, or "COPs," typically located in abandoned commercial buildings and police stations within Baghdad's most violent neighborhoods. Combat outpost units foreswore the vehicle-borne operations that had suffered so many casualties from improvised explosive devices (IEDs), turning instead to dismounted "cop-on-the-beat" patrols, which were better able to gather actionable, real-time intelligence. Infantrymen and U.S. special operations

teams continued to conduct cordon operations and raids on specific locations, but these were increasingly based on raw intelligence processed through new “pattern analysis tools,” such as “social network analysis,” which gave commanders greater confidence that the individual being sought for detention was actually a “bad guy” and in the house being targeted.

Meanwhile, Petraeus had authorized the formation of lightly armed self-defense militias in Shia and Sunni neighborhoods, which were generally referred to as “concerned local citizens,” or “Sons of Iraq.” Predominately one-sect neighborhoods were walled off for their protection where necessary by modular, 20-foot-high concrete blast or “T” walls. These, combined with basic entry controls, enabled local men to defend their own homes against nocturnal death squads and vehicle-born IEDs. By the late spring of 2008, a drop in violence reversed the pre-2007 slide toward generalized sectarian warfare. As each successive month witnessed fewer civilian deaths, and as the Iraqi army increased its ability to supplement (and, by implication, eventually replace) U.S. troops in security tasks, Iraqis of all identities pressed their leaders to make the immediate political compromises necessary to maintain each successive improved state of civil order.

The surge can best be understood as a simultaneous *increase in* U.S. forces in Iraq and a *reposting* of those forces, in a campaign that foregrounded the five principles of counterinsurgency. It was effective enough, as evidenced by the reduced sectarian killings and attacks on U.S. forces, to induce other regional powers to abjure from actions that would have further destabilized the U.S. occupation, while also convincing Iraqi officers in the army and National Police of the necessity to purge their ranks of sectarian actors and function more as a *national* security establishment. This gave Prime Minister Nuri al-Malaki the opportunity to launch an unexpectedly successful effort to clear the southern city of Basra of rogue Sadrist forces between March and April 2008, just as a new equilibrium had emerged in Baghdad.

In July 2008, intercommunal violence and IED attacks on coalition forces dropped to their lowest levels in more than 2 years, justifying a reduction to 14 combat brigades by December 2008. U.S. troop levels continued to fall throughout 2009, as did the violence, and the remaining U.S. brigades assumed an “advise and assist” role, in which they

retained their tactical organization but increased their efforts to mentor Iraqi security forces. The army designated the surge as the fifth phase of the Iraq campaign, lasting from January 10, 2007, to December 31, 2008, followed by an “Iraqi Sovereignty” phase, between January 1, 2009, and August 31, 2010, and “Operation New Dawn,” after September 1 of that year.

The question of the success or failure of the surge must be distinguished from the more important questions of the wisdom, legality, and success or failure of the larger war in which it occurred. It is best understood *not* solely as an increase of troops but as a package of new initiatives within a revised COIN doctrine *supported by* an increase in troops. It significantly reduced violence, which permitted the 2009–2011 drawdown and the eventual exit of all remaining U.S. troops from Iraq on December 18, 2011. However, as of that point in time, the government of Iraq had failed to assume the honest-broker role envisioned in COIN theory, being effectively a Shia regime governing for the benefit of the Shia majority. Nor had it effectively established a national rule of law or struck the petroleum resource bargains necessary to eliminate the possibility of an eventual Kurdish secession from the Republic of Iraq. The possibility thus exists of a return in the near or medium term to sectarian violence and national disintegration or, conversely, the subordination of Iraqi sovereignty to an emergent regional hegemon. Should either of those outcomes occur, the surge would have simply delayed the failure of the U.S. effort in Iraq.

John S. Reed

See also Counterinsurgency; Iraq Insurgency (2003–2011); Iraq War (2003); Petraeus, David

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SURGEON GENERAL, AIR FORCE

The U.S. Air Force surgeon general is the senior-most physician officer in the air force. In most cases, the rank afforded to the surgeon general is lieutenant general. The surgeon general's primary responsibility is to command the Air Force Medical Service (AFMS). With main offices located in the Pentagon, the air force surgeon general can be seen in all parts of air force military operations and commands.

History

In 1947, the U.S. Air Force separated from the army. Several primary functions continued to fall under the purview of the army, including medical services. In 1948, the newly formed air force, along with the air surgeon (Major General Malcolm C. Grow), convinced the U.S. Army and the Truman administration that the air force needed its own medical services. In 1949, Air Force General Order 35 established medical services in the following areas: Medical Corps, Dental Corps, Veterinary Corps, and Nursing Corps, among others.

In 1949, Secretary of Defense Louis Johnson directed that "aeromedical evacuation" become the preferred method across the armed services for carrying casualties long distances for evacuation. This directive not only solidified the place of the AFMS but also changed medical history for the armed services.

The Korean conflict (1950–1953) witnessed yet another change in medical services. The army assumed responsibility for frontline medical helicopter evacuations, while the AFMS used a variety of fixed-wing transport aircraft for aeromedical evacuation.

As early as the 1950s, medical service members at Holloman Air Force Base conducted tests to determine human responses to high G-force, using both rockets and high-energy aeronautical vehicles.

Largely based on methods perfected during the Korean War, the AFMS was instrumental in publicizing the possibilities aviation medicine offered to the American Medical Association. By the middle of the 1950s, the AFMS had created the first iterations of air-transportable hospitals. Subsequently, in the latter portion of the 1950s, the AFMS continued to conduct high-altitude studies at Holloman Air Force Base. In 1959, the U.S. Air Force changed the name from "aviation medicine" to "aerospace medicine," to

reflect the changing nature of air-medical strategy and technology. In 1964, this new designation would be acknowledged by the American Medical Association.

From 1965 to approximately 1970, many AFMS hospitals, schools, and laboratories supported NASA's space programs through the ongoing research conducted at Holloman Air Force Base. For example, the aviation physiology program supported the first U.S. high-altitude reconnaissance flights in the late 1950s—these missions greatly enhanced the knowledge of physiology and the high-altitude impacts on humans.

In many ways, the AFMS reached maturity with the invention of modular hospitals for the purpose of expeditionary uses, a concept perfected between 1965 and 1973. During this period, the air force used cargo planes, such as C-130s and C-141s, to reduce evacuation times to the continental United States, in order to expedite medical services to soldiers in need. In 1975, President Gerald R. Ford directed the U.S. Air Force to begin evacuation of orphans from Saigon and other areas of Vietnam. In a series of approximately 30 flights, nurses and other medical personnel cared for about 3,300 infants and children. Following the Cold War, however, contingency hospitals were for the most part removed from the AFMS.

The AFMS continued to expand operations, including the deployment of medics and expanded transportation, during the Persian Gulf War (1990–1991). During this period, research and development focused on transportable hospitals and the fatigue experienced by medical crews and medical flight crews in combat zones.

The Contemporary Period

During the period from 2005 to 2009, air force active-duty and guard teams took a leading role in disaster relief, ensuring the evacuation of approximately 2,600 patients during natural catastrophes. During Hurricane Gustav, the Air Mobility Command was responsible for evacuating more than 8,000 evacuees and more than 600 medical patients. The U.S. Air Force—active duty, guard, and reserves—continue to assist in rapid response and immediate health care.

In 2010, the U.S. Air Force surgeon general oversaw 60,000 total force medics. With the appointment of Lieutenant General (Dr.) Charles B. Green as surgeon general, the motto of the AFMS changed to "Trusted Care Anywhere." The AFMS focuses

on excellent health care delivery wherever it is needed. The AFMS also takes part in collaborative efforts to deploy health care services to multiple support teams assisting in humanitarian efforts where patients are the first and most immediate priority. In 2012, Lieutenant General (Dr.) Thomas W. Travis was appointed U.S. Air Force Surgeon General on the retirement of General Green.

The AFMS team works around the world to expedite medical care and to balance the demands on multiple missions in ever-expanding operation fields, as well as to decrease the response time to care for those in need. Coalition teams demonstrate response times of less than 40 minutes for transporting injured soldiers from the front lines to operating rooms.

Christopher R. Bloss

See also Air Force, U.S.; Medicine, Military; TRICARE (Military Health Plan)

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Website

Air Force Medical Service: <http://www.afms.af.mil/index.asp>

SURGEON GENERAL, ARMY

The U.S. Army surgeon general is the senior officer in the U.S. Army Medical Department. As a staff officer to the army chief of staff and army secretary, the surgeon general is responsible for setting medical (including dental and veterinary) policies; as commander of the Army Medical Command (MEDCOM), he or she is responsible for delivering care at fixed-facility hospitals and clinics in the United States and overseas, for medical research, and for training of medical personnel. The surgeon general is also the executive agent for various Department of Defense-wide medical functions, such as the military vaccine program and the Armed Services Blood Program.

MEDCOM has a mix of regional medical commands (e.g., European or Pacific) that oversee the delivery of care and functional commands (e.g., Dental Command or Medical Research and Material Command). The personnel of the Army Medical Department are organized into eight corps: Medical, Army Nurse, Dental, Veterinary, Medical Service,

Medical Specialist, Enlisted, and Civilian. At senior levels, officers are often in “branch-immaterial” positions, so that a qualified dentist or physical therapist will command a hospital. The various medical corps had much the same recruiting experience as the rest of the army; when the war in Iraq lasted longer than expected and grew costly and controversial, recruiting dipped. The reserves were a particular problem, as many reservists had not expected repeated deployments, which put extreme pressure on their finances, especially for physicians. Policies later reduced the number of deployments (for all reservists) and especially the length of deployments for specific categories of medical personnel.

MEDCOM is responsible for the medical care of soldiers, family members, and retirees. Because demand exceeds the care that army treatment facilities can supply, MEDCOM is also involved with the TRICARE program. For instance, when a unit is readying for deployment and takes priority for medical care, other beneficiaries can be referred to civilian medical practitioners through the TRICARE network.

Operations after the terrorist attacks of September 11, 2001, have caused a number of changes. A lesson from Operation Desert Shield in Iraq was the need for pre- and postdeployment health assessments to catch problems before and after deployment. Because of the repeated deployments and the realization that the conflicts would involve more than a single mobilization and demobilization, postdeployment health reassessments were added to catch problems that had not yet manifested immediately on return from deployment. (Some Army Reserve medical units were also restructured to perform these duties.) Due to the increasing mobilization of reservists, who are often geographically remote from military bases, reservists were granted TRICARE access for a period of time before and after mobilization. Many improvised explosive devices have led to blast injuries; when those have involved the head, they have often resulted in traumatic brain injury (TBI). The wars in Afghanistan and Iraq that followed the 9/11 terrorist attacks resulted in a higher percentage of brain injuries among wounded soldiers than had been seen in previous conflicts and triggered debates over the proper diagnosis and treatment of TBI. This has led to new organizations (e.g., the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury) and substantial research funding. Blast injuries also have led to traumatic amputations and a reevaluation of the risks of giving

all combat medics a tourniquet. To speed properly trained first aid response, basic training was revised to upgrade the medical training of all soldiers to Combat Lifesaver levels. Extensive experience with trauma patients (including a registry, started in July 2003, of all traumatic injuries in combat theaters) has also led to changes in established practice for handling blood and other resuscitative fluids that will influence future care. Such developments in medical practice infused changes in policy, reflecting why the surgeon general is in charge of policy and also heads MEDCOM.

Other changes stemmed from another post-Desert Shield change to the medical system. Focused research and development, plus joint-level changes in intertheater aeromedical evacuation, now make it possible to safely fly patients from the theater to a major hospital in the United States in less than 3 days. That reduced the number of hospitals needed in theater and meant that military hospitals in the United States would be receiving gravely wounded patients. Due to improvements in battlefield medicine, patients who previously had little chance of surviving were now in hospitals in the United States. Advances in rehabilitation medicine, primarily from the civilian sector, made it possible for patients to recover from ever more devastating injuries and, in some cases, allowed amputees to return not only to duty but also to combat. Yet that type of rehabilitation takes longer periods of time. Because determining that someone has fully recovered can take years and the administrative process for medical discharges had not been addressed since the Vietnam War, the Medical Evaluation Board/Physical Evaluation Board process backed up. Also, unlike previous wars, many of the severely wounded wanted to remain in the army; they had volunteered and sought a career. Also, the Army Medical Department sought to take care of its own rather than transfer patients to other military or Veterans Administration hospitals. As early as October 2003, the combination of some of these factors had led to problems in demobilizing ill or injured reservists at Fort Stewart, Georgia.

When the Base Realignment and Closure Commission (BRAC) recommended closure of Walter Reed Army Medical Center, funding for maintenance was cut and personnel were not hired as a result of the pending closure. In February 2007, at a low ebb of public support for the war in Iraq,

the *Washington Post* published a Pulitzer Prize-winning series describing cases of patient neglect and unacceptable conditions at the Walter Reed Medical Center. Other media castigated the army for poor quarters, overstretched outpatient administration, and poor care of the wounded. The commander was relieved, as was the army surgeon general (who had commanded Walter Reed during 2 of the years during the period in question), and the secretary of the army resigned under pressure. In-patient care was never questioned. The Warrior Transition Command was established for better administration of outpatients around the army; money was made available for maintenance and additional staff; the Walter Reed civilian personnel office finished planning the downsizing and closure and could resume hiring staff; and substantial efforts with the adjutant general staff went into revising the Medical Evaluation Board/Physical Evaluation Board process and integrating the Veterans Administration physical examination and benefits process.

Sanders Marble

See also Army, U.S.; Base Realignment and Closure; Disability; Medicine, Military; Medicine, Veterans; Traumatic Brain Injury; TRICARE (Military Health Plan); Wounds and Injuries

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SURGEON GENERAL, NAVY

The surgeon general is the highest-ranking officer in the U.S. Navy Medical Corps, which serves the medical needs of the servicemen and servicewomen in

the Navy and Marine Corps and their families. Vice Admiral Matthew L. Nathan has held the position of Navy surgeon general since 2011 and is the 37th officer to hold that position. He also holds the title of 41st chief of the Bureau of Medicine and Surgery (BUMED), which was established by Congress on August 31, 1842, as a part of the Department of the Navy. Its first chief was the naval surgeon William P. C. Barton.

History

BUMED, the agency that oversees health care for Navy and Marine Corps personnel both on land and at sea, was initially housed at the Naval Observatory and moved to Bethesda, Maryland, in 1942. During World War II, the Navy Medical Department witnessed an enormous expansion in operations and personnel thanks to President Franklin Roosevelt's interest in expanding the navy. Under the direction of Roosevelt's personal physician, Surgeon General Vice Admiral Ross McIntire, BUMED grew from around 6,000 personnel in 1941 to almost 170,000 by 1945. McIntire was also responsible for the decision to compile the daily proceedings of the medical department and generate a never published history of the office. Since June 2012, BUMED has been located at Defense Health Headquarters in Falls Church, Virginia, as part of the Base Realignment and Closure mission.

Operations

BUMED controls naval hospitals, dental clinics, preventative medicine units, and technical schools for service members and personnel. Due to the wars in Iraq and Afghanistan, the demand for care has increased, both for combat injury and, increasingly, for behavioral care. The Continuous Process Improvement plan has been established to oversee the quality of health care and its business and financial outcomes and to transform health care services through professional education. BUMED also encompasses an Office of Women's Health to specifically support medical readiness for female sailors and marines.

The Office of the Medical Inspector General, BUMED's oversight branch, acts as the "eyes, ears, and conscience" of the Navy surgeon general. Its major programs, as part of the nonprofit Joint Commission on Health Care, are currently ambulatory health care, behavioral health care,

critical-access hospitals, home care, hospitals, laboratory services, long-term care, and office-based surgery. The Office of the Medical Inspector General's operating principles are integrity, responsibility, accountability, and transparency.

BUMED also works jointly in a resource-sharing program with the Department of Defense and the Veterans Administration on policy initiatives, which in recent years have included the expansion of Veterans Administration medical facilities. The Navy's Warrior Care Resources program expanded MEDEVAC services to wounded service members in 2010 and also provides stress control, suicide prevention, and management resources for personnel in distress. Other programs at BUMED include the Sexual Assault Prevention and Response Program, which provides a number of services to victims, including restricted and unrestricted reporting services.

The current strategic goals for BUMED (effective from 2011 through fiscal year 2015) address research and development, quality of care, patient- and family-centered care, agile capabilities, total force (maintaining medical capabilities through the full range of military operations), deployment readiness, and a performance-based budget. Within these categories, BUMED has outlined various strategic objectives focused on issues such as efficient management of resources, improving access to caregivers, prevention and management strategies for musculoskeletal disorders, improving performance within the Integrated Disability Evaluation System, and alignment of manpower and personnel.

Hillary Jean Sebeny

See also Disability; Medicine, Military; Navy, U.S.; TRICARE (Military Health Plan)

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Office of the Medical Historian, BUMED Headquarters:
<http://www.med.navy.mil/bumed/nmhistory/Pages/default.aspx>

SURRENDER

The American military tradition often equates the act of surrender with failure—a failure of command, perseverance, or courage. Indeed, the Uniform Code of Military Justice (Article 99 (2)) describes unnecessary surrender as military misconduct, but occasionally, U.S. commanders have faced circumstances where the welfare of their soldiers outweighed mission objectives and the possibility of facing court-martial. From the opposite perspective, however, U.S. forces have also experienced surrender as the victor. In those circumstances, U.S. commanders accept responsibility for the humane treatment of, and potential reconciliation with, defeated enemies.

Surrender of U.S. Arms

Along with many celebrated victories, the U.S. armed forces have a long history with surrender. During the American Revolution (1775–1783), the American general Benjamin Lincoln chose to defend Charleston, South Carolina, with 2,500 troops, many in ill health, against the British general Henry Clinton's force of 13,000 troops. He was concerned that if he abandoned the region, loyalists might lead South Carolina to strike a separate peace with the British. The Siege of Charleston began on April 1, 1780, and Lincoln could only hold out for a few weeks, capitulating on May 12. Although Clinton paroled Lincoln and several of his officers, most of the American troops remained prisoners of war (POWs) for some weeks.

Several highly criticized surrenders by U.S. forces took place during the War of 1812 (1812–1815), none more controversial than General William Hull's capitulation at Detroit. Charged with establishing a base for an offensive into Canada, his troops were nonetheless ill supplied and ill armed. The British general Isaac Brock, with effective artillery and two warships, sent a surrender demand on August 15, 1812, but Hull initially refused. On the 16th, after a day's bombardment, Brock launched an assault, but as his troops neared the entrenchments, Hull

displayed the white flag. He surrendered about 800 men, opened the northwestern frontier to British and Indian attacks, and quashed the U.S. dream of conquering Canada.

A worse surrender of U.S. arms during the Civil War occurred at Harper's Ferry, Virginia. As part of the 1862 Confederate offensive into Maryland, General Thomas "Stonewall" Jackson attacked that town to secure its arsenal. Colonel Dixon S. Miles of the Union, however, failed to defend the surrounding heights, so on September 15, after Jackson arrayed some 90 cannon and bombarded the city, Miles decided to surrender. He was killed by artillery shot just after he informed his officers. All told, the Union surrendered 12,400 soldiers.

The surrender at Harper's Ferry would remain the worst for U.S. arms until the Japanese invaded the Philippines in December 1941. Facing the Japanese force under General Masaharu Homma, General Douglas MacArthur ordered the withdrawal of U.S. forces from Manila to the Bataan Peninsula and established a new headquarters on Corregidor Island just off the coast to the south. Under orders, he left for Australia on March 11, 1942, and commanded his successor General Jonathan Wainwright not to surrender. But as Homma pushed south, and with only 25% of the force available to fight, ground commander General Edward King found his position untenable. On April 9, he surrendered 78,000 troops, both Filipino and American. It remains the largest surrender of U.S. forces. Homma continued to Corregidor and on May 6, compelled Wainwright to surrender another 11,000 soldiers.

Although these surrenders span two centuries, some commonalities emerge. In every case, the chief consideration of the commander was the welfare of his soldiers—weighing continued defiance and bloodshed against mission objectives and the expectation of reasonable treatment as POWs. Those who surrendered at Charleston, Detroit, and Harper's Ferry eventually received their paroles, or they were exchanged. The Filipino and American soldiers at Bataan, however, endured brutal conditions during the 60-mile march to a POW camp, which resulted in the deaths of anywhere between 5,000 and 11,000 soldiers. Although King and Wainwright might have reconsidered their choices if they had known the trials ahead, their decisions nevertheless spared the lives of many thousands.

Choosing surrender over continued defiance also meant facing possible reprimand and charges.

At Bataan, when King made his decision, he reportedly remarked that his career was over. Perhaps he recalled the court-martial that in 1814 found Hull guilty of cowardice and neglect of duty for his surrender of Detroit and that sentenced the general to death. Although spared his sentence, the veteran Hull was forced out of the army. After his surrender at Charleston, Lincoln insisted on an inquiry, confident that it would exonerate him, and he eventually returned to duty and served at the siege of Yorktown (1781). Generals King and Wainwright expected court-martials after the Japanese released them, but they returned home as heroes. Both received the Army Distinguished Service Medal, and Wainwright received the Medal of Honor, for their service in the Philippines.

Surrender to U.S. Arms

The U.S. armed forces also experienced surrender as the victor. War-ending surrenders that concluded the American Revolution, the Civil War, and World War II not only provided a symbolically decisive closure but also served as defining moments for the nation. The capitulation of Lord Cornwallis at Yorktown, Virginia, and General Robert E. Lee's 1865 surrender at Appomattox, Virginia, represented crucial moments that secured and preserved the existence of the United States. As a turning point in the Revolution, the surrender of the British general John Burgoyne at Saratoga (1777) was less important for its tactical victory than as a symbolic victory that contributed to the crucial French decision to join the American cause. During World War II (1941–1945), after his meeting with the British prime minister Winston Churchill at Casablanca (1943), the U.S. president Franklin D. Roosevelt declared a policy of only accepting the unconditional surrender of the Axis and rejecting any negotiated end to the war. Roosevelt's announcement was informed by the ambiguous victory after World War I (1917–1918) and his desire to rally public opinion. Although the Allies considered negotiated peace at several points, and some historians criticize the stance as contributing to the decision to use the atomic bomb, Allied forces nevertheless succeeded in obtaining the decisive capitulation of both Germany (May 8, 1945) and Japan (August 14, 1945).

In accepting surrender, U.S. commanders assume the responsibility for the humane treatment of a defeated enemy. In large-scale surrenders, they must

consider the immediate contingency of providing appropriate facilities for the care of POWs against the paroling of troops that could return to the fight, and when entire nations capitulate, the conduct of U.S. commanders has often established the groundwork for reconciliation. At the end of the Civil War, when General Ulysses S. Grant accepted the surrender of Lee, he permitted soldiers from the South to return to their homes. After World War II, both Japan and West Germany received millions of dollars in rebuilding aid through the Marshall Plan and would become staunch allies of the United States during the Cold War.

Jimmy L. Bryan Jr.

See also Code of Conduct; Occupations; Prisoners of War; Reconstruction; Uniform Code of Military Justice

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SYRIA

Syria is located on the coast of the eastern Mediterranean, bordering Iraq, Turkey, Lebanon, Jordan, and Israel. Syria became an independent country in 1946, after a period of French occupation, and proceeded through periods of political instability marked by numerous military coups, until Hafez al-Assad took the presidency in 1969. This entry examines modern Syria, including the Syrian political and economic systems, the antiregime uprisings starting in 2011, and Syrian regional and national security issues.

The Syrian Political System

Freedom House, a U.S.-based organization that researches political freedom and human rights around the world, ranks Syria as “not free,” because

of Baath party domination of the political system, which controls the nomination and selection of the president. The Syrian national assembly has no real power, nor does the judicial system, which the president heads. In the early 2000s, President Bashar al-Assad briefly tried to open Syria's closed political system and its state-run economy; however, senior Baath party members opposed these reform efforts, and they quickly ended. The resulting political and economic stagnation helped fuel anti-Assad movements, which began in south Syria and quickly spread to its major cities after similar demonstrations terminated the reign of long-standing autocratic leaders in Egypt and Tunisia. As of mid-2013, the revolution has left tens of thousands dead, thousands more injured, and widespread devastation. Yet the regime, dominated by the Assad family and led primarily by members of the minority Alawite regime (breakaway Shia sect that has links to Shia Islam), continued to fight on, and its security forces are using almost all of the weapons at their disposal to battle the rebel "Free Syrian Army" and other revolutionary forces.

The Syrian political system is relatively inclusive of Syria's religious groups. While the Assad family belongs to the Alawi religious sect, Sunni Muslims held significant positions in the national cabinet, and Syria's Christian population has enjoyed religious and political freedom. Whether such relative freedoms might exist in a post-Baath Syria is unclear, as the majority of Sunni revolutionaries have targeted both Alawi and Christian supporters of the Assad regime. Many Sunni and Christian senior officials have defected from the Baath leadership, possibly to avoid reprisals should the Assad regime fall.

The Syrian National Economy

Oil and agricultural revenues constitute almost half of Syria's national economy, though Syria is rapidly depleting its 2.5 billion barrel oil reserve. Much of Syria's economy is under state control and ownership, though the regime has allowed for some privatization and the opening of a stock exchange, but economic progress still remains poor. The Syrian revolt of 2011 and 2012 decimated an already weak economy, with sanctions, disruption of internal commerce, and a large population exodus to neighboring countries. In 2011, its 2% economic decline gave Syria a global economic growth rate ranking of 209, with only six countries doing worse.

Syrian Regional Relations

Syria participated in the 1948 Arab-Israel war, initiating Syria's long period of hostility toward the Jewish state. Syrian and Israeli forces also fought in 1967, a war that cost Syria the Golan region. Syria and Egypt fought Israel again in 1973 to regain lost territory, and while the war paved the way for Egypt to regain the Sinai, Syria failed to reclaim Golan, though a 1974 agreement established a demilitarized zone between Syria and Israel. The two countries engaged in brief but futile peace talks over the return of Golan in 1999 but have not met since to explore the possibility of a peace accord.

Until 1920, Lebanon was a part of greater Syria, and Syria continues to attempt to control events there by establishing ties with leading Lebanese political figures, partly to reduce the possibility of Israeli influence in that country. Syria also supported Hezbollah, the Lebanese Shia political and militia group, funneling materials from Iran through Syria (Hezbollah funneled the material with Syrian complicity). Syrian influence in Lebanon weakened considerably, however, in 2005 following the assassination of the former Lebanese prime minister Rafiq Hariri, which was widely blamed on Syria. Following massive anti-Syrian demonstrations in the spring of that year, Syrian military forces evacuated Lebanon, though Syrian influence remained through Hezbollah.

Syria shares a long border with Turkey, a North Atlantic Treaty Organization ally of the United States, and Turkish-Syrian relations have been tense in the past. The 2011–2012 antiregime uprising spoiled a slight warming of Turkish-Syrian relations, as Turkey sided with the insurgents. It did so largely for geopolitical reasons, because the embattled Assad regime had drawn closer to Iran, which Turkey considers a regional threat.

Syrian Relations With Terrorist Groups

Syria has had an ambiguous relationship with Middle East-based terrorist groups, supporting some, like Hezbollah, while resisting others, like al Qaeda and, in the early 1980s, the Palestinian Liberation Organization. Syria also continues to support the Palestinian Islamist group Hamas and reportedly allowed Syria-based Iraqi Baath party members to carry out attacks in neighboring Iraq. There are widespread reports of al Qaeda influence

in the anti-Assad movements, though most Syrian Sunni Muslims reject al Qaeda's extremism.

Syrian-American Relations

Syrian-American relations have never been close, though sometimes the two countries take advantage of mutual interests to cooperate. Following the September 11, 2001, terrorist attacks, Syria offered assistance to the United States against al Qaeda and reportedly detained and interrogated al Qaeda suspects. However, the already cool relations faded quickly after the initiation of the anti-Assad movement, and the administration of Barack Obama demanded the resignation of the Assad regime early in the uprisings.

The Syrian Armed Forces

Syria has around 292,000 personnel in uniform, with approximately 215,000 in the Syrian ground forces, many of them conscripts. The land forces operate around 5,000 main battle tanks, though most are obsolete and poorly serviced. Such conditions also exist in the Syrian air arm, equipped with older Russian aircraft, and in Syria's navy, fitted mostly with coastal patrol craft and several frigates. The Syrian military also operates surface-to-surface missiles of the Scud class, which are capable of carrying chemical warheads, and Syria is known to have developed such warheads. Syria experimented with a North Korean-supplied nuclear reactor until Israeli aircraft destroyed it in 2007. While the Syrian military suffered mass personnel defections, including by many senior generals, the core leadership

of the Alawi officers continued to fight on as of mid-2013.

Syria spent around 5.9% of its gross domestic product on national defense as of 2005, the most recent year for which data are available. This is significantly above the 2% global average, ranking it 12th in the world in defense spending.

Conclusions

Syria is located in a significant strategic region, in an area with many real and potential conflicts. It has strained relations with all of its neighbors, though a relatively weak military limits Syrian strategic options. The Assad regime has survived a protracted revolt against it, and as of mid-2013, its end appeared to be near. Since March 2012, more than 36,000 Syrians have died in the conflict that has threatened to fragment the country politically. Given Syria's often chaotic past, a post-Assad future is also likely to be unstable and problematic for both Syria and its neighbors.

David S. Sorenson

See also Egypt; Hamas; Iran; Iraq; Israel; Lebanon, U.S. Intervention in (1982); Middle East Conflict

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Bombs, Nuclear
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General Dynamics
Guns, Machine
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Mines, Land
Mines, Naval
Missiles, Air-to-Air
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Missiles, Nuclear
Northrop Grumman
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Science Applications International
Stealth Technology
Submarines
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Warfare, Biological
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TACTICS, AIR

The tactics of air war are the techniques and procedures of aircraft employment against targets in the air, on the ground, and in the water. Such tactics will generally reflect the universal traits of air power: its speed, range, flexibility, and ability to mass power. Military operations at the tactical level are executed as missions. These may be broadly categorized as strategic bombardment, counter-air (offensive and defensive), air interdiction, close air support (CAS), airlift, and reconnaissance. Each mission is governed by a unique and dynamic subset of tactics that is linked to the technology of air warfare and is continually evolving in a response/counterresponse manner. In the modern era, tactics have been shaped as much by the electronic environment in which air warfare takes place as by the aerodynamic qualities of aircraft. Many tactics, however, have stood the test of time, remaining fundamentally unchanged since their first employment in World War I.

Early Thinking on Air War

Serious thinking about the optimal employment of aircraft followed closely behind their first use in the air battles of World War I. Based on trial and error and the rapidly expanding series of air missions, pilots took it on themselves to draw up the specific tactics and procedures of air warfare. Remarkably, many of these rules remain valid to the present day. For example, the element of surprise—a dominant factor then and now—has historically accounted for some 80%

of air-to-air kills. Therefore, a time-honored rule of close combat has been to mask the attack by coming out of the sun, employing camouflage, and using



An air-to-air left-side view of a flight of four F-5 Tiger fighters flying in a finger-tip formation over Monument Valley.

Source: Technical Sergeant Bob Simons (released).

smokeless engines. Today, the rule remains valid but, in light of radars and missiles, has been supplemented by further instruction to maintain electronic silence and employ low-observable shapes in fighter design.

Strategic Bombardment

The tactics of strategic bombardment have undergone several changes over the life of the bomber. Whereas bomber operations from World War I through the Korean War generally involved groupings of up to 1,000 aircraft to provide mutual support against defending fighters and achieve the desired target destruction, the advent of missile defenses of the sort that famously brought down a high-flying U-2 reconnaissance aircraft over the Soviet Union put an end to the mass bomber formation. Cold War era tactics saw bombers operating at low level, singly or in loose pairs, as part of the Single Integrated Operations Plan. The destructive power of nuclear weapons obviated the need for

large bomber formations, and the change in tactics from the *engagement* to the *avoidance* of enemy air defenses made large groupings of aircraft tactically unsound.

Bombardment in the Post-Cold War Era

The end of the Cold War reduced the importance of the strategic nuclear war and resulted in a temporary cut of defense expenditures, while concomitantly redirecting the bomber force toward conventional missions. The 1990s Northrop B-2 stealth bomber possessed a comprehensive nuclear and conventional bombing capability, of which the U.S. Air Force only purchased 21. Existing bomber aircraft, such as the B-52 and B-1B, were upgraded to include Global Positioning System, LITENING or SNIPER XR targeting pods, and precision-guided munitions, allowing these former nuclear bombers to conduct a variety of missions on the modern battlefield. The campaigns in Afghanistan (Operation



U.S. Air Force Major General Ken DeCuir, director of aerospace operations for Air Combat Command, fires an AIM-120 advanced, medium-range air-to-air missile from a Missouri Air National Guard F-15 Eagle fighter, 131st Fighter Wing, 110th Fighter Squadron, Saint Louis, Missouri, at an aerial target drone during a Combat Archer mission over the Gulf of Mexico on July 21, 2005.

Source: U.S. Air Force photo by Master Sergeant Michael Ammons (released).

Enduring Freedom) and Iraq (Operation Iraqi Freedom) saw the widespread use of bomber aircraft in precision support of friendly troop movements. What is more, as part of this remarkable transformation, the bomber has evolved to match the special needs of low-intensity operations, acting as airborne firepower arsenal ships and even as CAS aircraft, by way of Global Positioning System–based precision munitions.

Counter-Air Missions

Counter-air missions are flown by fighter and strike aircraft. This section focuses on the air-to-air fighter. The fighter is properly considered a platform by which weapons may be brought to bear against an opponent. To a great extent, weapons drive tactics because the particular characteristics of a weapon need to be met—for example, an aircraft having to maneuver to a position behind an enemy aircraft in order to bring forward-mounted guns to bear—for a

shot to be taken. Those same characteristics must be denied the enemy aircraft to prevent it from taking a shot. The tactics of air-to-air combat have therefore evolved to keep pace with radar and long-range air-to-air missiles, but the fundamentals of basic fighter maneuvering, or dogfighting, remain as valid today as when they were first articulated during the World Wars by Max Immelman, Oswald Boelcke, John S. Thach, and others.

The World War I-era Immelman turn, split-S, and barrel roll are familiar to all modern-day fighter pilots. Other maneuvers have been modified to account for the significantly greater power of contemporary fighter designs. For example, the Scissors maneuver—a sequence of break-like turns between two opponents aiming to force the other into the front—remains a recognized technique, but it is today also practiced in its Vertical Scissors variant, suited to modern fighters' superior climbing abilities. Indeed, fighter combat is far more vertically oriented today than it was in the piston-powered era.



A Soviet-built MiG-29 Fulcrum fighter flown by Major Peter Meisberger, from Germany's 73rd Fighter Wing, Laage Air Base, Germany, fires a radar-guided AA-10 "Alamo" short-burn air-to-air missile at a QF-4 "Rhino" full-scale aerial target drone during a live-fire weapons training mission.

Source: U.S. Air Force photo by Master Sergeant Michael Ammons (released).

Fighter aircraft fight in formations of a leader and a wingman, with the latter providing support to the former. This pair, or “combat pair,” is the basic fighting unit of air-to-air combat, allowing for mutual support and good situational awareness. The pair may be increased by increments of two to create the “finger four,” devised by Werner Mölders during the Spanish Civil War. In such cases, the formation will consist of a lead element, a second element, and so on. Jet speeds have spread the distances between fighters in a combat formation to accommodate greater turn radii. A “combat spread” may see well in excess of 5,000 feet lateral and 1,500 vertical separation.

Air-to-Air Missiles

Developments in air-to-air missile technology have profoundly influenced fighter tactics. The preferable mode of operation today is to employ medium-range missiles at long ranges and avoidance of close-quarters maneuvering. If that is impossible, then the opponents merge into a dogfight. For decades, the typical close-quarters shot required either a sneak attack from the opponent’s 6 o’clock position or, if surprise was lost, a dogfight, preferably followed by rear-quarters guns or infrared-guided missile shot. The advent of the all-aspect infrared-guided missiles in the 1980s meant that shots could be taken against targets at any angle to the shooter. Today’s technological advancements obviate even the requirement to point the attacker’s nose at a target. Off-boresight missiles, such as the AIM-9X, AA-11, IRIS-T, and others, used in conjunction with helmet-mounted cueing systems allow shots at targets flying parallel or, in some cases, behind the shooter. The dogfight of old may truly be at an end.

Air Interdiction

Air-to-ground operations have likewise been affected by radar and surface-to-air operations. The prevalent belief was that coordinated enemy air defenses, spearheaded by a new generation of surface-to-air missiles, had by the 1960s made medium- to high-altitude air operations impracticable. This led to a general and universally accepted push to operations at low altitudes. The key to survival in a modern integrated air defense environment was high subsonic speed at low—below the radar—altitudes, by single or mutually supporting pairs of aircraft. This belief found reflection in designs such as the 1960s-era General

Dynamics F-111 and the 1970s’ Panavia Tornado and Sukhoi Su-24, as well as the 1980s’ Rockwell B-1B strategic bomber. Both the North Atlantic Treaty Organization and the Warsaw Pact adopted low-level tactics and weapons; the British JP233 runway denial weapon and the American LANTIRN (Low Altitude Navigation and Targeting Infrared for Night) low-level navigation and targeting system are the most notable among them.

Low-Level Tactics: Pros and Cons

The actual tactics of ground attack differed significantly between air forces, even within the North Atlantic Treaty Organization. While the Royal Air Force Tornados were expected to operate in autonomous pairs, the U.S. Air Force’s tactical preferences were for strike aircraft to be accompanied by “packages” of defense suppression and electronic warfare aircraft operating with significant fighter top cover. Regardless of the specific tactics, low-level operations presented significant drawbacks. High-speed, night, and all-weather operations in close proximity to the ground were dangerous in and of themselves. Contact with terrain was assuredly lethal, but the denser air at low altitudes and the physics of terrain following flight also reduced range, increased crew fatigue, and presented the challenges of acquiring and hitting the target. Low-level operations were spectacularly demonstrated by Argentine forces during the 1982 Falklands War, but such operations resulted in bomb-fusing problems and cost the lives of a number of pilots who simply flew into the sea. Although the low-level arena remains valid in certain situations, it is today no longer the preferred method of operation.

The introduction of Airborne Warning and Control System surveillance aircraft and the widespread proliferation of fighters equipped with look down/shoot down capability took away the low-level sanctuary for strike and bomber aircraft. The growing low-level capability of surface-to-air missiles and radar-directed anti-aircraft artillery, powerfully demonstrated during the 1973 Yom Kippur War, highlighted the need to actively engage and peel back the enemy’s integrated air defense system. Aircraft specially designed for the suppression of enemy air defenses, popularly known as “wild weasels,” entered service with the U.S. Air Force and Navy during the Vietnam War and have remained a vital component of air war operations. It is rare for a



A pair of British Royal Air Force GR-1 Tornados cruise over Kuwait near the Iraqi border as part of the Southwest Asia buildup in 1998.

Source: PH2 (NAC) Jeff Viano, U.S. Navy.

U.S. Air Force strike package today to enter a combat area unaccompanied by F-16C Wild Weasels armed with the HARM antiradar missile. Electronic support aircraft, such as the Grumman EA-6B and Boeing EA-18G, employ myriad electronic spoofing measures to disrupt radar and communications networks. Developments in electronic warfare usefully illustrate the challenge and response nature of tactics development. Even as the door to the low-level sanctuary shut closed, measures were put in place to return safely to medium- and high-altitude operations.

Impact of Stealth

The real revolution in the conduct of air war came with the introduction of low-observable, or stealth, aircraft that could operate unimpeded in almost any defense environment. The highly secretive effort to develop stealth aircraft, begun in the mid-1970s, bore fruit in the shape of the F-117 strike fighter. The F-117 fused stealth technology,

precision-guided munitions, and sophisticated day/night sensors to negate the defenses that were threatening to shut down closed tactical fighter operations. Stealth revolutionized the tactics of air war, setting them back in some sense to the preradar and premissile “big sky” environment of the 1920s and 1930s. Stealth has proven so successful that every subsequent new U.S. fighter and bomber design has incorporated low-observable characteristics as a primary design requirement.

Close Air Support

The mission of supporting troops in enemy contact, know as CAS, remains an important, if controversial, part of air force capabilities. The challenges of separating friendly from enemy troops in close contact dictate that this mission be carried out in close coordination with ground controllers. In the U.S. Air Force, CAS is performed by the purpose-designed Fairchild A-10 of 1970s vintage but can be provided reasonably well by any modern fighter-bomber or

appropriately equipped heavy bomber. The A-10's GAU-8 seven-barrel 30-mm Gatling gun serves as an effective, accurate, and cost-efficient CAS weapon. The A-10 has seen its operations evolve from low-level pop-up and shoot tactics over Central Europe to the medium-altitude tactics seen in the Afghanistan and Iraq campaigns. Indeed, the change is reflected in the A-10's abandonment of its lizard green paint scheme, designed to conceal it at low levels, in favor of a light grey scheme more suitable to concealment at altitude. The A-10 operates in pairs for mutual support and survives in the dangerous environment of CAS due to its combination of good cockpit visibility, maneuverability, armored protection for pilot and vital systems, and a structure able to absorb damage.

Impact of Technology on Air War Tactics

Technological advances, made apparent during the 1991 Persian Gulf War, have seen a significant shift toward "precision warfare." It is now taken for granted that one stealthy aircraft, equipped with the appropriate targeting sensors and precision munitions, can achieve the destructive effect of hundreds of World War II-era heavy bombers. This assessment broadly holds true even in comparison with the Vietnam era, where dozens of fighter-bombers and support aircraft might have been needed to achieve the same effect. The consequences for air warfare have been profound. Heavy bombers using Global Positioning System-guided munitions can now conduct CAS from 30,000 feet with precision measured in feet, not city blocks. Fighter-bombers that once might have been used against battlefield targets such as troop convoys can now, in their stealthy guise, enter even the most defended enemy airspace and strike strategically valuable targets with remarkable precision.

The effect of all this has been to diminish the divisions between bomber and fighter, strategic and tactical. Technology has at once enabled and forced—due to its high cost—aircraft to take on many roles, employing many tactics. As this convergence continues, the introduction of unmanned combat aerial vehicles will further muddle the tactics of air-to-air and air-to-ground combat. It seems likely that unmanned combat aerial vehicles will continue to supplant the manned fighter, as they have already largely done in the field of aerial reconnaissance.

Mils Farmus

See also Air Force, U.S.; Bombs, Smart; Close Air Support; Rules of Engagement; Stealth Technology; Strategy, Air Power; Unmanned Aerial Vehicles

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TACTICS, COVERT

Covert tactics or actions are developed to influence foreign governments, organizations, persons, or events in support of the foreign policy objectives of the United States, while keeping secret the U.S. government's support. Covert actions differ from clandestine ones, the latter referring to the tactical secrecy of an operation; covert means the identity of the sponsoring government is secret or not acknowledged publicly. Covert tactics include propaganda, also known as psychological warfare; economic operations; political support; and paramilitary activities, which until 1976 included political assassinations. Since the September 11, 2001, attacks, covert tactics also have included renditions, cyberwar, and the use of unmanned aerial vehicles (UAVs) or drones. Under the National Security Act of 1947, the Central Intelligence Agency (CIA) has been the lead agency in carrying out covert actions. The president always had been made aware of large-scale operations, but since 1974, all covert operations require the written approval of the president (called "presidential findings"), and the Intelligence Act of 1991 states that the president is the final authority and no findings can be signed retroactively.

Background

In response to the Nazis' advance through Europe, President Franklin D. Roosevelt created the Office of the Coordinator of Information and appointed William J. Donovan as director in 1941. The next year, the Office of the Coordinator of Information became the Office of Strategic Services. The Office of Strategic Services not only collected and analyzed strategic information but also engaged in what is now defined as covert activities—propaganda, political and economic operations, and paramilitary actions behind enemy lines.

The Office of Strategic Services was dissolved in 1945, but unstable political conditions immediately following the war saw the USSR become a dominant threat to U.S. security. President Harry S. Truman signed the National Security Act of 1947, establishing the National Security Council and the CIA.

The CIA focused on the emerging threats of the USSR by collecting and analyzing data. A covert psychological warfare operation to counter communist propaganda in Europe began. Authority to undertake covert action was provided by the catchall phrase “other functions and duties” in the National Security Act.

Varieties of Covert Tactics

Propaganda is referred to as psychological warfare, or “black” propaganda, when used covertly and attributed to someone else. Propaganda, which makes up about 40% of covert actions, can take the form of information in newspapers, television and radio broadcasts, and other printed materials. Two of the first successful CIA propaganda missions took place during the 1948 elections in Italy and Greece.

Economic tactics have traditionally constituted only 10% of covert activities. These have included depressing the world copper price and inciting labor strikes against the Chilean president Salvador Allende in the early 1970s.

Political tactics, used about 30% of the time, include financial support to leaders and creating and/or supporting insurgencies. For example, funds and advice went to Poland's Solidarity movement in 1981 and 1982. The CIA has been involved in at least six coups d'états: the 1953 overthrow of Iran's government, Guatemala in 1954, the Dominican

Republic in 1961, the 1963 army coup in South Vietnam, a failed coup in Chile in 1970, and another coup in Chile that toppled Allende in 1973. Additionally, the CIA was involved in political actions in Grenada, the Philippines, Panama, and Haiti.

Paramilitary tactics often coincide with political tactics. The CIA National Clandestine Service's Special Activities Division (SA) provides training, supplies, and leadership assistance to local groups that carry out sabotage missions as well as actual combat operations. Sabotage can include cutting communication lines, placing bombs, spoiling gasoline reserves, and damaging food supplies. Over the decades, the CIA has supported conflicts and guerrilla actions in at least 26 publicly identified countries.

Renditions tactics refer to the abduction of individuals wanted by the United States but who live in or must be captured in a country where the United States cannot or chooses not to legally apprehend them. Although used in the past, after September 11, President George W. Bush authorized a program known as GST. This permitted capture of al Qaeda officials with the help of foreign intelligence services, the operation of secret prisons (“black sites”), and harsh interrogation techniques, which could include torture such as waterboarding. In some renditions, the United States did not retain custody but instead sent a terrorist to his or her home nation, where some were subjected to torture. Secret prisons or “black sites” in eight countries have held others. In 2009, President Barack Obama signed an executive order to continue renditions but pledged oversight and monitoring of interrogations to avoid torture.

Cyberwar tactics use the ability to penetrate computers or networks in order to cause damage or disruption. These tactics can include everything from transferring funds from a terrorist's bank account to implanting malware to disrupt or destroy operational systems.

UAVs, or drones, were first used for intelligence gathering but, starting in 2002, have been carrying missiles for attacking suspected terrorists, groups, and facilities.

Covert Actions Since 1989

Afghanistan

In 1998, the CIA sent teams and money into northern Afghanistan to persuade the Northern Alliance to capture Osama bin Laden. By 2001, the CIA was air-dropping weapons and supplies for the supporters of Hamid Karzai, a popular exiled tribal leader (who would later become president of Afghanistan) who was organizing resistance against the Taliban from Pakistan. The SA moved throughout the southern areas in attempts to entice other tribal leaders to join the opposition.

After September 11, 2001, President George W. Bush signed a presidential finding authorizing the assassination of Osama bin Laden and others in al Qaeda and the Taliban regime as part of the Global War on Terrorism. By late September, about 10 CIA operatives entered Afghanistan with more than \$3 million for the Northern Alliance to help fund combat preparation, for daily operation of their intelligence group, and for humanitarian aid to civilians near battle zones.

The SA quickly created and trained Afghan commando teams located around the country in CIA bases (usually shared with U.S. special operations forces). They conducted surveillance, raids, “snatch-and-grab” operations against insurgent leaders, and other sabotage.

In early October 2001, the first armed Predator drone missiles were used over Afghanistan. Missiles from drones continued and have become one of the main tactics used to kill Taliban and al-Qaeda members, especially in the remote areas of Afghanistan and neighboring Pakistan.

Iran

In recent years, the CIA has used propaganda and given millions to exiled and paramilitary groups. Efforts at sabotage have included planting faulty parts in nuclear power systems and triggering imported power supplies to explode. In 2007, a presidential finding authorized financial and other support to dissident groups within Iran. In 2010, an extremely complicated computer worm called Stuxnet attacked centrifuges in a top secret Iranian nuclear facility as part of “Olympic Games,” a cyberwar project started in 2006 under President Bush. A secret Israeli agency, along with the National Security Agency and possibly the CIA,

were involved in this cyber attack. More recently, the malware Flame has infected Iranian computers and spies by collecting data, documents, recorded conversations, and keystrokes. No agency or nation has admitted their involvement with Flame, but the United States and Israel are suspected to be behind these attacks as well.

Iraq

Five covert tactics—propaganda, economic tactics, political actions, paramilitary actions, and UAVs or drones, were used during the Persian Gulf War and the years afterward. In January 1991, President George H. W. Bush signed three presidential findings. These permitted propaganda, such as radio broadcasts of the Voice of Free Iraq, assistance to the U.S. Army Special Forces in supplying and supporting resistance forces in Kuwait, covert aid to rebel groups inside Iraq, aid to Kurdish groups to instigate a “rolling coup” in their territory, and economic injunctions that would dishearten citizens and encourage the assassination of Saddam Hussein by encouraging dissatisfied guards in mounting a palace coup. Another presidential finding authorized \$30 million for additional propaganda broadcasts and for organizing a coup involving military leaders and opposition groups.

In 1992, the CIA dumped counterfeit money throughout Iraq to exacerbate a preexisting severe inflationary cycle. The Iraqi National Congress received funding for broadcasting anti-Saddam Hussein propaganda on radio and television stations, the printing of booklets, and dropping leaflets over cities by using CIA-supplied UAVs. The Iraqi National Congress distributed a fake issue of the newspaper *Babil*, which reported the truth about Saddam’s atrocities. Unfortunately, these efforts led to increased fear, not rebellion. Subsequently, SA established a base near the Turkish border and supplied light weapons and training of guerrillas. Plans for an early March 1995 attack on the Iraqi garrisons at Mosul and Kirkuk were to include thousands of Kurdish guerrillas and men from the Iraqi National Congress and the Iraqi Communist Party. After discovering that Saddam’s men had infiltrated the group, the CIA withdrew its air cover and support.

In early 1996, President Bill Clinton signed a presidential finding for weapons, training, and other equipment. By June, however, Saddam’s forces had

arrested and executed more than 100 people, and after a Kurdish group changed sides allowing Iraqi troops to move into northern Iraq, CIA operatives had to flee the country. All in all, between 1991 and 1996, the CIA spent about \$100 million on attempts to oust Saddam Hussein.

Libya

In early 2011, President Obama signed a finding allowing for weapons, money, and other paramilitary support for opposition groups that eventually captured and killed the Libyan president Muammar Qaddafi in October 2011.

Pakistan

In 1999, the CIA trained and supplied about 60 members of Pakistan's Directorate for Inter-Services Intelligence to capture or kill Osama bin Laden, but the mission was abandoned when the prime minister was ousted by a coup. In 2004, the CIA began sending armed Predator drones into a remote region, the Federally Administered Tribal Areas, where al Qaeda members hid under the protection of the Taliban, who use this area to launch attacks against U.S. and other troops in Afghanistan. The use of "signature strikes," in which the CIA attacks targets based on patterns of suspicious behavior and locations, rather than identified individuals, has been successful. By January 2010, more than half of the most wanted terrorist suspects had been killed by armed drones. However, a more recent study shows at least one-third of those killed, or nearly 1,000, have been innocent children and civilians, often including first responders who are hit in a "double strike." The use of drones continues to be a controversial subject.

Serbia

In May 1999, President Clinton approved a finding for teaching sabotage tactics to Kosovar rebels acting against the regime of the Serbian president Slobodan Milosevic. In addition, the CIA employed cyberwarfare and disrupted Milosevic's foreign bank accounts.

Somalia

In 2005 and 2006, the CIA financed secular warlords in a mission to capture al Qaeda operatives, but war with Ethiopia ended the operation. In 2011, the CIA was using mercenaries to train Somalis against

a group with al Qaeda ties. The CIA maintained an underground interrogation center in Mogadishu for suspected jihadists abducted from other countries.

Syria

Since early summer of 2012, CIA operatives have been in southern Turkey, observing the flow of weapons and supplies into Syria from various countries. This is to prevent arms from reaching al Qaeda or other terrorist groups. In August, President Obama signed a finding allowing the SA to be active inside Syria in support of the Free Syrian army. CIA-coordinated airlifts of arms and equipment have greatly increased for those opposing President Bashar al-Assad. The months January 2012 to March 2013 saw at least 85 flights of 50–60 tons per military cargo plane from Qatar to Turkey and on to Syria. In addition to coordinating these supplies, the CIA is assisting in training rebels in weapons use.

Yemen

In 2002, a Predator drone's missile destroyed a vehicle carrying one of the al Qaeda leaders suspected of involvement in the 2000 attack on the *USS Cole*. In 2011, the CIA began employing armed drones over Yemen and, in 2012, requested presidential approval for "signature strikes," because of Yemen's increasing terrorist threat.

Future Developments

The coming years will see an increased use of UAVs. Besides their high success rate, drones eliminate the imperiling of U.S. ground forces. Although little practice of cyberwar tactics by the CIA has been confirmed, their use will grow, especially in targeting the movement of finances and as countries like Iran attempt to hide their nuclear programs in fortified underground facilities and pose a threat to U.S. interests and allies.

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See also Central Intelligence Agency; Cyberwar; Global War on Terrorism; Syria; Unmanned Aerial Vehicles; War in Afghanistan

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TACTICS, GROUND FORCES

Ground forces tactics describes the application of a combination of combat elements to defeat an enemy in a battle or in a nonlethal action, such as a small-scale peacekeeping contingency. In ground forces tactics, certain methods are employed to achieve a specific objective. Tactics are used to create an advantage over the enemy and allow the resulting success to be exploited, thereby gaining a decisive victory. Ground forces tactics focus on the technical application of military action and consist of those techniques and procedures used for accomplishing specific tasks within a tactical action. The objective itself, enemy composition and disposition, and other elements such as terrain and weather dictate

which tactics will most effectively and efficiently accomplish the mission. In a conventional battle, tactics rely on a combination of maneuver and fire support to destroy and defeat the enemy. In nonlethal operations, such as peacekeeping or humanitarian assistance missions, the tactics may be as simple as providing a secure environment in which to deliver food supplies.

Basic Tactical Tenets

Ground forces tactics can be described as the combination of an art, the creative application of military force to a given situation, with a science, the technical application of combat power. To accomplish a particular tactical objective, six basic tenets, described below, must be applied:

1. *Achieving a decision:* It is imperative for a successful tactical leader to study the combat environment to develop a clear understanding of contextual events, background, and future possibilities. Considering the various factors of the combat situation, such as the assigned mission, the enemy and its most likely course of action, terrain and weather, the troops and fire support available, and time, the unit leader must identify all possible actions that will achieve the desired result.

2. *Gaining an advantage:* After a decision is achieved, the tactician must work to utilize his or her knowledge and available information about the combat environment to provide a military advantage. One of the most pivotal factors in gaining an advantage is the identification of decisive points and actions that will be used to target enemy weaknesses.

3. *Being faster:* In combat, it is necessary to only act faster than the enemy, not necessarily as fast as possible. A smart tactician must prevent reckless movement, for it will decrease effectiveness against the enemy.

4. *Adapting:* The ever-changing nature of combat requires a tactician to be able to adapt to various scenarios on the battlefield. By remaining flexible and being willing to change as the situation dictates, the tactician can exploit opportunities to mass at the decisive point, continue to surprise the enemy, and capitalize on available combat resources. There are two types of adaptation: anticipation and improvisation.

5. *Cooperating*: Cooperation is defined as the union of self-discipline and initiative in the pursuit of a common goal or objective. It is a component of control. Control can generally be divided into two types: centralized and decentralized.

6. *Exploiting success and finishing*: In combat, gaining the advantage is only one step toward mission accomplishment. The successful tactician capitalizes on each success to aggressively and continuously pursue the enemy's weaknesses and deliver the finishing stroke when the opportunity arises.

In tactical situations, it is necessary for the unit commander to designate a main effort, or the mission central to accomplishing the objective, and the supporting effort, which facilitates the main effort's actions by providing combat support. The main effort is employed to strike at the decisive point, typically massed with a concentration of resources including manpower and fires. The supporting effort provides the main effort with supporting fire. In contrast to tactics based on incremental attrition, tactics in maneuver warfare apply mass through a weighted main effort at the decisive point to attain the objective.

Types of Ground Forces Tactics

Offensive operations, or those military actions taken to pursue, close on, and destroy an enemy, are designed to achieve decisive victory by defeating an enemy. This is accomplished by either destroying the enemy outright or reducing its will to fight to such a level that, in the enemy's perception, continuing military action is no longer feasible.

Offensive tactics are utilized to accomplish one or more of the following tasks:

- Destroy enemy forces, equipment, and resources
- Deceive and divert the enemy
- Deprive the enemy of resources
- Gain information about the enemy
- Fix the enemy in place
- Seize key terrain
- Produce a reaction from the enemy
- Disrupt enemy actions or preparations

Offensive operations are categorized by four principal types, which can occur independently, simultaneously, or in sequence. The application of

each type of operation is driven primarily by the tactical decision-making process of the unit commander. The four types of offensive operations are as follows:

1. *Movement to contact*: This is an offensive operations that seeks to gain or regain contact and develop the situation in relation to an enemy whose general location is known but whose exact location is unknown.

2. *Attack*: An attack is an offensive operation characterized by coordinated movement, supported by fire, and conducted to defeat, destroy, neutralize, or capture the enemy. The foundation of offensive tactics involves the attack, which is designed to destroy or defeat an enemy at a known location. Two types of attack are most common: a hasty attack, or one in which preparation time is traded for speed to exploit opportunity (i.e., a chance contact), and a deliberate attack, or an offensive action characterized by preplanned, coordinated employment of firepower and maneuver to close in on and destroy the enemy.

3. *Exploitation*: This is an offensive operation that follows a successful attack and is designed to disorganize the enemy in depth.

4. *Pursuit*: Pursuit is an offensive operation designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it.

Three phases typically characterize offensive tactical operations: preparation, conduct, and consolidation/exploitation. These phases should not be considered as distinct entities, as there is not always a definable separation between them. The offensive forms of maneuver represent the basic techniques a force conducting offensive operations uses to gain an advantage over the enemy. The decision on the form of maneuver to utilize in an operation is made during the preparation phase of the attack. There are six forms of tactical maneuver:

1. Frontal attack
2. Flanking attack
3. Envelopment
4. Turning movement
5. Infiltration
6. Penetration

Because offensive operations cannot continue indefinitely, defensive tactics will eventually be required to facilitate additional decisive actions. Once a maneuver unit has reached the culmination point of its offensive action, establishing a defensive position may be required. The characteristics of defensive tactics are similar to those of the offense, such as striking when the enemy is most vulnerable and massing at an identified enemy weak point.

Defensive operations may also be conducted to

- gain time;
- retain key terrain or deny a vital area to the enemy;
- counter surprise action by the enemy;
- economize force, allowing combat power to be concentrated elsewhere;
- increase the enemy's vulnerability by forcing him to concentrate his forces;
- attrite or fix the enemy as a prelude to offensive operations; or
- prepare to resume the offensive.

Defensive positions are formed either hastily, organized while engaged with the enemy or when time is limited, or deliberately, when contact with the enemy is not imminent and can be fortified and developed in depth.

In the defense, there are seven forms of maneuver that a unit may utilize to accomplish its objectives:

1. *Battle position*: This defense position is established with an orientation toward the most likely enemy avenue of approach from which a unit may defend or attack. The battle position can be used to deny or delay the enemy the use of certain terrain or an avenue of approach.

2. *Strongpoint*: It differs from a battle position in that it is designed to be occupied for an extended period of time; the strongpoint defense is a fortified position created to deny the enemy access to terrain and prevent the enemy's use of a specific avenue of approach.

3. *Sector*: This defensive position is a control measure used by a larger unit that allows freedom of action to subordinate units. The principal benefit of this defense is that it allows for decentralized execution, which is synchronized with the higher unit's intent.

4. *Reverse slope*: Organizing a defense on the slope that descends away from the enemy allows the main defensive position to be masked from enemy observation and direct fire by a topographical crest.

5. *Perimeter*: A perimeter defense is oriented in all directions and allows a unit to use this form of maneuver to accomplish a specific mission, such as to defend friendly infrastructure (e.g., military base, air strip) or to provide immediate self-protection, such as during resupply operations when all-around security is required.

6. *Linear*: A linear defense facilitates interlocking and overlapping observation and fields of fire across the unit's front, with the majority of the unit's combat power well forward of the position. In this type of defensive maneuver, sufficient resources must be available to provide adequate combat power across the frontage to detect and stop an attack.

7. *Nonlinear*: Used when the enemy's firepower and mobility are assumed to be equal to those of the defending unit, the nonlinear defense provides the most decentralized and dynamic defense option for units. This type of defense is almost exclusively enemy oriented and is not well suited for retaining terrain.

Evolution of Ground Forces Tactics

Tactics have existed in some form since organized ground warfare began. Recorded military history began with the Battle of Kadesh, pitting one force against another in an open battlefield. This style of warfare, in which an opponent uses sheer numbers and combat power to overwhelm his enemy, has defined ground combat for millennia. Sometimes, using superior tactics and unfamiliar techniques, a numerically inferior force could triumph. This was the case for the Greeks at the Battle of Marathon, where they defeated a larger Persian ground force. It continued through U.S. history, including major land battles of the Civil War in which opponents pitted force against force on the open ground. However, the evolution of such attrition style of combat gave way to superior tactics, which gave an advantage to the unit with the best ability to adapt, mass forces at the decisive point, and maneuver against the enemy. General Stonewall Jackson succeeded in using these methods at the Battle of Chancellorsville, where he flanked a larger Union army and annihilated the numerically superior opponent. The transition

from attrition to maneuver warfare gave the tactically superior force a significant advantage over the static enemy, and using the principles of warfare, the unit with the best ability to maneuver could rely on tactics instead of brute force to defeat an opponent. Modern infantry tactics allow a unit to utilize mass, surprise, and mobility to target and exploit an enemy's weakness. Maneuver warfare now dominates modern ground force tactics.

In contemporary warfare, militaries find themselves involved in several types of operations, ranging from full-scale combat to small-scale contingencies, such as peacekeeping operations and humanitarian assistance missions. In each of these, modern armies are required to employ the same principles and tenets of ground tactics, although the "enemy" in operations other than combat may not be clearly defined. In those missions, the military still seeks to exploit the advantage, perhaps by establishing secure zones for humanitarian agencies to successfully complete their objectives. In Operation Iraqi Freedom, for example, the U.S. military deployed into Iraq with a clearly defined combat mission and engaged in an international armed conflict against the Iraqi armed forces. After vanquishing the enemy, the mission transitioned into a peacekeeping mission, which required supporting local law enforcement and national military units to secure the country and provide order for the citizens of Iraq. During both types of missions, the U.S. military was required to provide humanitarian assistance as well, in the form of providing potable water, medical care, or rebuilding local infrastructure. In each of these missions and operations, the military employed the basic tenets of tactics, achieving a decision and carrying it through to completion.

Although it has existed for thousands of years, irregular warfare has received significant attention in recent years, as military operations have shifted from conventional, force-versus-force battles to asymmetric tactics involving civilian populations. This form of protracted warfare, known as irregular or hybrid warfare, is defined in the Department of Defense's 2010 document *Irregular Warfare: Countering Irregular Threats Joint Operating Concept* as a "violent struggle among state and non state actors for legitimacy and influence over the relevant populations" (p. 9). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities to erode

an adversary's power, influence, and will. This "modern" form of warfare typically pits subnational or nonstate actors against conventional forces in a battle for control over the local population. Tactics in these fights involve extensive interaction with civilians, law enforcement operations, economic development, and information operations. The enemy typically employs a hybrid of irregular, disruptive, catastrophic, and traditional capabilities as a way to achieve strategic objectives. Although irregular warfare is not a new concept or collection of tactics, many top military and civilian leaders agree that irregular warfare will be the domain in which the United States and its allies will engage threats in the 21st century.

August Immel

See also Combined Arms; Guerrilla Warfare; Infantry; Strategy, Ground War

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TACTICS, NAVAL

Naval tactics are maneuvers and procedures used by warships to accomplish their assigned missions. Guided missiles and aircraft greatly influenced and

changed naval tactics in the latter half of the 20th century. Naval tactics can be organized into categories based on the type of opponent being engaged: anti-air warfare, antisurface warfare, and antisubmarine warfare. Naval tactics are also influenced by the formations, the weather, the electronic environment, the battlespace, and the level of air support available.

Anti-Air Warfare

In anti-air warfare, warships engage enemy aircraft and missiles with the intent of destroying the aircraft and avoiding damage from the missiles. Antiship missiles launched from aircraft represent the most serious threat to modern warships. As such, most warships carry some form of surface-to-air missile for use against enemy aircraft. These missile systems range from handheld weapons such as the American Stinger to long-range missiles that make use of the warship's radar for guidance. Larger warships such as cruisers and destroyers are often equipped with three anti-air weapon systems: a longer range surface-to-air missile; a shorter range surface-to-air missile; and a close-in weapon system, such as an automated defensive cannon. Close-in weapon systems based on gun technology, such as the American Phalanx, are designed to fire thousands of rounds at incoming missiles as they near the targeted warship. When one missile is destroyed, the system automatically searches for and engages additional incoming missiles. Warships also carry decoys, such as radar buoys and rockets carrying chaff, which provides opposing radars with false returns. Warships can also seek the protection of natural radar decoys by closing with islands and rocks if possible. As a last resort, the artillery weapons, ranging in size from 75-millimeter to 5-inch guns, of modern warships can be used to engage enemy aircraft and missiles. However, the slow rate of fire of these guns, in comparison with close-in weapon systems, limits their effectiveness.

Warships are able to make the most effective use of their defensive systems when opposing aircraft and missiles are detected at a significant distance. The distance at which detection occurs depends on the height and power of the warship's radar, the weather conditions, and the height of the opposing aircraft or missiles. Modern antiship missiles are designed to fly close to the surface in order to reduce the distance at which detection can occur. This tactic

is known as "sea-skimming." Aircraft can use land features, such as mountains, to avoid detection by warship radar. To enhance the distance at which detection occurs, warships are often accompanied by airborne early-warning planes equipped with powerful radar systems. These planes allow warships to detect sea-skimming missiles and aircraft at longer ranges. As an alternative to airborne early-warning aircraft, smaller warships can be used as radar pickets, stationed at a distance from a group of warships to provide early warning and detection.

Antisurface Warfare

Historically, the heavy guns on warships were the primary means of inflicting damage on other warships. The advent of modern, guided missiles changed the nature of surface combat between warships. In his book *Fleet Tactics and Coastal Combat*, Wayne P. Hughes argues that gun-centered attrition-style naval battles have been replaced by missile-centered battles based on a series of offensive pulses. Each pulse consists of antiship missiles, perhaps in combination with supporting aircraft. The extensive defensive capabilities of warships against air and missile attack mean that these offensive pulses must have sufficient missile strength for at least some of the missiles to penetrate the warship's defenses and strike the target. To achieve the necessary density of missiles, warships fire their weapons simultaneously in groups to maximize the concentration of missiles. These saturation tactics were used successfully by Argentinean aircraft operating against the British navy during the Falklands War in 1982. The British escorts were able to destroy some of the attacking aircraft, but not before their bombs or missiles could damage the British fleet.

A variation on saturation tactics is the concept of swarm tactics. Swarm tactics begin with the same premise as saturation tactics—that the modern warship requires a sufficient density of attacking missiles to overwhelm its defense. However, swarm tactics call for a dispersal of the attacking missiles onto numerous launching platforms. For example, instead of firing a barrage of missiles from two or three larger warships, a group of 10–15 patrol boats, each equipped with several antiship missiles, would launch from multiple locations against the target. The resulting number of incoming missiles would be the same but would have the advantage of approaching the

target from 10–15 different vectors, increasing the challenge for the warship's defensive systems.

The ever-increasing range of antiship missiles makes targeting a difficult challenge for naval commanders. Missiles, particularly cruise missiles, can strike targets outside the maximum detection range of a warship's radar system. To engage targets at a great distance, warships rely on supporting ships and aircraft serving as scouts to provide targeting information. The warship must be able to securely communicate with the scouting units, highlighting the importance of the electronic battlefield for naval tactics. Communications between warships and scouts can be interrupted by jamming equipment, designed to flood the electronic spectrum with randomly generated signals, often referred to as "noise." Jamming also reduces the performance of radar systems. However, aircraft and ships operating jamming equipment can be located by coordinated search efforts. Once located, these jamming units themselves become vulnerable to attack.

Undersea Warfare

Under the surface, submarines perform many of the functions of surface warships, including escort, trade protection, interdiction, and land attack. Undersea tactics emphasize maintaining a low sound profile, due to the capabilities of modern sonar. Sonar can be used to detect submarines and ships by bouncing a pulse of sound waves off their hulls and measuring the time required to travel between the two units. This is called active sonar. Passive sonar involves listening for the sounds given off by submarines and warships that are transmitted through the water. The engine sounds are usually the first to be heard and at the greatest distance. Passive sonar can detect opposing units at a greater distance than active sonar. As a result, submarines, especially submarine engines, are designed to be as quiet as possible to avoid being detected first. Submarines equipped with nuclear engines, while capable of higher performance than diesel engine submarines, are at a disadvantage in remaining quiet due to the continuous cooling operations of modern nuclear reactors.

Submarines can try to hide their sound profiles by traveling slowly at greater depths. After detecting their target, submarines maneuver into a favorable firing position, seeking to minimize the potential for detection by the enemy. Underwater currents create

"flow noise" as water with a certain temperature and speed moves past water with a different temperature and speed. Torpedoes are the standard weapon used against submarines and can be guided to their target if equipped with wires. Wire-guided torpedoes trail a wire connecting the torpedo to the launching submarine, enabling the submarine to maintain control of the weapon after it is launched. When the target ship detects the torpedo and begins evasive maneuvering, the torpedo's speed is increased, and the weapon can be steered toward the target. At this point, submarines can also deploy noisemaking devices in an effort to confuse the acoustic sensors on torpedoes.

Larger surface warships also carry torpedoes, which can be launched directly into the water or deployed at a distance from the warship by attaching a rocket motor to the torpedo. Helicopters play an important role in antisubmarine warfare since their approach is difficult for submarines to detect. Helicopters use sonar buoys equipped with active sonar as well as sonar equipment that can be lowered into the water and raised again. Once their target is located, helicopters can drop a torpedo equipped with a parachute.

Formations and Battlespace

Warships typically operate in groups to provide mutual support and mutual protection. Electronic data links allow warships in a group to share information, enhancing the effectiveness of their defensive systems. Since World War II, the most important warship in a group, often an aircraft carrier, is placed at the center of a rough circle of escorting warships. The design characteristics of antimissile missiles shape the effectiveness of this circular formation. These defensive missiles are most effective when engaging targets heading directly for the ship launching the antimissile missile. As a result, escorts in a circular formation are most effective in engaging antiship missiles at a distance, where the incoming missile appears to be heading for every ship in the formation. While the circular formation is common, warships sometimes operate at a distance from a group of friendly ships. This tactic could be used to extend radar coverage, to keep opposing ships away from higher value targets, or to operate in shallower waters.

The battlespace is the physical area within which naval combat takes place, and it is defined by the area within which a naval commander can detect

and defeat enemy forces. In open waters on the world's oceans, the battlespace is limited only by the range of weapons, radar, and sonar. Closer to shore, geographic features, such as islands, shallow waters, and undersea formations, restrict the size of the battlespace. Since many naval operations are designed to protect sea lines of communication, merchant ships and coastal maritime traffic can also inhibit the battlespace.

Unconventional Warfare

Since the end of the Cold War, the frequency of unconventional naval operations has increased. The 1998 attack on the American destroyer USS *Cole* highlights the danger posed to warships by small boats equipped with explosives, especially in harbors. More recently, warships from navies throughout the world have been deployed off the coast of East Africa to protect maritime shipping from attacks by Somali-based pirates. These operations highlight the reactive and adaptive nature of unconventional warfare. When the naval patrols began near the coast, pirates began to utilize support ships to operate farther out to sea. When pirates began holding merchant crews hostage, navies used special operations teams to recapture merchant ships under pirate control, and some shipping companies hired private security personnel.

Corbin Williamson

See also Antisubmarine Warfare; Strategy, Naval; Warfare, Submarine; Warfare, Surface

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TAIWAN

Taiwan is a mountainous subtropical island located in the West Pacific Ocean, between the East China Sea and the South China Sea, separated from mainland

China by the 180-km-wide Taiwan Strait. The island, with a land area of approximately 36,000 square kilometers, has 23 million residents. New Taipei, Kaohsiung, Taichung, and Taipei are the four largest cities, and Taipei is the capital. This entry describes the historical background and current state of the East Asian island.

From European Colonization to Japanese Colonization: 1624–1945

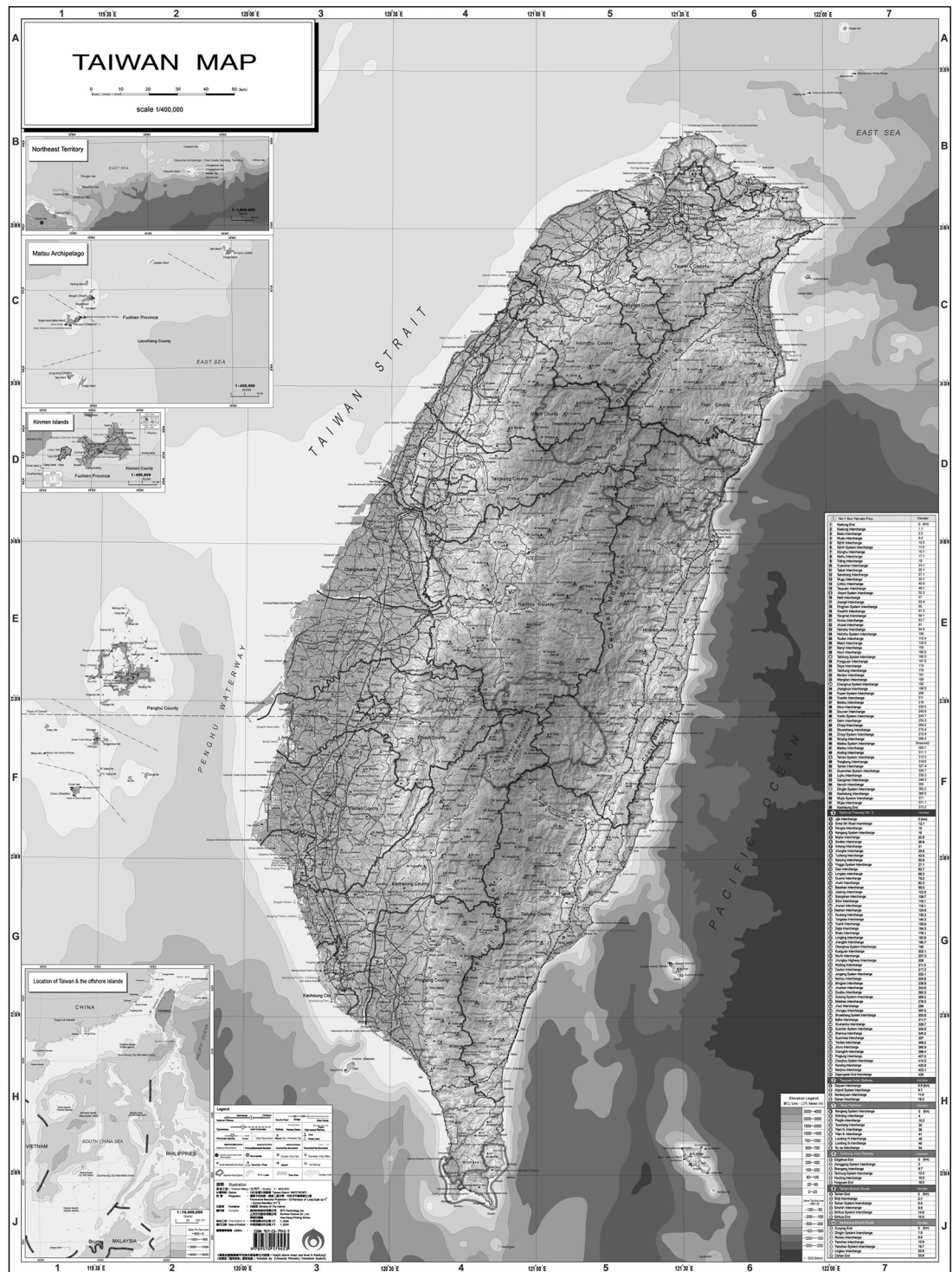
Early Portuguese sailors called Taiwan “Ilha Formosa” (beautiful island). The Dutch came to this island in 1624, when it was inhabited by Austronesian aboriginal peoples and Han Chinese. Spaniards arrived in 1626 to colonize northern Taiwan, but the Dutch ousted them in 1642. In 1662, Admiral Zheng Chenggong (Koxinga), a loyal Ming Chinese general, expelled the Dutch and started to rule the island. Zheng’s regime surrendered to Qing China after a sea battle off Penghu (Pescadores) in 1683. Taiwan became the official name of the island when the Qing Empire annexed it in 1684.

In 1874, the Japanese landed in southern Taiwan and defeated the native resistance. After China sent reinforcements to Taiwan and the British minister’s mediation in Beijing, the Japanese invasion army withdrew. From 1884 to 1885, French troops attacked northern Taiwan but failed to defeat the Chinese defenders. After these foreign encroachments, the Qing court established Taiwan as a province of China and chose Taipei as its provincial capital.

The Qing court tried to modernize Taiwan. However, Japan defeated the Qing Empire and forced Beijing to cede Taiwan in 1895. The Japanese ruled Taiwan as a colony for 50 years until 1945. The colonial government laid the foundation for Taiwan’s modernization by enforcing compulsory education, providing the necessary infrastructure, starting a public health service, and promoting agricultural and industrial development. Taiwan was used as the Japanese base for military operations to conquer Southeast Asia during the Second World War. After the war, Taiwan was restored to the Republic of China (ROC) in October 1945.

Taiwan After 1945

Taiwan was made a province of the ROC, founded in 1912 after the Qing Empire had been toppled. President Chiang Kai-shek moved the ROC



Map of Taiwan.

Source: Ministry of Interior, ROC, 2010 (Retrieved from <http://www.moi.gov.tw>).

government to Taipei after the People's Republic of China (PRC) was proclaimed in Beijing in 1949. A battle was fought at Guningtou in October 1949

on the offshore island of Kinmen (Quemoy), which was under the control of the ROC (Taiwan). The People's Liberation Army (PLA) lost the battle and

gave up the plan to invade Taiwan. The Korean War occurred in 1950, and the PRC shifted its attention from the Taiwan Strait to the Korean Peninsula.

After the end of the Korean War, the United States signed a mutual defense treaty with the ROC in 1954. The First Taiwan Strait Crisis occurred in the same year. The PLA began to bombard Kinmen on September 3, 1954, and took over some other offshore islands controlled by the ROC in 1955. The Second Crisis occurred on August 23, 1958, when the PLA's shore batteries bombarded Kinmen again. The artillery duel that followed lasted for 44 days. The PLA also engaged with the ROC's navy and air force during this crisis.

An undeclared truce has been in place after the Second Taiwan Strait Crisis. The economy took off, and Taiwan became an industrial society during the presidency of Chiang Ching-kuo, Chiang Kai-shek's successor. Under President Jimmy Carter, Washington cut off diplomatic relations with Taipei in 1979, but the United States has continued to maintain quasi-official relations with the ROC. Under the Taiwan Relations Act of 1979, the United States continues to provide defensive weapons and equipment for Taiwan's self-defense.

Taiwan started democratization in earnest after 1980. Chiang Ching-kuo initiated a political liberation process, and his successor Lee Teng-hui kept democratizing Taiwan through a series of constitutional amendments during the 1990s. Taiwan became a semipresidential democracy, in which the president is elected directly by the people and the prime minister is responsible to the legislature. The prime minister is appointed by the president. The term of office for the president is 4 years, and the president may be elected for a second term.

President Lee also improved relations between Taiwan and the PRC. In 1991, the PRC and Taiwan (under the name of Chinese Taipei) joined the Asia-Pacific Economic Forum at the same time. Both sides of the Taiwan Strait started to hold quasi-official meetings in 1993. Meanwhile, Taiwan started to accumulate huge foreign exchange reserves with a vibrant electronics industry.

In 1995, Lee accepted an invitation from Cornell University to attend his college reunion. Initially, the administration of Bill Clinton objected to Lee's visit, especially for the precedent it would set since no ROC official from Taiwan had visited the United

States since the Carter administration had normalized relations with the PRC in 1979. But under pressure from the U.S. Congress and over the strenuous objections of the PRC, the Clinton administration relented and granted Lee permission to come to the United States, while stressing his trip was strictly unofficial. The PRC interpreted this as a provocative move. Beijing reacted with a series of massive military exercises, including launching missiles toward the sea near Taiwan's major ports, before the first democratic presidential election in Taiwan. Lee won the election in March 1996.

Chiang Kai-shek, Chiang Ching-kuo, and Lee Teng-hui were all from the Chinese Nationalist Party, known in Taiwan as the Kuomintang, or KMT. Chen Shui-bian, from the Democratic Progressive Party, served as president from 2000 to 2008. From 1995 to 2008, the Taiwan Strait was one of a few hot spots that might ignite a great-power war in the post-Cold War era. As cross-strait relations deteriorated, Taiwan's economic growth started to slow down in the first decade of the 21st century. Thus, sustaining huge financial and human resources for nonproductive military purposes became more difficult than before.

After a decade of military downsizing programs, supported by both the Democratic Progressive Party and the KMT, the ROC's military has decreased to fewer than 300,000 personnel, equipped with weapons such as F-16 fighters and M-60A3 main battle tanks (purchased from the United States), Mirage-2000 fighters and *Frégate classe La Fayette* (purchased from France), and the homemade Indigenous Defense Fighter, protecting Taiwan, Penghu, and some offshore islands near Mainland China, such as Kinmen and Matsu. The ROC also claims sovereignty over the Spratly Islands in the South China Sea and Diaoyu Islands (Pinnacle Islands, or Senkaku Islands in Japanese) in the East China Sea.

In 2008, the KMT won the presidential election again. To reduce tension across the Taiwan Strait and revitalize Taiwan's economy, the Ma Ying-jeou administration negotiated with Beijing to conduct the Economic Cooperation Framework Agreement, and authorities on both sides of the Taiwan Strait signed it in June 2010. The KMT plans to utilize the Economic Cooperation Framework Agreement as a foundation to enhance Taiwan's security and economic interests in the next decade. On January 14,

2012, Ma received nearly 7 million votes and was reelected as president of the ROC.

Hsin-wei Tang

See also Asia; China, People's Republic of; Korean War (1950–1953); World War II

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TANKS

Tanks, the tracked, armored vehicles with large caliber and machine guns now associated with both offensive and defensive combined-force operations in front-line combat, were a technological innovation developed by the French and British armies during World War I in response to the new combat conditions of machine-gun created stalemate of trench warfare. Seen as an adjunct to infantry for many decades, tanks now contribute their mobility and lethality to the integrated battlefield.

World War I

The British Royal Navy Air Service used armored touring cars to protect planes against German cavalry in France and Belgium during 1914. Nautical terms associated with tanks to this day (“crew,” “turret,” “hatch,” “periscope” among others) can be attributed, in part, to interest in “landships” by Winston Churchill, then First Lord of the Admiralty. By early 1915, the British experimented with using caterpillar tracks to move a machine-gun-wielding armored device (called water “tanks” to keep secret their actual purpose) over barbed wire and across

trenches. British Mark I tanks first saw combat in the Battle of the Somme, September 15, 1916. Deployed in small groups, their crews received no training to coordinate with either ground or air forces. Tank enthusiasts claim the Battle of Cambrai (November 19 to December 7, 1917) as evidence of their advantage when deployed as a principal weapon en masse: 300 British Mark IV tanks engaged in a surprise attack along the Hindenburg Line, resulting in an initial gain of territory along a 7-mile stretch with only 4,000 Allied men lost and 7,000 Germans captured. The future U.S. Army general George S. Patton used armored Dodge touring cars in a 1916 raid against Pancho Villa's troops in Mexico, thus claiming to be the first American to use an armored vehicle in combat. By the fall of 1918, the U.S. First Brigade, under the then captain George S. Patton, would train with French Renault light tanks and engage in the Meuse-Argonne Battle as support for infantry.

Crews of British tanks as well as French Renault light tanks faced numerous dangers: lack of communication between tanks and with other forces, overheating and fire, exhaust fumes, and breakdowns on either side of the line. The U.S. Army corporal Henry Edwin Bianchi, in France in 1918, reports in his diary that American crews called tanks “crawling coffins.” The tanks drew so much enemy fire that infantry, far from seeing them as adjuncts, grew hostile to their appearance.

Interwar Developments

After the war, the disappointing performance of tanks when used in small groups by infantry commanders who expected them to perform in rugged or muddy terrain caused many to dismiss them as mere support for the infantry or, even more surprising, horse cavalry. A few visionaries (John Frederick Charles Fuller in Britain, Heinz Wilhelm Guderian in Germany, Patton in the United States) saw the potential of tanks to be used in large numbers combined with—rather than in support of—infantry and coordinated air power; several decades passed before the infantry-centric doctrine was overcome in the United States. As a result, the United States entered World War II with the lightly armored, but fast, medium Sherman tanks. Designed to support infantry, its 74-millimeter main gun's short 10-foot barrel had a low muzzle velocity, making it a poor match for the German Panzers.



Tank ploughing its way through a trench and starting toward the German line, during World War I, near Saint Michel, France.

Source: National Photo Company (Courtesy of Library of Congress).

During the Russian Civil War, the Red Army not only captured French Renault light tanks and British Mark V heavy tanks and Whippet light tanks issued to the White Army but also began to develop a Soviet-designed tank based on the French Renault. Later called the KS (Krasno-Sormovo), the first Soviet tank, with armor and firepower comparable with the Renault, was named “Freedom Fighter Comrade Lenin” on December 1, 1920. In 1922, as a result of combat experience, 15 KS tanks were produced, which for the first time carried a machine gun and a 37-millimeter gun in the turret. Seen initially as support for infantry, throughout the Civil War the developing Red Army tank forces developed tactics in actual combat and gained experience with rapid flanking tactics and simultaneous multiple sector breakthrough tactics similar to those used by the Allies on the Western front.

During the interwar period, the Russians purchased a variety of light and medium tanks from

British Vickers-Armstrong and chose to model their heavy tank on the Christie, a model rejected by the U.S. Army. The Russian T-28 medium and T-35 heavy tanks of the period were known for mobility and power. In the mid-1930s, Soviet and German mechanized war theories were remarkably similar, emphasizing mobility, surprise, and flexible tactics. However, after failures in the Spanish Civil War, Joseph Stalin purged the Red Army of commanders and tacticians and rejected the efficiency of large, independent armored units. Subsequent defeats in the Finnish-Soviet War (1939–1940) inspired a return to large tank units to be deployed en masse. Although the Soviets gained important lessons about maneuvering through difficult terrain, and sloping armor to increase protection, the reorganization of Russian tank forces would not be effected in time to deflect the impending German invasion.

By 1935, with Adolf Hitler in power, Germany maintained a combined force armored division

of 481 tanks. In contrast, in 1939, the U.S. Army had only 8 medium and 10 light tanks. Although German aircraft development and production would overshadow armored vehicles as World War II progressed, the Wehrmacht benefited from advantages in training and force coordination practiced in the 1939 invasion of Poland.

World War II

In 1940, when Germany turned these tactics (and 2,500 light Panzer I and II tanks) on Western Europe, French forces, focused on the Maginot Line, faced tactical and strategic challenges despite their superior numbers. In many ways, French tanks were superior to their German counterparts, particularly the FT Renault light tank, with innovative fully rotating turrets, and the Char (Renault) D 2, with a powerful 47-millimeter gun. German Panzer divisions also succeeded against

the British Matilda 1 (A11), an infantry support tank with superior armor. German use of advance artillery and airstrikes followed by coordinated attacks by tanks, motorized infantry, and motorized artillery, known as Blitzkrieg, also lent their tanks a reputation for terror. Even during the war in the mountainous Balkans, reports of German Panzers projected an image of invincibility in advance of further evidence.

During the battle for North Africa, German general Erwin Rommel developed new and influential principles of armored warfare, in particular the classic breakout strategy: concentrating force at one weak point to affect a breakthrough, bringing on forces to secure the flanks on both sides, and then quickly penetrating deep into the enemy's rear. However, despite Rommel's practiced use of speed, maneuverability, and surprise, and the addition of Mark III and IV Panzers, Germany's loss of air superiority and logistical difficulties led to its surrender on May 13, 1943.



M4 Tank on the production line, ca. 1942.

Source: Office of War Information.

Although played out over vastly larger territories, the tank battles of Operation Barbarossa—the German attack on the USSR—were determined by similar matters of supply and reinforcement. Despite the legendary German acquisition of Soviet territory in the summer of 1941, the Germans knew that their Panzer III and IV tanks were outclassed by the Soviet T-34, a highly maneuverable medium tank weighing 33 tons, with 1.8 inches of sloping frontal armor and a 76-millimeter gun. Nazi military leaders' arrogance prior to the invasion caused them to dismiss their knowledge of the Soviet tank, whose armor could withstand the relatively small-caliber rounds from Panzer IIIs and IVs. The German delay in producing heavy tanks, according to Gerhard Weinberg, meant that the new German designs, the Panther and the Tiger, would not appear until 1943. Although the Red Army lost 17,500 out of 24,000 tanks early on, the Soviet factories spread throughout the USSR could produce large numbers of T-34s and, after 1943, the IS (Iosif Stalin) heavy tank. Weighing 47 tons and carrying a 122-millimeter gun, the IS was remarkably mobile, allowing it to coordinate operations where the new models of German tank could only operate independently.

The German Tiger and the Panther exchanged mobility and maneuverability for firepower and armor. With 3 inches of sloping frontal armor, the Panzer V Panther's 75-millimeter 18-foot gun could penetrate the armor of the T-34 as well as the U.S. Sherman tank. The Tiger II's 88-millimeter gun could penetrate the Allied armor at 2 miles. However, delivery of these models never reached the numbers of the Panzer III and IV. Overwhelmed by production and replacement costs (complicated by the use of slave labor), not to mention the lack of raw materials, combined with treacherous weather, vast distances, and shortages in trained crews caused the Germans to fight battles of attrition at Stalingrad and Kursk. While the T-34, like the Sherman tank, was disadvantaged against more highly engineered German models, it could be, and was, mass produced cheaply by highly motivated civilians on the home front, as was the Sherman.

Cold War

In the years immediately following World War II, the Soviet Union deployed large numbers of armored divisions aimed at the Fulda Gap, the most likely

route of a Soviet invasion of Western Europe, causing the United States to continue manufacturing the M26 Pershing tank, a heavy tank developed late in the war. Although only 20 Pershings saw combat in Europe, they deployed in Korea, as did the "Easy Eight," a Sherman with a high velocity 76-millimeter gun. The M48 Patton, a medium tank, served in Vietnam, as did its successor, the M60, the last tank based on World War II technology. While these tanks and British Centurion were given to North Atlantic Treaty Organization Allies, satellites of the former Soviet Union acquired Stalin IIIs (IS-3 or *Shchuka*, a heavy tank developed late in World War II with a 122-millimeter gun capable of firing high explosive rounds) as well as T-34-85s which were produced into the 1950s. In addition, after 1958, the Soviet Union awarded or sold T-55s, a 40-ton medium tank with 4-inch cannon. T-55s had a range of 2,700 yards and modifications to the turret's ventilation in anticipation of nuclear war. Like the U.S. M60, the Soviet T62, produced after 1960, represents one of the last tanks based on World War II technology.

The United States did not deploy a large number of tanks in Vietnam due to the terrain and initial lack of enemy armor fielded by the North Vietnamese army. As the war continued, the North Vietnamese used the Polish PT-76 amphibious tanks as well as Soviet T-54s (capable of river crossings) and the T-59, the Chinese version of the T-54. It was a T-54 that crashed through the gates of the Presidential Palace in Saigon in 1975, signaling the war's end.

During this first phase of the arms race between the United States and the Soviet Union, many lessons were learned through observance of combat in the proxy wars fought in the countries to which each side supplied arms. The Soviet army, having relied in World War II on its vast numbers of T-34s to combat the more highly engineered German Panzers, continued to be guided by the principle "Numbers annihilate," according to Steven Zaloga. The USSR would continue to mass produce tanks that required only a few hours of training to operate. Even for its T-80 and later tanks, armed with guided missile capabilities, cost concerns minimized training. Soviet-trained satellite countries also suffered from lower target engagement skills and an inability to coordinate large unit tactics and interaction with individual crews.

Nowhere was this more evident than in the 1973 October War, also known as the Yom Kippur War. On October 6, 1973, along the Golan Heights,

170 Israeli Shot Kal (a modified British Centurion tank with 6 inches of frontal armor and a 4-inch rifled cannon) were surprised by 1,200 Syrian tanks (Soviet T-62s, T-54/55s, and T-34s) armed with Soviet night fighting equipment including laser range finders. Simultaneously, Egypt launched an attack in the Sinai, with 1,650 T-54/55s, 100 T-62s, and 100 T-34 medium tanks. As the war progressed, Jordan and Iraq supported Syria with both infantry and air power and an additional 420 medium tanks and 900 T-54/55 tanks. The Arabs planned to force Israel into a two-front war of attrition before it could deploy its superior mobile armor capabilities. Instead, at the war's end 12 days later, the vastly outnumbered Israeli forces were within artillery range of Damascus and within 20 miles of Cairo.

One advantage Israel had against Syria, Jordan, and Iraq was the high ground of the Golan, allowing its military personnel to see the approach of enemy tanks. Another factor in Israel's favor was the superior training given to the crews. Despite losing 75 tanks on the war's first day, the Israelis overcame the Syrian crews' night fighting equipment by identifying the laser beams with their night vision binoculars and coordinating responses between their remaining tanks, thus surviving the first night. The Israeli forces' superior targeting and maneuvering skills took advantage of the terrain and enabled them to exploit weaknesses in the capabilities of the T-55s and the Syrian crews.

M1A1/2 Abrams

In 1975, the lessons of the Yom Kippur War influenced the design of the 62-ton M1 Abrams, first produced in 1978. More than 3,000 were produced after 1980. With armor able to withstand virtually any blast as a result of layering of materials (including depleted uranium and Kevlar), the M1's first-strike capabilities were greatly enhanced by a computer-stabilized gun platform that allowed accurate targeting of the British 105-millimeter rifled tank gun (also used in the M60) while on the move. While the M1's top speed was governed to 45 miles per hour, when ungoverned it could reach speeds of up to 60 miles per hour. The increased weight of its successors (6 tons for the M1A1 and 7 tons for the M1A2) has decreased that speed slightly, though power from the 1,500-horsepower turbine engine remains ample. The tanks' cruising range, however, has suffered, dropping from 275 to 265 miles.

In addition to an improved suspension system and a nuclear, biological, and chemical protection system, the upgraded Abrams M1A1, of which 4,796 were built for the U.S. Army after 1985, carried a 120-millimeter cannon with a smooth bore barrel (as does the current M1A2). Among a variety of rounds available for the cannon are high explosive antitank rounds that deploy chemical energy penetrators effective against concrete bunkers and armored vehicles. The charge can be initiated by impact or by a proximity sensor, depending on the operational mode the tank crew chooses. In addition, 45-pound depleted uranium Sabot antitank rounds are also utilized, which deploy kinetic energy for an increased kill probability at greater ranges than the heavier high-explosive antitank rounds. The variety of ordnance, when combined with the thermal imaging system and laser range finder, makes the Abrams the most lethal tank in history.

The Abrams's main gun sight's optical and thermal imaging allows targeting through dust and fog as well as at night. Further enhancing targeting is the computerized stability of the gun platform. Enhanced communication systems allow each member of the crew to relay information about the terrain, increasing coordination within the tank as well as with other forces. In addition to the armored layers, the Abrams's crew also benefits from gun rounds stored in armored ammunition boxes and top panels that blow outward to avoid injury to the crew.

All three tanks in the M1 series also have a 7.62-millimeter M240 machine gun (often called the "coax," short for the term *coaxially*) mounted in-line and aimed with the main gun to kill targets within closer range, especially enemy ground troops. The commander can fire the main gun independently of the gunner in M1A2s. In addition, the commander can fire a 50-caliber machine gun mounted outside the hatch. The loader also fires a 7.62-millimeter M240 machine gun.

Although the M1A1 participated in many North Atlantic Treaty Organization exercises, it went untested in battle until February 24, 1991. During the Battle of 73 Easting in the Persian Gulf War, the 2nd Armored Cavalry Regiment discovered and destroyed two Republican Guard Tawakalna Division brigades even before the bulk of coalition forces arrived to destroy seven other elite Iraqi divisions.

The success of this 90-minute battle established the supremacy of the M1A1. The fact that tanks in

the Persian Gulf War fought at such distances (rarely approaching closer than 2 kilometers) provided evidence supporting the accepted U.S. military doctrine that tanks, even ones so versatile, cannot be used in urban combat. As a result, tank crews continued to be trained to fight in the open desert and improvements to the M1A1 during the interwar period focused on enhancing targeting and armor.

During Operation Iraqi Freedom, in 2003, however, Abrams M1A1s attached to the U.S. Army 3rd Infantry Division played a key role in the April 3–12, Battle for Baghdad, revealing both the effectiveness of tanks in an integrated, albeit urban, battlefield and their surprising vulnerability to asymmetrical warfare. Less surprising was their dependence on maintaining supply lines, particularly those for fuel.

The U.S. victory in 2003 demonstrated the versatility of the M1A1 but again exposed its primary weakness, its poor fuel consumption. With a fuel

capacity of 498 gallons, Abrams are multifuel capable; however, whether they are burning gasoline, jet fuel, or kerosene, they require 1.7 U.S. gallons per mile.

Improvements to the M1A2 are primarily related to electronic awareness and management of the battlefield. Future modifications of tanks will most likely focus on optimizing electronic navigation and situational awareness, as well as cost and fuel efficiency. Enhancing the ability to communicate with other components of combined forces will be increasingly important because the tank's future, as with all armament, will depend on its lethality in situations where air superiority is not as secure as it has previously been for the United States.

Jan-Ruth Mills

See also Armored Vehicles; Blitzkrieg Warfare; Iraq War (2003); World War I; World War II



A U.S. Marine Corps M1A1 Abrams Main Battle Tank, 2nd Tank Battalion, fires its main gun into a building to provide suppressive counterfire against insurgents who fired on other marines during a fire fight in Fallujah, Al Anbar Province, Iraq, 2004.

Source: Lance Corporal James J. Vooris, U.S. Marine Corps (released).

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TARGETING SYSTEMS

Air, land, and sea military forces use a number of mechanisms, either individually or together, to designate a target for attack, via a process known as fire control, and to guide a weapon toward its target.

Laser, optronic, satellite, radar, and infrared mechanisms are used by the military for targeting. Each of these techniques has advantages and disadvantages. It is for this reason that contemporary armed forces do not use a single targeting process to the exclusion of all others.

Laser Targeting Systems

The process of light amplification by stimulated emission of radiation (LASER) can be used for several targeting system applications, including laser target range finding, laser target designation, and laser weapons guidance.

Laser Target Range Finding

Laser range finding exploits the ability of laser radiation to travel at the speed of light in a straight line. This provides a precise measured distance between the origin of the laser beam and the target it is illuminating. Once this distance has been ascertained, it is possible to decide which type of weapon to employ against this target based on the target's distance and the weapon's range.

Although laser range finders provide precise measurements, their accuracy can degrade over distance. This is because a laser beam radiates in a cone-shaped pattern, that is, the farther the beam travels, the wider its coverage, potentially causing

it to reflect prematurely from other objects in front of the target, such as leaves on plants. This light is then reflected back to the range finder, providing a false distance to the intended target. Laser range finders can be affected by this phenomenon over distances in excess of half a mile. Laser range finders are available as stand-alone portable systems, such as the Vectronix LRF-1000, and on larger military platforms, such as within the ballistic fire control computer equipping the U.S. Army's M1A1 Abrams Main Battle Tank.

Laser Target Designation

Laser range finders can be embedded into larger fire control systems that also encompass a laser designator. A laser designator works in a similar fashion to a laser range finder (see above). However, the primary purpose of a laser designator is to illuminate a target for attack by a laser-guided weapon. A laser designator illuminates a target that is then detected and followed by the laser-guided weapon (see below). Laser designators are included in military systems such as the Thales Damocles combat aircraft targeting pod.

Laser Weapons Guidance

Laser weapons guidance is achieved by the use of laser sensors that can outfit surface-to-surface, air-to-surface, and surface-to-air weapons. Once a target is illuminated by a laser designator (see above), the laser sensor outfitting the weapon detects this laser radiation and transmits guidance commands to the weapons' flight control and propulsion systems, enabling the weapon to adjust its flight profile to ensure an accurate impact. Laser seekers are used by a number of contemporary weapons including the Lockheed Martin AGM-114 Hellfire family of air-to-ground and surface-to-surface missiles.

Optronic Targeting Systems

Optronic targeting systems use television to provide an electronic picture of a target both for fire control and weapons guidance. Television guidance has an advantage in that it provides a detailed view of a target. It cannot, however, depict a target obscured by smoke, dust, rain, or fog.

Optronic Fire Control

Optronic technology is used for target detection in a number of military applications. These include the



Captain Michael Edmonston of the 46th Expeditionary Reconnaissance Squadron operates a Predator MQ-1 aircraft from Balad Air Base, Iraq, on November 5, 2006. The Predators provide surveillance and come equipped with AGM-114 Hellfire missiles to combat the enemy.

Source: U.S. Air Force photo by Airman 1st Class Chad Kellum (released).

Selex Spotter long-range daylight observation camera, which can be used by ground troops to perform reconnaissance. Optronics technology is also used in the Lockheed Martin Arrowhead M-TADS/PNVIS (Modernised Target Acquisition Designation Sight/Pilot Night Vision Sensor) equipping the McDonnell Douglas/Boeing AH-64D Apache helicopter gunship. Due to the inherent limitations of television optronics with regard to obscurants such as smoke and bad weather, television targeting systems are often paired with other technologies, such as laser and infrared systems (see above and below), for use in circumstances where television will not function.

Optronics Weapons Guidance

Alongside its use as a fire control system, television targeting systems can be used for weapons guidance. One weapon using television guidance is

Raytheon's AGM-65 Maverick air-to-ground missile. Prior to launch, the crew of a combat aircraft deploying the AGM-65 activate the missile, which then relays images from its television guidance system into the cockpit. The pilot then moves the crosshairs positioned in the head-up display (a holographic projection of an aircraft's avionics) onto the intended target. The missile's own guidance system automatically follows the placement of the crosshairs, homing in on this location once the weapon is fired. Again, because of the limitations of television guidance, the AGM-65 Maverick can use laser (see above) and infrared (see below) guidance.

Satellite Targeting Systems

Geographical location information, known as geolocation, obtained from satellites can be employed for fire control and weapons guidance. The advantage

of satellite constellations, such as the Navstar Global Positioning System of the United States, is that they provide highly accurate coordinates of a particular target beyond the line of sight and over the horizon unlike laser, optronic, radar, and infrared mechanisms that have their range limited by the curvature of the earth. However, any satellite targeting and weapons guidance system has the risk that its transmissions may be jammed or switched off.

Satellite Fire Control

Geolocation information can be employed to provide satellite-guided weapons with the precise position of their target. Once a target has been designated, by using a laser designator for instance (see above), its geographical coordinates can be derived based on the targets' position relative to the laser designator. A number of weapons systems, such as the Bell AH-1W/Z Super Cobra attack helicopter, now have embedded satellite-based fire control equipment.

Satellite Weapons Guidance

Geolocation can also play an important role in weapons guidance, due to the precision that it can provide. Prior to the employment of a satellite-guided weapon, geolocation coordinates are entered into a weapons' guidance system. At the same time, the weapon will automatically ascertain its own location using its integral satellite guidance system. Once launched, the weapon continually adjusts its flight path based on its own position relative to the targets' location. Satellite guidance can be used to hit both stationary and moving targets. A number of weapons systems use satellite guidance, including Boeing's Joint Direct Attack Munition (JDAM) series of air-to-ground bombs and the Raytheon/BAE Systems M982 Excalibur 6-inch artillery shell.

Radar Targeting Systems

Radar (radio direction and ranging) is used for fire control and weapons guidance. A radar can derive the position of an object and its speed by measuring the time elapsed between the transmission of a microwave pulse toward a target and its reflection back to the radar from the target, a process that occurs at the speed of light. Radar has a distinct advantage over other technologies in that it provides the accurate position of an object in all weather, and

at day or night. However, like satellite-guided targeting systems, radar can be vulnerable to jamming, and its performance can be degraded due to so-called stealth techniques employing radar absorbent materials that reduce the quantity of microwave energy reflected back to the radar.

Radar Fire Control Systems

Radar is employed extensively as a fire control technique as it can rapidly detect moving and stationary targets. Once a target is discovered, the radar operator must determine whether the target is friendly or hostile. This is achieved through the employment of an Identification Friend or Foe (IFF) interrogator. IFF systems send a radio transmission to a transponder fitted to an aircraft, ground vehicle, or ship. The IFF interrogator is programmed to listen for a particular coded radio signal reply transmitted once the transponder has been activated by the IFF interrogator. If no reply is received, or if the coded reply is different from that which the IFF interrogator has been programmed to receive, then the target can be designated as hostile. The radar operator can then mark the target as hostile on his or her radar screen. This information, together with the targets' location, can be transmitted to a specific weapons system, such as a surface-to-air missile. The radar can continue to illuminate the target once the weapon is launched to allow a radar seeker inside the missile to guide the weapon to its target. Some radars can perform general surveillance to detect targets and fire control to provide precise targeting coordinates for weapons. One example is the Raytheon AN/MPQ-65 radar, which equips the MIM-104 PAC-3 Patriot medium-to-high altitude surface-to-air missile system.

Radar Weapons Guidance

Radar can be used to provide weapons guidance. This can be achieved using a radar seeker—a passive system that monitors the electromagnetic spectrum to detect reflections from fire control radar. Alternatively, an active radar guidance system can outfit a weapon allowing it to track a target's position after launch.

Both active and passive radar detections have advantages and disadvantages. A passive radar seeker requires the fire control radar to continuously illuminate a target during the entire engagement



Senior Airman Jessica Morgan Miller is performing an identification friend or foe operational checkout on the B1 Bomber on November 9, 2006, at an undisclosed air base in Southwest Asia. The system allows for aircraft encountered during flight to be identified and placed into categories showing whether the aircraft is military, civilian, or enemy.

Source: U.S. Air Force photo by Master Sergeant Franklin D. Hayes Jr. (released).

sequence from a weapon's launch to target interception. However, the fire control radar can be jammed using an electronic or physical radar countermeasure, or destroyed by an antiradar weapon. Active radar seekers do not require fire control radar to continuously illuminate the target during the engagement sequence, although these weapons can be vulnerable to deception and disruption by physical and electronic radar countermeasures. Several radar-guided weapons exist, including the passive radar-guided Patriot surface-to-air missile and the active radar-guided MBDA Exocet family of anti-ship missiles.

Infrared Targeting Systems

Finally, weapons targeting can be performed by exploiting the infrared portion of the electromagnetic spectrum. Infrared is produced by heat reflected

and generated by objects. Infrared can be detected both during the day and at night, although it can suffer disruption by weather phenomena, such as rain. Infrared-guided weapons are also vulnerable to jamming, which can be achieved by using hot flares that produce a comparatively warmer, and therefore more attractive, target for such a weapon.

Infrared Fire Control Systems

Infrared fire control systems typically include a camera detecting infrared light, which is presented on a television screen. Objects do not typically have a uniform heat signature, making it possible to discern the outline of an object relative to its surroundings. For example, a main battle tank with a running engine will produce a bright image, particularly around its engine compartment, and the vehicle will tend to be warmer than its surrounding

environment, allowing the operator to discern its silhouette. Infrared fire control systems include Lockheed Martin's AN/AAQ-39 product equipping the U.S. Air Force's AC-130U fixed-wing gunships.

Infrared Weapons Guidance Systems

Infrared detection is used extensively by air-to-air and surface-to-air missiles for weapons guidance. This is because an aircraft's engine exhaust presents a highly conspicuous heat signature compared with the surrounding sky. Nevertheless, such weapons can be vulnerable to disruption and deception from hot flares launched by a targeted aircraft in self-defense. Alternatively, a so-called directional infrared countermeasure can be employed to project bright light directly into the missiles' infrared seeker to blind it. Infrared-guided weapons include the Russian 9K38 Igla (North Atlantic Treaty Organization reporting name SA-18 "Grouse") antiaircraft missile and the U.S. AIM-9 Sidewinder air-to-air missile.

Thomas Withington

See also Global Positioning System; Missiles, Air-to-Air; Missiles, Conventional; Missiles, Cruise; Radar; Tanks

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TECHNOLOGY

Military technology includes the machines of war and also ideas about how to employ these tools, or what is known as doctrine. Modern militaries make extensive use of technology and actively pursue technological innovation through ongoing research and development programs to improve

existing technology and invent new forms of it. It can be argued that technology is more important to militaries than it is to civilians; in the military, lives depend on it. Today's militaries strive to maintain technological superiority over competitors. The United States spends vast amounts of money on maintaining current forces of aircraft carriers, fleets of aircraft, and cutting-edge land forces, while at the same time dedicating resources to future systems, like space and cyber technology. In the modern era, technology on the battlefield is a necessary component of war.

Theory

Technology, and especially military technology, has improved vastly in the recent era. In the past century, technology changed the way nations fight. The early part of the 20th century introduced aircraft, submarines, and atomic bombs, all important to the methods of war. The latter part of the 20th century ushered in another set of changes to warfare, with developments in computer technology and the start of the Internet. The most difficult aspect of technological change is putting the pieces to work for strategic advantage. It is not enough to have good technology; it must also be incorporated into military thinking. In the 18th century, rifled guns were available, but smoothbore guns persisted. It was not until standardization became commonplace, prices fell, and commanders realized the potential for more accurate fire that the rifled musket came into widespread use. Likewise, some technologies today are cost prohibitive (space weapons), untested (non-lethal crowd control devices), or too radical to fit into military planning. Shaping the battlefield is a key idea in warfare. The strategist must analyze the situation and decide how to best employ the tools of war. Furthermore, strategies must be developed to maximize technological advantage so that it translates into strategic success.

Successful incorporation of technology begins with intelligence, surveillance, and reconnaissance assets. Pulling from a wide variety of sources, including space platforms, aerial observation, signals intelligence, the Internet, and human assets, the commander will analyze the battlespace to determine areas of exploitation. Even before committing forces, a good commander will have thought through the risks and rewards of the upcoming conflict.

Technology is seen as a panacea for diverse problems. In the past 20 years, the U.S. military has sought to maximize technological advantages in order to become more successful and efficient on the battlefield. As well, high-technology systems continue to evolve that promise a way to prevent future wars. In the former are military technologies that make the U.S. military the most powerful in the world, such as the navy's fleet of aircraft carriers and their battle groups, to the Air Force's 5th Generation JSF-35 Fighter now in development. In the latter are a wide variety of technologies that may help avoid war, such as the deterrent capabilities of nuclear weapons to the obviously overwhelming capabilities in American possession.

Military Technology in Practice

The United States currently holds a technological lead over the rest of the world, although some countries may challenge the United States in specific spheres. Its dominance is partly because of American ingenuity and entrepreneurial spirit and, in no small part, due to the vast resources invested in research and development. Its technological advantage includes land, air, and sea weapons systems, and extends into space and the cyber realms as well. Furthermore, American research outstrips the rest of the world. This lead, if continued, may in fact prevent conventional wars on the scale of World War II. The Cold War, marked by high technology, many analysts believed prevented a full-scale war between the United States and the USSR, because both sides had nuclear arsenals that could destroy the other. The deterrent effect of technology prevented war. In the modern age, high-speed Internet, global positioning satellites, and a worldwide communications network are breaking down historical barriers. Information flow is democratizing formerly "closed" countries and introducing them to the market system. As well, personal computers, cell phone technology, and future improvements in video teleconferencing technology will affect human relations and market dynamics around the world.

In the military sphere, the United States has made significant strides in incorporating high technology into strategy. During his most recent tenure as secretary of defense from 2001 to 2006, Donald Rumsfeld promoted the idea of "transformation," or making the military more mobile, flexible, and transportable.

The idea was dependent on high-tech systems replacing legacy systems. New technologies included better arms and armament for individual infantrymen as well as lighter, faster vehicles to transport them. The lighter systems in turn allowed more efficient transport to the far reaches of the globe at times of crisis. Among the new technologies were the Stryker armored combat vehicle, the Squad Automatic Weapon, and the doctrine of the Brigade Combat Team. Rumsfeld's plan was not entirely adopted for financial, strategic, and situational reasons (the United States had just gone to war in Iraq in 2003). The military continues to evolve technological systems for multiple uses. New versions of legacy systems are still in development, with improvements to the M1A2 Abrams Main Battle Tank, the Aegis-equipped guided missile cruisers and *Virginia*-class submarines for the Navy, and the futuristic JSF-35 Joint Strike Fighter aircraft as well as the proposed B-3 bomber aircraft.

In addition to these advances, the United States has made great strides in space, cyberspace, and communications technology. Based on military applications, but with obvious benefits to the civilian market, the United States has invested heavily in communications satellite technology. Real-time command and control, imagery, intelligence, as well as targeting information are all examples of military uses of improved communications technologies. Cell phones, Global Positioning System receivers for directions, and satellite radio are just a few of the technologies that have trickled down from classified government applications to civilian use.

The military improves on existing systems to make them more efficient and also researches technology that has the potential to change the nature of warfare itself. In the recent past, these significant changes include stealth technology, night vision equipment, and network-centric warfare. In the future, significant changes may include different aspects of nanotechnology, unmanned systems, and satellite and Internet technologies. In addition, there are other breakthroughs that cannot be foreseen or predicted; technology development is often radical.

Technology change can be characterized in two ways: evolutionary and revolutionary (sometimes termed disruptive). Evolutionary technology change is indicated by incremental changes in existing technology that improve on older models. One example is the improved fighter aircraft designs with one airframe: the World War II North American P-51

Mustang, which went through significant changes through its A, B, C, and D models. Revolutionary or disruptive technology change includes invention and paradigm shifts. It results in technology that is radically different from existing technology and completely changes technological advantage as well as thinking patterns. Examples include the introduction of submarines in the early 20th century; rockets and missiles during World War II; and the atomic bomb, and in the modern era, the Internet. Finally, there are game-changing technologies that embody both evolutionary and revolutionary change: examples include the launching of the HMS *Dreadnought* in 1906, a warship (evolutionary) that incorporated revolutionary changes in sea power that made all other warships immediately obsolete. Another modern-day example is the unmanned aerial vehicle, known by a number of different acronyms, which is an evolution of existing aviation technology with the revolution of pilotless flight. Unmanned aerial vehicles are still so new that there is a lack of consensus on how to use them properly.

Often technology is developed long before it is widely available to the public at large. Another issue is choice. Competing technologies vie for support and market share, and sometimes one type of technology becomes dominant. The competition between VHS and Betamax is an example; the success of the personal computer over Macintosh is another (although Mac is trying to fight its way back into the market). This poses both benefits and drawbacks. On the one hand, a single technology can lead to standardization, interchangeability, and reduced training requirements. By committing to one technology, everyone becomes familiar with it and costs are lower. However, a single technology is rarely good at every task. Furthermore, one source for technology can lead to a monopoly, or even a crisis in logistics and supply. As an example, currently the United States is banking on the Lockheed Martin JSF-35 to replace all fighter aircraft in the air force, navy, and Marine Corps inventories. The one airframe means that there is only one aircraft for all (fighter) pilots to train on, and serviceability should be better. Standardization of parts will also be a benefit. However, in early testing, the JSF is neither as good as current point interceptors (specifically F-15s and F-16s) nor as good at ground attack as other specific airframes (like the F/A-18 and A-10). It can, however, do a number of roles marginally better. Furthermore,

by choosing one airframe, the military depends on one supplier (in this case Lockheed Martin) for all the planes. If problems emerge in the type, all services will have the same problematic plane.

However, it is argued that one good product is better than too many, as was the case in Germany in World War II where more than 100 different types of aircraft were built. The Germans suffered from too many types of planes to supply and operate during wartime. Ideally, it seems as if a few good types are the best bet for competition, operability, supply, and evolution in most technologies.

In military spheres, it is important to match technology with strategy to produce desired results. Although the U.S. military is the most sophisticated and technology-rich military in the world, a danger exists in too much reliance on military technology. In certain cases, lower technology forces will fight more advanced militaries in what is now referred to as asymmetrical warfare. For the most part, it is always preferable to have the technological advantage. However, technology does not necessarily equate to successes in war. The great military theorist Carl von Clausewitz argued that technology was important, but will (spirit, motivation, etc.) was even more important. Great strategists will be mindful of not only the benefits of technology but also its limitations and drawbacks in a particular battle or war of technology in the fight they are considering.

The U.S. military currently benefits from a number of advanced technologies in the field. From computer and communications networks for coordination in the battle space to night vision goggles for night fighting, to the cornucopia of weapons systems from light machine guns through heavy artillery to air superiority, the American soldier has absolute technological superiority over an enemy. The U.S. military, which is well equipped with these advanced technologies, can rely on these systems but must be mindful that others will try to take advantage of this reliance. Furthermore, a competent enemy will always try to avoid, circumvent, or overcome these advantages. In Iraq, the insurgents fought high-tech coalition forces with decidedly low-tech solutions, including improvised explosive devices. Using garage door openers and antiquated cell phones as detonators and unexploded ordnance as bombs, they threatened soldiers with low-tech weapons.

When the logic of technology is understood and adopted, it can create an advantage in the society, the

economy, or in the military sphere. It is important to have good technology and cutting-edge research, but it is more important to be able to fit technology into a strategy for use on the battlefield. Military personnel on the ground, in the air, or at sea do not benefit from technology that is sitting on a shelf; they need to be able to use it. During World War II, the Germans were the first to develop jet aircraft for combat operations; they achieved a technology breakthrough. But they had difficulty putting the aircraft to use, including serious production problems. The Americans, on the other hand, were able to develop atomic power, and use it to defeat Japan in the Pacific. Although the decision to develop and use the atomic bomb is controversial to this day, this weapon is an example of a technological change in military history.

Conclusion

Militaries will continue to develop new, more efficient, and more effective technologies. And, they will continue to strive for technological solutions to strategic problems. The military that is most successful technologically will continue to promote research and development, design improvement, and close ties with civilian industry and universities. In the near future, successful militaries will tap into, and continue to expand, evolutionary and revolutionary technologies in order to keep pace with existing technology as well as technology that is unforeseen today. However, the best military minds will remember the paradox of technology: while there are benefits, there are also drawbacks, and it is important to not become too reliant on technology. Technology may influence the character of wars, but the nature of humans will likely remain the same.

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See also Economy and National Defense; Lockheed Martin; Research and Development; Rumsfeld, Donald

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TELEVISION

From its introduction, television has broadcast the drama of conflict. In its glory years after 1948 and until the early 1960s, cowboys and Indians shot it out in TV Westerns, Americans battled the Germans and Japanese in reruns of World War II combat pictures, and broadcast journalists covered Cold War stories. By the start of the Vietnam War, new technologies and slackened military censorship allowed extensive television coverage of the battlefield, generating heated controversies over the role of the media in wartime. Meanwhile, fictional portraits of war on the small screen became more graphic amid the general liberalization of culture in the 1960s and 1970s and advancing cynicism about the military and government. By the 1980s and 1990s, a slew of small, successful military operations; tighter official restrictions on the news media; and a revived admiration for the World War II generation had led to a rehabilitation of the military's televised image. Finally, the age of 24/7 news coverage of the Global War on Terror since September 11, 2001, has brought new complexity to the depiction of armed conflict on television.

Historical Overview

The technologies that made television possible emerged from the medium it would eventually displace—radio. In the 1930s, the Radio Corporation of America began developing ways to transmit visual images through radio waves. As part of its paean to futuristic machinery, the 1939 World's Fair in New York gave the Radio Corporation of America (RCA) space to publicize the new wonder. Production of television sets soon began but was halted during World War II when the Federal Communications Commission (FCC) enjoined RCA to pour its energies into laboratory research, not television promotion. At the war's end in 1945, Americans still looked to the printed word, radio, and film for entertainment and

news, with roughly equal devotion to all three. Such parity would be shattered by television in the 1950s.

Cold War Television

In 1948, Americans started buying television sets at escalating rates, with 9 out of 10 households owning one by 1960. Programmes on the four early networks (CBS, NBC, ABC, and Du Mont) featured sports, children's shows, situation comedies, dramas, roller derby, and even live feeds from the United Nations. Images of war also traveled the airwaves between 1948 and 1965—as journalism, entertainment, or both.

Although television coverage of the Korean War was limited mainly to stateside opinion programs, nonfiction images of conflict appeared in documentaries. Prominent among these was the Emmy-winning *Victory at Sea*, a 13-hour, 26-part, made-for-television epic aired on NBC in 1952 and 1953. This rousing production, developed in conjunction with the Department of the Navy, told the story of American naval warfare during World War II. NBC showcased a mighty maritime force doing battle with evil enemies. Dramatic footage punctuated the story of defeats and ultimate victory. The theme music lent an air of Hollywood theater to images of real action. Part entertainment, part reportage, and part patriotic spectacle, *Victory at Sea* sounded familiar notes in 1950s-era television combat.

In an age of Cold War–fueled murkiness and fear, televised World War II films and TV Westerns typically pitted archetypes of American virtue against shadowy, sometimes shadowing foes—reassuring contests with predictable outcomes. One popular and long-running television program offered a somewhat more ambiguous picture of the military, a bridge between 1950s-era bombast and Vietnam-era cynicism. The World War II drama *Combat!*, which aired on ABC in 152 episodes between 1962 and 1967, not only told familiar tales of martial camaraderie and strength but also showed lapses in military discipline and the breakdown of unit cohesion. Sergeant Saunders (Vic Morrow) and Lieutenant Hanley (Rick Jason) led men who refused orders, men who accidentally killed civilians and lost their minds over it, men who deserted, men who shot themselves rather than fight. By 1966, with an anti-war movement rising to oppose the Vietnam War, *Combat!*'s producers aired “Hills Are for Heroes,”

a two-part affair that mourned the tragedy of men dying for military objectives of temporary value. Cynicism about the military expanded even further during and after the Vietnam War, with television shows such as *M*A*S*H* (1972–1983) and *Tour of Duty* (1987–1990) addressing the damaging effects of combat and indignities of military life.

The Vietnam Era

The Vietnam War and the 1960s changed the depiction of armed conflict on television, and, in the process, ignited fierce debate over the relationship between the media and the military.

Television news broadcasting expanded just in time to offer more detailed coverage of the guerilla war in South Vietnam. In 1963, CBS and NBC lengthened their nightly newscasts to 30 minutes (ABC followed suit in 1967), just as the Buddhist crisis threatened to undermine President Ngo Dinh Diem's authority and the credibility of his American sponsors. As the United States broadened its commitment to South Vietnam, the conflict in Southeast Asia became increasingly newsworthy. With the longer evening news broadcasts and improved technology, television reporting would define the coverage.

A roster of prominent broadcast journalists made their names covering Vietnam, including Morley Safer, Ed Bradley, Garrick Utley, Ted Koppel, Dan Rather, and Mike Wallace. These reporters brought American television-viewing audiences unprecedented access to combat. They interviewed wounded soldiers and marines, documented the destruction of South Vietnamese villages, recorded interrogations of enemy prisoners, and gradually exposed the confused and tragic nature of the conflict. A prescient documentary, *It's a Mad War*, airing in December 1964 on NBC, exposed friction between U.S. military advisers and their South Vietnamese clients. Segments on Saigon highlighted the corruption and decadence of urban elites and their disengagement from the rural war. During the communist Tet offensive of early 1968, television networks showed chaos on the streets of Saigon. The beloved CBS anchor Walter Cronkite famously visited Vietnam after Tet, declaring the war a stalemate. President Lyndon Johnson understood that Cronkite's defection signaled broader disaffection in middle America.

The graphic and critical nature of some television coverage has led many observers, including the administrations that managed the war, to blame

television for the “loss” of Vietnam. Such critics have impugned the patriotism of journalists and unfavorably compared them with World War II reporters who had “gotten on the team.” It was true that unlike during World War II and most of the Korean War, there was no formal censorship of the press in Vietnam—journalists observed normal constraints about reporting troop movements and such, but otherwise they could go more or less where they pleased and say what they liked. And there was little question that by 1970 or so, much television coverage of Vietnam emphasized dwindling morale, drug use among the troops, racial tensions, and even the murder of officers by their men.

Other commentators have argued differently. They have pointed out that television networks and the media in general wished to see the United States prevail in Vietnam from the beginning and provided patient and supportive coverage. When television reporters showed problematic American operations—as in Morley Safer’s infamous report from Cam Ne in 1965—they did so not to suggest that the United States pull out but often because they wanted their country to do better. And hawkish figures, including the ABC anchor Howard K. Smith, continued to support the war in Vietnam amid the erosion of public approval of the conflict in 1967 and 1968. Along the same lines, scholars Daniel Hallin, William Hammond, and others have demonstrated that television coverage was not nearly as bloody or as negative as critics suggest. The television network executives agreed to a military request to minimize graphic footage of casualties in 1966, partly because they understood that public appetite for such images was limited, partly because they tended to support the war, and partly because they wanted to protect their access to the war zone. Accordingly, various studies have shown that only a small portion of news broadcasts from Vietnam showed violence or casualties.

Finally, scholars of popular opinion hold that support for the Vietnam War, like the Korean War before it, eroded when mounting casualties failed to bring measures of progress or purpose. True, the television news reported those casualties, and certain dramatic televised moments—a South Vietnamese officer shooting a Vietcong prisoner in the head among them—lent a desperate and brutal character to the coverage. But those elements appeared just as often, if not as vividly, in other forms of journalism,

and there’s little evidence that television in particular drove the public from the administration’s side of things. Had the war gone better, these commentators have suggested, television broadcasts would have reported that.

In any event, the Pentagon came away from Vietnam vowing that the press, particularly television reporters, would never again get unfettered access to the battlefield. Even the British, in their 1982 Falklands/Malvinas War, learned the Vietnam lesson and severely limited images of casualties. The next year, when the Reagan administration sent troops to Grenada, reporters were excluded from the island for 2 days. The Pentagon provided the main visual material from the conflict, telling a largely bloodless story. The 1989 invasion of Panama featured similar restrictions on war correspondents, though now the Defense Department allowed carefully selected “pools” of journalists to report on the conflict. The strategies paid off—quick, decisive victories for the United States—and the military enjoyed high public approval ratings

War and Television Since 1989

The Persian Gulf War

The military judged its management of the media in the 1980s a success. Thus, when war with Saddam Hussein broke out in 1991, the brass similarly limited reporters’ access to the battlefield—while carefully putting out their own imagery of combat. The result was a paradox—Americans saw both more and less of war than ever before.

Television journalists bristled at military controls imposed during Operation Desert Storm. If they wanted access to the war zone, pool reporters had to sign agreements limiting their movements and restricting the kinds of stories they could air. Some American reporters were so frustrated that they joined pools from other nations. Others defied the rules and had their credentials stripped by military authorities. CBS correspondent Bob Simon and his crew entered the battlefield without military handlers and were arrested by Iraqi troops. Thus, most of what Americans learned about the war came in televised press conferences by General Norman Schwarzkopf. Because these were beamed back to audiences in the United States, the military effectively bypassed the media and allowed Schwarzkopf to speak directly to the public.

At the same time, the Persian Gulf War also produced unprecedented televised drama, much of it airing on the Cable News Network (CNN), the only 24-hour news service available around the world at that time. Saddam let its correspondents report live from Baghdad—behind enemy lines—as coalition bombs started falling on January 17, 1991. Audiences around the globe thus witnessed the start of the war even before the Pentagon had officially announced it. Meanwhile, in CNN coverage as well as in Schwarzkopf's briefings, the public saw airstrikes against the Iraqis in extraordinary footage shot from far above the battlefield, the nose cones of missiles, and the cockpits of aircraft. This carefully censored footage, along with computer graphics aired by the news networks, lent the Persian Gulf War a video-game quality—the military tended only to release footage of missiles that hit their targets.

The military also restricted access to the ugly sides of war. Few images of casualties made it to television screens. Yet even when reporters shot footage of the infamous “Highway to Hell” airstrikes at the end of the conflict, they tended not to air it. Various polls have shown that the American public rejects graphic imagery of war; during the 1993 UN operation in Somalia, some viewers recoiled when networks aired footage of jubilant Somalis dragging the corpse of an American soldier through the streets of Mogadishu. To some media critics, the result in the 1990s was to paint a rosy picture of war, making it romantic again after Vietnam. Military officials responded to such complaints with their standard post-Vietnam argument—unfettered access led to distorted coverage and the potential erosion of public support back home.

The successful military missions of the 1980s and 1990s, along with their relatively bloodless appearances, helped revive public faith in the armed forces. Both reflecting and helping shape that development was a renewal of World War II nostalgia. As World War II veterans died off in increasing numbers and Americans observed 50th anniversaries (Pearl Harbor, D-Day, the war's end), mass media broadcast the World War II memory boom. Hollywood films and popular books led the way in the 1990s, but by the new century, the trend hit television. HBO aired the 10-part miniseries *Band of Brothers* in 2001 and *The Pacific* in 2010; Ken Burns's documentary *The War* ran on PBS in 2007. These productions included more gritty realism about combat than some earlier

World War II films and television documentaries but still cloaked that material in “Good War” ideology. Indeed, at the televised dedication of the World War II memorial in May 2004, President George W. Bush explicitly equated the moral stakes of that conflict with those of the new war on terror—a war that was playing out on the small screen.

Television and the Global War on Terror

Although Muslim fundamentalists had carried out terrorist attacks before September 11, 2001, it was on that day that millions of television viewers quite literally watched the Global War on Terror begin. Many Americans heard about the first plane hitting the World Trade Center by word of mouth or through the Internet, radio, or television, and then saw the second one happen live. Footage of the attacks, rescue efforts, and cleanup played endlessly on the small screen for months afterward.

The ensuing wars in Afghanistan and Iraq saw changes in the way television reporters and other journalists covered conflict. Responding to critiques from the press about the tight restrictions of the Persian Gulf War and the War in Afghanistan in 2001, the Pentagon “embedded” journalists with military units during the Iraq War in 2003. This provided greater access to combat—and thus the unprecedented spectacle of live images from the battlefield—but tethered reporters to particular units and the whims of their military handlers. With more cable news networks than in 1991, as well as videos posted on Internet news sites, the sheer volume of footage from Iraq (and much less so, Afghanistan) was staggering. But television news coverage generated a host of debates and controversies.

New communications systems allowed live feeds from the war zones. This made for dramatic television, but some media critics also felt that it gave viewers snapshots of action (or desert sand whizzing by) rather than in-depth coverage of the war's purposes or consequences. It was left up to the networks to glue all this footage together into a coherent narrative, which they did with varying degrees of success. Like in 1991, some critics felt that the constant footage sanitized the war and numbed viewers to combat's results. Network rules and the dangers of combat continued to prevent the most graphic images from reaching stateside audiences. Meanwhile, though American networks focused on

military technologies and the progress of the war, Arabic networks, such as Al Jazeera, emphasized the human toll of the conflict.

Another controversy involved the notion of journalistic objectivity. Some commentators suggested that embedding reporters with particular military units compromised their ability to report the war dispassionately, with the correspondents dependent on military protectors not only for their lives but also for their press credentials. Also, the wave of patriotism that followed 9/11 carried forward, for a time, into the Iraq War of 2003–2011. MSNBC and Fox News used American flags and the administration term *Operation Iraqi Freedom* to frame their coverage. Some observers had no objection to American reporters and networks taking the American side in the war, while others argued that the role of the media is not to serve as a mouthpiece for the government and military. But if television is about ratings, these strategies worked—the patriotism of the Fox News Channel and MSNBC led to huge increases in viewership for those news organizations. Audiences seeking a grittier view may have turned to the short-lived Iraq drama *Over There* in 2005 or the popular counterterrorism thriller *24* between 2001 and 2010.

Looking ahead, the controversies television networks have faced in their depictions of war may recede as more and more viewers turn to Internet news sites, blogs, and websites like YouTube. During the Vietnam War, the small screen offered the only footage of the conflict. With so many other sources now available, it is proving beyond the powers of any particular government, news organization, or military branch to manage the material reaching homefront audiences. In any case, the basic question remains: Does this greater access to combat imagery make for a more informed and sensitive citizenry, or one numbed to the violence of war?

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See also Censorship; Internet; Journalists, Embedded; Literature and War; Media Relations, Military; Propaganda; Public Affairs, Military; Public Opinion on War and the Military; War Films

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TERRORISM

The subject of terrorism is of central relevance for policymakers in the United States and allied governments. Domestically, homeland security has become an endemic feature of American culture at every level of government and in the private sector. In particular, the armed forces of the United States have significantly adapted operational doctrine and training to respond to the global threat posed by terrorists.

Terrorism has been a disturbing attribute of human conflict since the first accounts of warfare and conquest were recorded. History is replete with episodes of terrorism, commonly rationalized as a necessary means to achieve superior ends. Nations and empires have eliminated enemies on a grand scale, insurgent movements and zealous individuals have violently sown widespread disorder, and political and religious ideologies have glorified extremist behavior—incidents that perpetrators hold to be completely justifiable.

The evolution of terrorism in the modern era is primarily, though not exclusively, a conflict between adversaries waging, on one side, a self-described war on terrorism and, on the other, a self-described holy war in defense of their religion. It emerged in the modern era but has taken new forms in the decade following the attacks of September 11. This entry first considers the definition of terrorism, its causes,

and its goals and then examines the characteristics of terrorism in the post-9/11 world. The use of weapons of mass destruction and the indiscriminate use of violence typify this modern terrorism, which has been manifested in asymmetric warfare carried out by urban guerrilla movements and suicide bombings.

Defining Terrorism

Some acts of political violence are clearly acts of terrorism. Most people would agree that politically motivated bombings of marketplaces, massacres of enemy civilians, and routine government use of torture are terrorist acts. Behind each incident of terrorist violence is some deeply held belief system that has motivated the perpetrators. Such systems are, at their core, extremist systems characterized by intolerance. Extremism is a precursor to terrorism—it is an overarching belief system terrorists use to justify their violent behavior. Those who violently act out their extremist beliefs are terrorists. However, it is important to appreciate that there are many definitional gray areas. Depending on which side of the ideological, racial, religious, or national fence one sits, political violence can be interpreted either as acts of unmitigated terrorist barbarity or as freedom fighting and national liberation.

Among experts, there is some consensus—but no unanimity—on what kind of violence constitutes an act of terrorism. Governments, individual agencies within governments, and private agencies have each developed, adopted, and designed their own definitions, and academic experts have proposed and analyzed dozens of definitional constructs. One complication is that most definitions focus on political violence perpetrated by dissident groups, even though many governments have practiced terrorism as both domestic and foreign policy. The result is a remarkable variety of approaches and definitions. This lack of unanimity, which exists throughout the public and private sectors, is an accepted reality in the study of political violence.

The United States has not adopted a single definition of terrorism as a matter of government policy, instead relying on definitions developed from time to time by government agencies. These definitions reflect the U.S. traditional law enforcement approach to distinguishing terrorism from more common criminal behavior. The following definitions are a sample of the official approach.

The U.S. Department of Defense defines terrorism as the unlawful use of, or threatened use of, force or violence against individuals or property to coerce and intimidate governments or societies, often to achieve political, religious, or ideological objectives. The U.S. Code defines terrorism as illegal violence that attempts to intimidate or coerce a civilian population, influence the policy of a government by intimidation or coercion, or affect the conduct of a government by assassination or kidnapping. The Federal Bureau of Investigation has defined terrorism as the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives. For the State Department, terrorism is premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience.

Using these definitions, the following common elements can be used to construct a composite definitional model: Terrorism is a premeditated and unlawful act, in which groups or agents of some principal engage in a threatened or actual use of force or violence against human or property targets. These groups or agents engage in this behavior intending the purposeful intimidation of governments or people to affect policy or behavior with an underlying political objective.

Causes of Terrorism

Experts have long struggled to identify the central causes of terrorist violence. The most fundamental conclusion in this regard is that terrorism originates from *many* sources. The final decision by an individual or group to accept a fringe belief or to engage in terrorist behavior is often a complex process. The decision to engage in violence may be subsumed within the following classifications.

Sociological Explanations

Sociological explanations generally hold that terrorism is a product of intergroup conflict that results in collective violence. The sociological approach argues that terrorism is a group-based phenomenon that is selected as the only available strategy by a weaker group. In essence, the disadvantaged group asserts its rights by selecting a methodology—in this

case, terrorism—that from the group’s perspective is its only viable option. The selection process is based on the insurgent group’s perceptions and its analysis of those perceptions.

Psychological Explanations

Psychological approaches to explaining terrorism broadly examine the effects of internal psychological dynamics on individual and group behavior. Although individuals and groups act out of certain idiosyncratic psychological processes, their behavior is neither insane nor necessarily irrational. Those who engage in collective violence are, in many respects, “normal” people. Some experts argue that the decision to engage in political violence is an outcome of significant events in individual lives that give rise to antisocial feelings. They actively seek improvement in their environment or desire redress and revenge from the perceived cause of their condition. Research has *not* found a pattern of psychopathology among terrorists. Thus, psychological explanations are fairly broad approaches to the dynamics of terrorist behavior. These explanations may be summarized as follows:

- Terrorism is a technique for maintaining group cohesion and focus. Group solidarity overcomes individualism.
- Terrorism is a necessary process to build the esteem of an oppressed people. Through terrorism, power is established over others, and the weak become strong. Attention itself becomes self-gratifying.
- Terrorists consider themselves an elite vanguard. They are not content to debate the issues, because they have found a truth that needs no explanation. Action is superior to debate.

Terrorism as Rational Choice

An important explanatory theory for terrorism is that terrorist violence is a choice, a rational decision from the revolutionary’s perspective, to adopt specific tactics and methodologies to defeat an adversary. These methodologies are instruments of rational strategic choice, in which terrorism is adopted as an optimal strategy. All that is required for final victory is the political and strategic will to achieve the final goal. Selecting terrorism is a process based on the experiences of each insurgent group

and is thus the outcome of an evolutionary political progression. As a result, terrorism is simply a tool, an option, selected by members of the political fringe to achieve a goal. Terrorism is a deliberate strategy, and success is ensured as long as the group’s political and strategic will remains strong.

Objectives and Effectiveness of Terrorist Violence

Politically violent groups and movements show certain similarities in their objectives. Several commonalities may be summarized as follows:

Changing the Existing Order

At some level, all terrorists seek to change an existing order, even if it is simply a short-term objective to disrupt the normal routines of society by inflicting maximum casualties. When evaluating what it means to change an existing order, one must take into consideration the different profiles of terrorist movements, their motives, and the idiosyncrasies of individual terrorists.

Psychological Disruption

An obvious objective is to inflict maximum psychological damage by applying dramatic violence against symbolic targets. When terrorist violence is applied discerningly, the weak can influence the powerful, and the powerful can intimidate the weak. Cultural symbols, political institutions, and public leaders are examples of iconic (nearly sacred) targets that can affect large populations when attacked.

Social Disruption

Social disruption is an objective of propaganda by deed. The ability of terrorists and extremists to disrupt the normal routines of society demonstrates both the weakness of the government and the strength of the movement; it provides terrorists with potentially very effective propaganda. When governments fail to protect the normal routines of society, discontent may spread throughout society, thus making the population susceptible to manipulation by a self-styled vanguard movement. For example, bombing attacks on public transportation systems certainly cause social disruption. A group might be attacked specifically to deter those individuals from traveling through a region or territory.

Creating a Revolutionary Environment

Dissident extremists understand that they cannot hope to win in their struggle against the state without raising the revolutionary consciousness of the people. For many terrorists, propaganda by deed is considered the most direct way to create a broad-based revolutionary environment. Revolutionary theorists predict that terrorism would force the state to overreact, the people would understand the true repressive nature of the state, and a mass rebellion would occur—led by the revolutionary vanguard.

The Effectiveness of Terrorist Violence

Terrorism is arguably effective—however defined—in some manner to someone. The key for terrorists is to establish a link between methods used and desirable outcomes. Of course, success and effectiveness are subjective considerations. In this regard, terrorists tend to use unconventional factors as measures. For example, terrorists have been known to declare victory using the following criteria:

- *Acquiring global media and political attention:* At times, focusing world attention on the terrorists' cause is itself a measure of success.
- *Having an impact on a target audience or championed constituency:* Terrorists use propaganda by deed to affect audiences, hoping to rouse them to action or incite a society-level response. Victim audiences, neutral audiences, and championed groups can all be affected by a terrorist event. When an incident occurs, extremists and their supporters assess reactions from these audiences.
- *Forcing concessions from an enemy interest:* Enemy interests—broadly defined—will sometimes concede to the demands of a politically violent movement. Concessions vary in magnitude. They can be made as short-term and immediate concessions or as long-term and fundamental, whereby an entire society essentially concedes to a movement.
- *Disrupting the normal routines of a society:* An obvious measure of effectiveness is whether the normal routines of society can be affected or halted by a terrorist incident or campaign. Some targets—such as the commercial transportation industry—can be selectively attacked to the point where their operations will be disrupted.

- *Provoking the state to overreact:* One outcome that terrorists allude to as a measure of effectiveness is the state's imposition of violent security countermeasures in response to a terrorist environment.

Historical Prelude to the Modern Terrorist Environment

The histories of every nation give rise to specific anti-state environments that are unique to their societies. Recent history from North America and Europe illustrate this point.

In the United States, leftist terrorism predominated during the late 1960s through the late 1970s, at the height of the anti-Vietnam War and people's rights movements. Acts of political violence—such as bank robberies, bombings, and property destruction—took place when some Black, White, and Puerto Rican radicals engaged in armed protest. This changed in the 1980s, when the leftist remnants either gave up the fight or were arrested. Around this time, right-wing terrorism began to predominate when some racial supremacists, religious extremists, and antigovernment members of the Patriot movement adopted strategies of violence.

In the United Kingdom, the terrorist environment was shaped by the sectarian conflict in Northern Ireland, which was characterized by both antistate and communal violence from 1969 until the peace settlement in 1999. The nationalist Provisional Irish Republican Army (IRA) was responsible for most acts of antistate political violence directed against British administration in Northern Ireland. During the same period, Protestant Loyalist terrorism tended to meet the criteria for communal terrorism rather than antistate terrorism, because Loyalist paramilitaries targeted pro-IRA Catholics rather than symbols of governmental authority. The IRA responded in kind, so that more than 3,500 people had been killed on both sides by the 1999 cease-fire.

In West Germany, from the late 1960s through the mid-1980s, the leftist Red Army Faction engaged in a large number of bank robberies, bombings, assassinations, and other acts of antistate violence aimed at destabilizing the West German government. The Red Army Faction also targeted the North Atlantic Treaty Organization presence in West Germany, primarily focusing on U.S. military personnel. After the

fall of the communist Eastern bloc in 1989 and the reunification of Germany, Red Army Faction-style leftist terrorism waned. Around this time, rightist neo-Nazi violence increased—much of it was directed against non-German *Gastarbeiters*, or guest workers. The perpetrators of this violence were often young skinheads and other neofascist youths. Many of these rightist attacks occurred in the former East Germany.

In Italy, the leftist Red Brigade was responsible for thousands of terrorist incidents from the early 1970s through the mid-1980s. Originating in the student-based activism of the late 1960s and early 1970s, Red Brigade members were young urban terrorists whose campaign is best described as a nihilist attempt to undermine capitalism and democracy in Italy. By the late 1980s, Italian police had eliminated Red Brigade cells and imprisoned their hard-core members. During this period, Italian neofascists also engaged in terrorist violence, eventually outlasting the leftist campaign, and remained active into the 1990s.

In Spain, antistate terrorism has generally been nationalistic or leftist. Without question, the most prominent was the nationalist and vaguely Marxist ETA (*Euskadi Ta Askatasuna*). ETA was founded in 1959 to promote Basque independence. ETA was rife with factional divisions—at least six factions and subfactions were formed—but their terrorist campaign continued, despite the considerable political rights the Spanish government granted them and the loss of popular support among the Basque people. A right-wing terrorist group, Spanish National Action (*Accion Nacional Española*) was formed as a reaction to ETA terrorism.

Post-9/11: The New Terrorism and the Modern Terrorist Environment

The post-9/11 era is different from previous eras because the new terrorism espouses vaguely articulated political objectives, indiscriminate attacks, attempts to achieve maximum psychological and social disruption, and the potential use of weapons of mass destruction. It also includes an emphasis on building horizontally organized, semiautonomous cell-based networks. The modern era is characterized by the threat of weapons of mass destruction, indiscriminate targeting, and intentionally high casualty rates.

The New Terrorism should be contrasted with traditional terrorism, which was typically characterized by the following:

- Clearly identifiable organizations or movements
- Use of conventional weapons, usually small arms and explosives
- Explicit grievances championing specific classes or ethno-national groups
- Relatively surgical selection of targets

New information technologies and the Internet create unprecedented opportunities for terrorist groups, and violent extremists have become adept at bringing their wars into the homes of literally hundreds of millions of people. Those who specialize in suicide bombings, car bombs, or mass-casualty attacks correctly calculate that carefully selected targets will attract the attention of a global audience. Cycles of violence thus not only disrupt normal routines but also produce long periods of global awareness. Such cycles can be devastating. The growing threat from the New Terrorism adds a unique dimension to the terrorist environment of the 21st century.

Weapons of Mass Destruction and Objectives of the New Terrorism

The redefined morality of the New Terrorism opens the door for methods to include high-yield weapons and for targets to include large populations. Symbolic targets and enemy populations can now be hit much harder than in the past; all that is required is the will to do so. Terrorists may strike with the central objective of killing as many people as possible. They are not necessarily interested in overthrowing governments or changing policies as their primary objectives. Rather, their intent is simply to deliver a high body count and thereby terrorize and disrupt large audiences. For example, the 1993 and 2001 attacks on the World Trade Center in New York City by radical Islamists, 1995 sarin nerve gas attack in Tokyo by Aum Shinrikyo, and the 1995 bombing in Oklahoma City by American terrorists were all intended to kill as many civilians as possible and to demonstrate the vulnerability of society. Little if any consideration was given to changing government policies.

The Threat From Homegrown Jihadists

There is a significant threat of terrorist attacks from domestic terrorists who adopt violent jihadi

beliefs even though they live or are raised in Western countries. The attacks in March 2004 in Spain, July 2005 in Great Britain, and November 2009 at Fort Hood in the United States are examples of this new threat.

The Madrid Train Attacks

Spain suffered its worst terrorist attack on March 11, 2004, when terrorists detonated 10 bombs on several commuter trains in Madrid after delivering them in backpacks dropped at key locations. The explosions were synchronized, occurring within a span of 20 minutes at the height of rush hour, when the trains were certain to be crowded with commuters. Casualties were high: 191 people were killed and more than 1,500 were injured. Casualties could have been more severe, but fortunately, three additional bombs (also in backpacks) failed to explode and were later detonated safely by Spanish authorities.

The London Transportation System Attacks

On July 7, 2005, four bombs exploded in London, three on London Underground trains, and one on a double-decker bus, killing more than 50 people and injuring more than 700. The attack was well synchronized by suicide bombers, so that the three Underground bombs exploded within 50 seconds of each other. Several days later, on July 21, an identical attack was attempted but failed when the explosives misfired. Four bombs—like those in the first attack, three on Underground trains and one on a bus—failed to detonate because the explosives had degraded over time. Investigators quickly identified four suspects from video surveillance cameras. All were residents of London. A fifth bomb was found in a London park on July 23, abandoned by a fifth bomber. Authorities were acutely concerned because British-based cells—sympathizers of al Qaeda—were responsible for both the attacks.

The Fort Hood Incident

On November 5, 2009, a gunman opened fire in the sprawling military base at Fort Hood, Texas, killing 13 people and wounding 29. The attack occurred inside a Fort Hood medical center, and the victims were four officers, eight enlisted soldiers, and one civilian. The shooter was Army Major Nidal Malik Hasan, a psychiatrist at the base who treated returning veterans for combat stress. After the Fort

Hood attack, investigators uncovered connections between Hasan and an openly radical cleric named Anwar al-Awlaki. Like Hasan, Awlaki grew up in the United States, having been born in New Mexico. He eventually became a dedicated jihadi who specialized in recruiting English-speaking Muslims and Muslims who were raised in the West, the rationale being that such recruits would be able to blend in more easily. Awlaki also became known as a propagandist who maintained a website with his writings about how to wage jihad. He was believed to operate from Yemen.

Asymmetrical Warfare and the New Terrorism

The concept of asymmetrical warfare refers to the use of unconventional, unexpected, and nearly unpredictable methods of political violence. Terrorists intentionally strike at unanticipated targets and apply unique and idiosyncratic tactics. This way, they can seize the initiative, redefine the international security environment, and overcome the traditional protections and deterrent policies that societies and the international community use.

The Appeal of Asymmetrical Conflict

Dissident terrorists are quantitatively and qualitatively weaker than conventional security forces. In today's intensive security environment, they simply cannot prevail or last indefinitely in an urban-based guerrilla campaign. Because of this, state-level rivals must resort to unconventional and subversive methods to confront U.S. and Western interests. At the same time, they must also deliver maximum propaganda and symbolic blows against the seemingly overwhelming power of enemy states or societies.

Netwar: A New Organizational Theory

The New Terrorism incorporates maximum flexibility into its organizational and communications design. Semiautonomous cells are either prepositioned around the globe as sleepers (e.g., the 2004 Madrid terrorists) or they travel to locations where an attack is to occur (e.g., the September 11 hijackers in the United States). They communicate using new cyber and digital technologies. An important concept in the new terrorist environment is the notion of netwar, in which organizational strategies are linked to technologies in the information age. In this way, independent small groups maintain

communication and organizational solidarity. These new “internetted” movements have made a strategic decision to establish virtual linkages via the Internet and other technologies.

Case: The Suicide Bombers

“Human bombs” have become an accepted method of political violence in a number of conflicts. Although some examples of suicidal behavior by ideological extremists can be cited, most incidents have been committed by ethno-national and religious terrorists. When considering the tactical and symbolic value of suicide attacks, it is instructive to recall the words of the Chinese military philosopher Wu Ch’i: “One man willing to throw away his life is enough to terrorize a thousand.”

In some conflicts, suicide bombings have occurred only rarely. For example, the IRA, ETA, and European leftists and rightists did not use suicidal violence. In others, suicide attacks have been common. The Tamil Tigers in Sri Lanka, Hezbollah (Islamic Jihad) in Lebanon, several Palestinian groups in Israel, and al Qaeda are all examples. In other conflicts, suicide operations became a signature method, as with Chechen rebels and Iraqi insurgents.

The New Terrorism is thus characterized by a new doctrine that allows for the use of weapons of mass destruction, indiscriminate attacks, maximum casualties, technology-based terrorism, and other exotic and extreme methods. It is trying to break the enemy’s will to resist by whatever means are at its disposal.

Gus Martin

Note: Portions of this entry are adapted from Martin, C. G. (2012). *Understanding terrorism: Challenges, perspectives, and issues* (4th ed.). Thousand Oaks, CA: Sage.

See also al Qaeda; Asymmetric Warfare; Civil Defense; Counterinsurgency; Global War on Terrorism; Guerrilla Warfare; Hamas; 9/11 (2001)

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TEXTRON, INC.

Textron Inc. is a multi-industry conglomerate with a worldwide network of aircraft, defense, industrial, and finance businesses.

Textron was started by Royal Little in 1923 as the Special Yarns Corporation of Boston, Massachusetts. It became the Atlantic Rayon Company and prospered during World War II, in part due to its parachute-manufacturing contracts with the U.S. Army. It renamed itself Textron in 1943 to emphasize its production of synthetic fabrics. After the war, it diversified into fabric-related household products and clothing and began acquiring nontextile companies beginning in 1953.

In 1960, Textron purchased Bell Aircraft, the makers of Bell Helicopters, for \$32 million. The three divisions of Bell Aircraft—Bell Helicopter, Bell Aerosystems, and Hydraulic Research—were combined into Bell Aerospace. Today, Textron’s Bell Division manufactures advanced military helicopters and tilt-rotor aircraft for the U.S. government and commercial helicopters for corporate, utility, police, and medical helicopter operators.

The Bell 47, a single-engine, twin-blade light helicopter, entered military service in 1946 and was used extensively in the Korean War as the H-13 Sioux. The television series *M*A*S*H* showcased the H-13. The Bell 47 was also used by the National Aeronautics and Space Administration during simulation tests of the lunar lander.

The UH-1 Iroquois, nicknamed the Huey, entered production in 1960 as the first turboshaft helicopter used by the U.S. military. More than 7,000 were used in the Vietnam War. The Huey was originally

designed as a medical evacuation helicopter and was prototyped in 1956. It has been continually upgraded, and in its current configuration, the UH-1Y entered into Marine Corps service in 2008 as a twin-engine, four-blade chopper.

James Hardyman became Textron's president in 1989 and initiated several important acquisitions, including Cessna Aircraft, a maker of small- to medium-sized business jets, in 1992. Cessna's key designs include Models 172, 182, and 206.

The year 1989 also saw the start of production of the tilt-rotor vertical takeoff and landing vehicle, the Osprey V-22, in a joint venture between Textron's Bell Division and Boeing. The V-22 grew out of a Department of Defense project for an aircraft that melded the capabilities of a helicopter and a turboprop cruiser. The Bell-Boeing version was commissioned in 1983. Today, it is being fielded by the U.S. Air Force and the Marine Corps and has been deployed for combat operations in Iraq and Afghanistan. The V-22 has a crew of four and can transport up to 32 troops. Its cruising speed is 277 miles per hour and it has a range of just more than 1,000 miles. It can be configured with two high-powered machine guns.

The V-22 has been the subject of controversies over its cost and safety record. The original 1986 development budget was \$2.5 billion, but as of 2008, more than \$27 billion has been spent, and a similar amount will be needed to complete production. In 2001, three Marine Corps officers were implicated for falsifying maintenance records to increase the appearance of V-22 reliability. Five V-22 crashes have been reported as of April 9, 2010, when three U.S. servicemen died after their aircraft went down in Zabul Province, Afghanistan.

In 2009, the Textron Defense Systems (TDS) subsidiary, which is responsible for the development of military and aerospace products, reported \$2 billion in earnings. The TDS unit manufactures air-launched weapons, smart submunitions (cluster bomblets), intelligent battlefield munitions and sensor systems, and ground and airborne surveillance systems.

Among TDS's most important systems are two air-launched delivery systems. The first, the CBU-97 Sensor Fuzed Weapon, is a U.S. Air Force 1,000-pound-class freefall Cluster Bomb Unit. The CBU-97 carries 10 submunition dispensers (the BLU-108), each carrying four small projectiles called "Skeets." The weapon can detect and penetrate

various vehicles, including tanks, using infrared and laser sensors. The CBU-97 was first deployed in combat on April 2, 2003, in Operation Iraqi Freedom. The second delivery system, the Universal Aerial Delivery Dispenser (U-ADD), is a 35-pound generalized airborne delivery system for lethal and nonlethal payloads.

In addition to the BLU-108 submunition dispenser, TDS offers two other munition and submunition products. The Clean Area Weapon (CLAW) is a 64-pound cluster bomb used against personnel and materiel. The STS Submunition is derived from the BLU-108 and can be deployed from cruise missiles and drones. TDS offers several other munition products that combine explosives, sensors, and communication electronics into compact delivery packages. All feature safeguards to protect against nondetonation and are up to 99% effective in this regard.

TDS also produces the Medium Wave Infrared Array (MIRA) hardware/software solution to support intelligence-gathering activities aboard USAF RC-135 Cobra Ball reconnaissance aircraft. The Mobile Microwave Landing System (MMLS) has been successfully used to land aircraft in hostile terrain, such as Bosnia, Kosovo, Albania, and Afghanistan.

The most cutting-edge weapons program undertaken by TDS relates to Directed Energy Weapon (DEW) systems, commonly called laser weapons. Its ThinZag ceramic-based laser technology has been contracted to two different government agencies for development and testing: the Department of Defense Joint High Powered Solid State Laser Program, and the Defense Advanced Research Projects Agency High Energy Liquid Laser Area Defense System. ThinZag is an improvement over earlier crystalline-based lasers in terms of durability and cost-efficiency. While promising, DEW technology still has to overcome challenges related to weather conditions, power consumption, and focus dispersion. TDS's government contracts indicate that it will work on research to overcome these challenges.

TDS offers key technology to the U.S. Homeland Security Department through its Adaptable Radiation Area Monitor (ARAM). The device uses spectroscopy to detect radiation in land-based and marine applications. It is designed to monitor flows of traffic without detection or impact. ARAM can be deployed at fixed locations or be carried by

vehicles and persons for portable detection requirements. The U.S. Secret Service employs at least one truck-deployed ARAM unit, and the device is used by various law-enforcement organizations, such as the New Jersey State Police.

AAI Corp, a Textron unit since 2007, develops the RQ-7B Shadow unmanned aircraft system (UAS) for use by the U.S. Army and Marine Corps, which has seen service in Iraq. It is used for surveillance and delivery operations in sensitive areas.

Textron seems well positioned, with its intelligence-gathering and threat-detection systems, to continue its close cooperation with the U.S. military and security establishment as the United States continues to engage in counterterrorism operations

Eric Bank

See also Aircraft, Reconnaissance; Ammunition; Boeing; Bombs, Cluster; Helicopters

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Websites

Textron Corporation: <http://www.textron.com/>

Textron Defense Systems: <http://www.textronsystems.com/>

THUCYDIDES

Thucydides was an Athenian historian of the Peloponnesian War (431–404 BCE). The conflict between Athens, Sparta, and their allies convulsed the entire Hellenic world and inspired him to compose the first analytic contemporary military history in Western literature. His work is not only a primary source for the military and political events of the 5th century BCE but also a fundamental text for the study of political science and international relations.

What little is known of Thucydides personally is derived almost entirely from his own work in which he figures as an actor. Born about 460 BCE, he was an unabashed admirer of Pericles and his political and imperial policies. In 424 BCE, Thucydides entered into office as one of Athens's 10 annually elected generals. While serving in the north Aegean, he had the misfortune to find himself pitted against Brasidas, one of the most capable Spartan commanders of the war. Failure on campaign led to his exile by the Athenian assembly, and he presumably spent the remainder of his life working on his history, which breaks off with the events of 411 BCE.

An experienced soldier, his history may be read with profit by those interested in operational detail. Above all, however, it is his higher level strategic and political analyses that have remained timeless. As it has come down to us, his history consists of eight books. It details the background and outbreak of the war, the inconclusive first 10 years of fighting in the so-called Archidamian War, the unstable peace brokered by Nicias, Athens's catastrophic expedition to Sicily, and the opening years of the renewed hostilities that eventually resulted in Athens's final defeat. Methodologically, Thucydides explicitly favored rigorous autopsy with a didactic purpose. He notes that his work is "a possession for all time" and that, human nature being what it is, future statesmen among his readers would likely find themselves in situations similar to those it describes. His treatment is therefore mainly restricted to serious analysis of politics and war with little room for ethnographic or mythological digressions.

His multilayered analysis of the outbreak of the war includes the note that the "truest" cause was the growth of Athenian power and the fear it inspired in the Spartans. This structural and psychological explanation accords well with the modern Realist theory of power transition crises leading to hegemonic war. However, Thucydides's narrative is not simply deterministic. Fear, honor, and self-interest on the part of even second-tier powers such as Corinth, Corcyra, and Thebes led to decisions and policies that mattered and affected the course of events.

In his analysis of strategy, Thucydides emphasizes the need for preparation and husbanding of resources for war. He commends rational and careful planning and condemns analysis based on hope or wishful thinking. He approves of Pericles's Fabian policy of avoiding pitched battle with the superior

Peloponnesian army and minimizing risk in favor of asymmetric reliance on the fleet, massive financial resources, and city walls. While the Spartans could and did repeatedly devastate Attica, they were unable to starve Athens into submission until they achieved naval superiority with Persian backing.

On the other hand, Thucydides also notes the limits of strategy and rational planning, no matter how carefully conceived. The hazards of war can be unpredictable. Chance, politics, and the enemy all play a part. No one could have predicted the plague that swept through Athens in the early years of the war. After the death of Pericles, the Athenians disregarded defensive strategies and looked toward generals and policies that promised greater rewards, but at higher risk. Likewise, he notes that the citizens of Chios had properly and rationally judged their moment to revolt against Athens, but found success far more difficult than they first imagined. In Thucydides's estimation, even so great a failure as the Sicilian expedition was not so much due to the Athenians' strategic error as to political divisions and the nature and determination of their opponents.

Thucydides's hard-nosed understanding of international relations is highlighted by the treatment of smaller powers at the hands of Athens and Sparta. It is not justice but expediency that moves the Athenians to spare the population of Mytilene in 428 BCE and the Spartans to execute the defenders of Plataea in 427 BCE. This point is driven home by the famous "Melian Dialogue," in which the Athenians explicitly note that human nature and their own desire for safety drive men to rule where they can. This conception of states being necessarily guided by their interests rather than morality has deeply influenced modern Realist thinking regarding international relations.

Whether or not Thucydides personally approved of this amoral approach to international relations, he reveals an extremely negative view of such power-maximizing calculations when they are applied to internal disputes. His discussion of civil strife at Corcyra, and the nature of subsequent revolutions, is the first such analysis in Western scholarship. Thucydides notes that the violent effects of revolutions can quickly escalate, resulting in the complete breakdown of civil society. This is particularly true under the tensions of war and when foreign interference is likely. Indeed, so dangerous is revolution that Thucydides notes that it was not disaster in Sicily

but internal dissension that brought on the final defeat of Athens.

Above all, for Thucydides, war is a dangerous business that must be approached prudently. Even when approached with caution, it is a harsh teacher capable of emphasizing the worst aspects of human nature and defeating rational calculation.

Joseph Raymond Frechette

See also History, Military: Approaches to; Realism in International Relations

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TIME, MILITARY

Most U.S. civilians equate military time with the 24-hour clock, a convention for counting the hours of the day from 0 to 24, and with the expression "Zulu time," a code for the time of day at the meridian through Greenwich, England. But for the U.S. military's global operations, precise time is crucial to navigation, geographical positioning for locating forces and targets, and secure communications. Military time, therefore, is more than a method for counting the hours. It is also an authoritative source of time and a set of methods to disseminate synchronized time worldwide.

The key system for relating time to location information has become the Global Positioning System (GPS). GPS employs a constellation of earth-orbiting satellites, depends on precise atomic frequency standards (also known as "atomic clocks"), and distributes Coordinated Universal Time (UTC), an international time scale closely coordinated with international civilian scientific bodies and shared

with civilian users. Through a joint armed services program, the U.S. Air Force manages procurement and operations for GPS.

The 24-Hour Clock

In this method of counting the hours, the day runs from 00:00:00 to 23:59:59 UTC. UTC is derived from International Atomic Time with leap seconds added or subtracted as needed to conform to earth's rate of rotation. The 24-hour clock coexists with the more common civil convention of counting the hours of the day from 1 through 12, repeated for a.m. and p.m. Designed to avoid confusion between a.m. and p.m., the 24-hour clock is widely used around the world for both military and civilian purposes, especially for operating transportation systems and global scientific observations like weather reporting. Clock- and watchmakers have made customized analog dials and digital displays for timekeepers to display the 24-hour clock.

The origins of the 24-hour clock lie in the idea of dividing the day into 24 equal hours, a time-reckoning method that Greek astronomers adopted in antiquity from revised Babylonian and Egyptian practices. For centuries, the 24-hour clock remained just one of several locally determined ways to divide the day. Gradually, beginning in the late 19th century, Western countries began to adopt the present 24-hour international system, coincident with efforts to introduce standardized global time zones and a prime meridian for the world.

Zulu Time

The prime meridian through Greenwich, England, or zero degrees longitude, governs time of day in its time zone and serves as an international reference time. The zone is designated with the letter Z, and "Zulu" is the word customarily spoken for this zone's letter to ensure clarity during radio and telephone transmissions. Greenwich Mean Time represents the time at the prime meridian, though outside of the United Kingdom UTC—which is broadly analogous—is often used in its place. For military operations that may cross time zones, the time at the zero meridian, rather than multiple local times, serves as a common reference for synchronizing all participants. The idea of assigning a letter of the alphabet to each time zone originated in the 19th century, when zones were first proposed.

Time and the U.S. Department of Defense

The U.S. Department of Defense (DOD) has a responsibility to find and maintain astronomical and atomic standards of time and time interval and to disseminate time information. This activity is part of the DOD's wider mission to provide aids to navigation for its own purposes and for operating the GPS. The U.S. Air Force manages the GPS constellation for DOD. The National Space-Based Positioning, Navigation, and Timing (PNT) Executive Committee, cochaired by the deputy secretaries of defense and transportation, coordinates the system.

The U.S. Naval Observatory (USNO) in Washington, D.C., is the official source of time for DOD and, together with the National Institute for Standards and Technology in Boulder, Colorado, is a standard of time for the civilian activities of the United States. One of the oldest scientific units in the federal government, the observatory operates a master clock in Washington, D.C., and an alternate master clock at Schriever Air Force Base (AFB) in Colorado Springs, Colorado. The USNO master clock is an ensemble of about 50 atomic clocks—cesium frequency standards and hydrogen masers—that contribute to UTC, the international time scale overseen by the International Bureau of Weights and Measures near Paris, France. About 300 atomic clocks in more than 70 national laboratories around the world contribute to International Atomic Time and to UTC, which is International Atomic Time plus or minus a leap second to ensure approximate agreement with the time derived from the rotation of the earth. These leap seconds are inserted on the advice of the International Earth Rotation and Reference Systems Service to which the USNO also contributes earth orientation data. USNO staff members provide the GPS satellites with time from the master clock, monitor the GPS signal at specialized stations, and provide the GPS air force managers with timing data from the GPS system. The observatory has provided time for military and civilian users since 1845, first with a time ball as a visual signal and later with telegraph, radio, and telephone time signals to listeners across the country.

Time and GPS

GPS became a fully operational one-way radio source for the world's most accurate time and location information in 1995. In addition to the USNO's

monitoring of GPS time, staff at the Naval Research Laboratory played a role in developing the space-qualified atomic clocks for GPS in the 1970s, as no atomic clocks had flown in space before the Naval Research Laboratory experiments, and the Naval Research Laboratory continues to test suitable atomic clocks for the program.

Clocks are fundamental to the way GPS works. With four satellites in view, it is possible for GPS users, military or civilian, to know continuously their altitude, latitude, and longitude to within a few meters and the time of day exact to within a few nanoseconds. Each GPS satellite contains a suite of atomic clocks, turned on sequentially only if necessary. Each is required to keep time to within a few billionths of a second. Each satellite transmits signals continuously to indicate its location in current time, and all the clocks are synchronized. The signals, emitted at different times, move at the speed of light and arrive at a GPS receiver's antenna on earth. The receiver calculates the distance to the GPS satellites by estimating the amount of time it takes for their signals to reach it.

Carlene E. Stephens

See also Global Positioning System; Navigation, Aerial; Navigation, Sea

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in the said declaration read as follows: "We do not intend that the Japanese shall be enslaved as a race or destroyed as a nation, but stern justice shall be meted out to all war criminals, including those who have visited cruelties upon our [Allied] prisoners" (*Proclamation Defining Terms for Japanese Surrender*, July 26, 1945, para. 10). Eleven nations that had been at war with Japan took part in the international proceedings: (1) Australia, (2) Great Britain, (3) Canada, (4) France, (5) India, (6) the Netherlands, (7) New Zealand, (8) the Philippines, (9) the Republic of China, (10) the Soviet Union, and (11) the United States. Each participating Allied nation provided a judge, a prosecutor, and supporting staff. The U.S. government supplied additional lawyers, too, who assisted the Japanese defendants and their counsel to ensure equality between the prosecution and the defense. Joseph B. Keenan—formerly director of the criminal division of the U.S. Justice Department and assistant to the U.S. attorney general—served as chief prosecutor, while 10 other lead Allied prosecutors who joined the International Prosecution Section assumed the position of associate prosecutors. The president of the tribunal was Sir William F. Webb, chief justice of the Supreme Court of Queensland, Australia, and three-time chairman of the Australian War Crimes Inquiries (1943–1945).

Of some 100 major war crimes suspects whom General Douglas MacArthur—in his capacity as Supreme Commander for the Allied Powers—had ordered to be placed under house arrest or detained at Sugamo Prison in Tokyo, the International Prosecution Section chose 28 for the trial. The number of defendants subsequently diminished to 25 because of two deaths and one dismissal for the reason of mental unfitness to stand trial. The lead defendant was General Tōjō Hideki, former prime minister and concurrently war minister since the eve of the Pearl Harbor attack to the fall of Saipan (October 1941 to July 1944). Kido Kōichi—former lord keeper of the privy seal and personal advisor to Emperor Hirohito—was also one of the defendants. Hirohito himself was not among the accused, however, despite his assumption of tremendous power and authority as "head of the [Japanese] Empire, combining in Himself the rights of sovereignty" and "the supreme command of the Army and Navy" (Articles 4 and 11, *The Constitution of the Empire of Japan*, 1889). His absence from the courtroom

TOKYO WAR CRIMES TRIBUNAL

The International Military Tribunal for the Far East was established in Tokyo on January 19, 1946, pursuant to the Instrument of Surrender. The surrender document stipulated that Japan "accept[s] the provisions set forth in the declaration issued . . . on 26 July 1945, at Potsdam." The relevant provision

reflected the view of the United States and its allies that the Japanese emperor was as much a security problem as a legal one, whose trial, if it were to be held, could adversely affect the Allied occupation of Japan and, more generally, postwar peace and stability of the Asia-Pacific region. It remains a matter of controversy as to whether or not Hirohito should have faced trial along with his wartime advisors.

The principal charges against the 28 defendants were “crimes against peace,” namely, planning, preparation, initiation, and waging of aggressive war, or participation in a common plan or conspiracy to accomplish actions thereof. This category of offense

is presently known as the “crime of aggression” in the Rome Statute of the International Criminal Court (1998). The legal doctrine of crimes against peace was first introduced at the International Military Tribunal at Nuremberg (1945–1946), whose purpose was to set out a clear legal precedent that aggressive war constituted an international offense and that there was individual criminal liability for those who committed it. The Allied powers applied the same legal doctrine at Tokyo. The Charter of the Tokyo Tribunal, in fact, required that the principal charges against prospective defendants be crimes against peace. Consequently, much of the court case



Japanese war leaders are made to rise from their seats during their arraignment at the Tokyo Trials, which were held by the International War Crimes Tribunal for the Far East, in Japan.

Source: U.S. Army.

at Tokyo revolved around substantiating aggressive-war charges, although evidence of Japanese wartime atrocities was, in fact, also presented. The disproportionate emphasis that the Allied policymakers placed on crimes against peace had far-reaching consequences on the Japanese remembrance of the Tokyo Trial. The aggressive-war charges came to define the postwar debates on the trial, while the prosecution's evidence on war crimes—namely, Japanese military violence against Allied prisoners of war, civilian internees, and other civilian populations in Japanese-occupied territories—rarely elicited discussion for many decades.

The Tokyo Tribunal heard the prosecution's case between June 4, 1946, and January 24, 1947. The defense case began on February 24, 1947, and continued through January 12, 1948. The Tribunal adjourned on April 16, 1948, after hearing the rebuttal, surrebuttal, and summation of the two parties. The court reopened between November 4 and 12, 1948, in order for the tribunal to deliver the judgment. The decision was split among the majority opinion of eight justices, two separate concurring opinions, and three separate dissenting opinions. The majority of the judges found that all but one defendant was guilty of crimes against peace and that 10 of the 25 defendants—including the one acquitted of crimes against peace—were guilty of war crimes. The death sentence was meted out to 7 of these 10, while the remaining defendants received varying terms of imprisonment. In exercising his reviewing authority as supreme commander for the Allied Powers, General MacArthur subsequently confirmed all verdicts and sentences. The death sentences were carried out on the early morning of December 23, 1948.

The ones sent to the gallows included General Matsui Iwane, commander in chief of the Central China Area army, whose forces committed large-scale atrocities against Chinese prisoners of war and the civilian population in Nanjing (1937–1938); General Mutō Akira, chief of staff of General Yamashita Tomoyuki, who led the Fourteenth Area army and whose forces committed large-scale atrocities in the Philippines (1944–1945); and Hirota Kōki, foreign minister of Japan at the time of the Rape of Nanking. According to the Judgment of the Tokyo Tribunal, these three individuals were accountable for the respective instances of large-scale atrocity not so much because they ordered or authorized the

commission of war crimes. Rather, their convictions were based on the tribunal's findings that they knew, or should have known, that the Japanese armed forces were committing war crimes on a vast scale; that they had the power and duty to take such steps to stop the violence; but that they nevertheless failed to do so. The lead defendant, Tōjō Hideki, too, was convicted of war crimes as well as crimes against peace. The tribunal's main findings can be summarized as follows: that in his capacity as army minister, Tōjō authorized the exhaustive use of prisoner-of-war labor in violation of the Hague and Geneva Conventions (1907, 1929); that he tolerated widespread mistreatment of prisoners of war (e.g., during the construction of the Burma-Siam Railway); that in his capacity as prime minister, he continued the policy not to recognize prisoner-of-war status for enemy captives in the Chinese theater; and that he failed to discipline those commanders who were responsible for the Bataan Death March. Tōjō received the death sentence.

After the conclusion of these proceedings, the supreme commander for the Allied powers hosted additional trials of two high-ranking Japanese army and navy officers at separate courts in Tokyo (Toyoda and Tamura Trials, 1948–1949). Furthermore, individual Allied countries held more than 2,240 war crimes trials against some 5,700 suspects between 1945 and 1952. According to the Japanese government's data, the breakdown of the national trials is as follows: 456 American trials at Guam, Kwajalein, Manila, Shanghai, and Yokohama; 330 British trials in formerly Japanese-occupied British colonies in Southeast Asia, including Hong Kong, Kuala Lumpur, Singapore, and Rangoon; 294 Australian trials in several different locations in the South and Southwest Pacific as well as at Hong Kong and Singapore; 448 Dutch trials at 12 separate locations in formerly Japanese-occupied Dutch East Indies, including Batavia (present-day Jakarta); 39 French trials in Saigon; 72 Philippine trials in Manila; and 605 Chinese trials at 10 different locations in continental China, including Beijing, Nanjing, Guandong, Hankow, and Shenyang. The People's Republic of China carried out its own trials against select war crimes suspects in 1956. Data relative to the Soviet trials are unavailable except for a special military trial held in Khabarovsk in December 1949, where 12 Japanese army officers were convicted of charges that they had been party to developing and deploying bacteriological weapons.

The Tokyo Trial was a watershed moment in the history of modern Japan. It presented the Japanese people with a unique opportunity to examine voluminous oral and documentary evidence of the war of aggression and atrocities that were committed by the Japanese armed forces during the Asia-Pacific War (1931–1945). This trial, in this respect, marked a crucial starting point of the Japanese confrontation with war guilt, a process that continues to this day. The Tokyo Trial is an important event also in the field of international law. The tribunal delivered a landmark judgment that determined individual criminal responsibility not only of military commanders but also of state leaders for war crimes. Despite these important legacies, however, the prevailing view of the Tokyo Trial has been that of “victors’ justice.” Critics argued from early on that no justice could be achieved when the victor nations were the ones to plan and carry out the trial. The fact that controversial legal doctrines such as crimes against peace were introduced—with the result of guilty verdicts and life sentences to most accused—further reinforced the notion that the Tokyo Trial was nothing but a victors’ show trial.

Meanwhile, the blossoming of new international tribunals since the 1990s began to influence afresh the ways in which researchers assessed the historical significance of the Tokyo Trial and, more generally, that of World War II-era war crimes trials. International lawyers, in particular, paid special attention to the fact that a number of historical war crimes trials had handed down important rulings on theories of liability and that these rulings had immediate practical relevance to present-day international criminal trials. The growing consensus in recent years appears to be that while there is an element of truth in the “victors’ justice” perspective, the Tokyo Trial and other World War II-era war crimes trials helped build the foundation of the international criminal justice system. The challenge for future researchers is to carry forward both new and old lines of inquiry so as to produce a comprehensive assessment of the Tokyo jurisprudence.

Yuma Totani

See also Crimes, War; Geneva Conventions; International Criminal Court; Japan; Laws of War; Nuremberg War Crimes Trials; Prisoners of War; Rape; Warfare, Biological; World War II; Yamashita Precedent

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TORPEDOES

Torpedoes are self-propelled underwater missile weapons designed for use against surface and submerged targets. They incorporate a warhead, propulsion source, steering mechanisms, and, in modern iterations, a guidance system.

Many of the characteristics associated with modern torpedoes originated prior to the end of the Second World War. The earliest successful models were built in three sections: (1) the warhead, (2) a central section containing a compressed air flask to power the torpedo, and (3) an after body with drive and steering mechanisms. These early weapons could follow a relatively straight path at a preset depth and depended on warheads fired by a simple impact fuse.

Designed initially for use by surface combatants, these early torpedoes were quickly mated with submarines once their inventors provided seaworthy platforms around the turn of the 20th century. German successes with the torpedo-firing U-boat during the First World War proved the combination's viability, and developers from many nations used the interwar period to improve the torpedo.

The modern torpedo is part of a weapons system, and much of the development after the Second World War focused on improving the other components needed to employ the weapon in addition to making improvements to the torpedo itself. Probably the most significant development of the interwar period was the development of an aircraft specifically designed to carry the weapon, the torpedo bomber.

New search sensors, fire control systems, and fusing mechanisms were available by the beginning of World War II. Ships and submarines carried active sonar to find targets and fire control systems to compute automatically the proper settings for their torpedoes. Torpedoes, with improved propulsion systems, received magnetic influence exploders that promised to increase the torpedo's destructiveness by allowing the weapon to target the most vulnerable part of a ship, the keel. In the end, the magnetic exploder needed additional work before it fulfilled its promise.

During the Second World War, warring navies added pattern-running torpedoes—zigzag or circular—for use against convoys, and by 1943, Germany and the United States deployed acoustic-homing torpedoes using passive sensors. Design of active sonar-equipped torpedoes required solution of significant technical problems. A few were produced during the war; none were used in combat.

The postwar period did not bring a slowdown in torpedo work. A warlike competition surfaced during the Cold War between the nations of the Warsaw Pact and the nations of the North Atlantic Treaty Organization. The West, having lost thousands of lives and spent millions in treasure winning the Battle of the Atlantic, worried about a growing Soviet submarine force based on captured German technology and engineers. The Soviets feared the West's sea power and its ability to use the torpedo to devastating effect.

Cold War competitors worked to perfect wartime advances and add new types of guidance and homing technologies to their torpedoes, including effective wire guidance and wake homing. While better antishipping weapons replaced torpedoes on surface combats, increasingly "smart" antisubmarine torpedoes replaced "dumb" ballistic weapons like depth charges and hedgehog bombs.

Longer sonar detection ranges prompted the creation of new torpedo systems able to capitalize on

the information. Antisubmarine rockets used rocket boosters to give torpedoes much greater ranges, and in those instances where the target's position was not known with great accuracy but ensured destruction was required, some torpedoes were equipped with nuclear warheads.

Other developments during this period resulted in rationalization of torpedo production into two general types: (1) heavyweight and (2) lightweight torpedoes. Modern submarines, nuclear and conventionally powered, were fitted with sophisticated dual role (antisubmarine and antishipping) heavyweight torpedoes incorporating wire guidance, improved digital acoustic sensors, advanced quieting to lower self-generated noise, and increased onboard computer processing power.

Lightweight torpedoes gave surface warships and aircraft a specialized antisubmarine weapon. These weapons used many of the technological advances incorporated in heavyweight torpedoes. Their ranges were shorter but acceptable, especially after shipborne helicopters, paired with sophisticated shipborne sensor systems, became available to deliver them. Their smaller warheads were enhanced through the use of shaped charges for targets particularly vulnerable to an explosive hull breach.

The Post-Cold War Period

Developmental efforts in advanced torpedo technology continued after the dissolution of the Soviet Union. The new Russian Federation continued work on Soviet designs for domestic use and for export sales. Some Western nations, principally the United States, the United Kingdom, Sweden, France, Italy, and Germany, also manufacture torpedoes, including some for the export market. Newer naval powers like China and India have indigenous manufacturing capability, though they sometimes modify designs purchased elsewhere.

The increased lethality of the torpedo has created a parallel interest in the development of effective countermeasures and automated detection systems. These devices vary in character from avoidance maneuvering and simple mechanical noisemakers towed in the wake of surface ships to autonomous electronic acoustic jammers and smart decoys. Naval designs now routinely incorporate degaussing systems and advanced equipment isolation and quieting techniques to defeat torpedoes'

magnetic and acoustic sensors. Defensive programs are also working on anti-torpedo torpedoes. Few torpedoes have been fired in combat since the end of World War II. Air-dropped torpedoes were last used during the Korean War to attack the Hwachon Reservoir dam after conventional bombing failed. The American destroyer, USS *Maddox*, was attacked by North Vietnamese torpedo boats in the Gulf of Tonkin, in 1964; and Israeli torpedo boats attacked the American surveillance ship, USS *Liberty*, in 1967. Four years later, the Pakistani submarine, PNS *Hangor*, sank the Indian frigate, INS *Khukri*. The British nuclear submarine HMS *Conqueror* sank ARA *General Belgrano* during the Falklands

War using a World War II-vintage torpedo, and the last attack employing a torpedo was the North Korean attack on the South Korean corvette ROKS *Cheonan* in the Yellow Sea in March 2010.

Though used infrequently, the lethality of modern torpedoes lends the threat of their use considerable potency. This is particularly true where the weapons are combined with modern quiet diesel-electric submarines or submarines using some form of AIP (air-independent propulsion) deployed in strategic shallow water locations like the Strait of Hormuz. Antisubmarine operations in such areas are extremely difficult and dangerous, and a successful attack against commercial shipping would have



An MK-32 Mod 15 Surface Vessel Torpedo Tube fires an MK-46 Mod 5 lightweight torpedo from the starboard side of the recently commissioned guided missile destroyer USS *Preble* (DDG 88) during a Combat Systems Ship Qualification Test on February 24, 2003. The MK-46 torpedo is designed to attack high-performance submarines and is considered the backbone of the Navy's AntiSubmarine Warfare inventory. USS *Preble* was commissioned on November 9, 2002, and is homeported in San Diego, California.

Source: U.S. Navy photo by Photographer's Mate 3rd Class Ramon Preciado (released).

political, economic, and environment consequences out of proportion to the force applied.

Seeing little likelihood of major naval conflict, naval powers have stopped large-scale torpedo production, and future development will likely follow a program of gradual improvement to guidance, computer processing, propulsion, acoustic stealth, and sensors, especially to improve performance in the difficult littoral areas. This effort will be complemented by continued development of underwater battle space management systems designed to provide a real-time integrated tactical picture to military commanders.

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See also Antisubmarine Warfare; Submarines; Warfare, Submarine

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TORTURE

Torture refers to physical coercion by state officials or their agents in order to generate evidence usable at trial. In addition to its evidence-producing function (that often does not produce reliable evidence or useful intelligence information), torture includes the deliberate infliction by government officials of physical and mental suffering to extract information unrelated to court proceedings. Resort to torture in the 20th century (and now the 21st) has typically been actuated by the second of these functions. This entry sketches the history of torture in Western society before turning to its modern-day manifestations and their relevance to military personnel.

Torture in the Ancient and Medieval Worlds

Until the time of the Roman Empire, neither the Greeks nor the Romans allowed the torture of free

men; instead, they restricted torture to slaves and sometimes to foreigners. This immunity of free men to official torture began to erode during the Roman Empire, when the emperor created an exception to facilitate the torture of free Romans in times of emergency. As imperial power expanded, so did the range of cases in which free Roman citizens could be subjected to torture.

Torture disappeared from western Europe after 500 CE, but made a comeback during the High Middle Ages. The return of torture was due to several factors, but abolition of trial by ordeal in 1215 may have been the most significant, insofar as it forced judicial officials to devise alternative ways to decide cases. The English turned to jury trials, while the Europeans employed inquisitorial methods. In both canon law and Justinian's Code, conviction was possible through only one of two means—the testimony of at least two eyewitnesses or the confession of the accused. Given the unlikelihood of multiple witnesses to a crime, confession became instrumental to conviction for serious offenses. When the accused declined to confess, Medieval judicial officials sought to extract the confession through torture.

Torture as a tool for securing confessions continued until the 18th century, when it became an object of opprobrium for the followers of the French Enlightenment. The abolition of torture in 1789 by the French revolutionaries was the culmination of decades of antitorture agitation, which deplored the practice as both cruel and irrational. Revulsion against *la question*, as it was called, continued throughout the 19th century. From 1929 until the German invasion of France in 1940, French police did employ a method of torturous interrogation resembling the American “third degree,” a practice called the *passage à tabac* (“rough handling”); however, French suffering under the Schutzstaffel (SS) and Gestapo torture during the occupation reaffirmed the nation's abhorrence of *la question*.

The Return of Torture: The 20th Century

In the 20th century, torture reentered Western history through two portals: (1) the rise of totalitarian states and (2) the formation of national security organizations tasked with gathering intelligence. The two 20th-century models of totalitarianism, Nazi Germany and Stalin's USSR, freely used torture as

a technique for securing incriminating evidence and military intelligence. Both governments overrode general guarantees of legal equality by appealing to alleged states of emergency that required extreme measures. From the onset of the Nazi government, a pattern quickly emerged of top-echelon government approval of torture carried out by Nazi auxiliaries (the Gestapo and the Sturmabteilung, or SA) on communists and socialists. The practice became routinized in the USSR by the 1930s, particularly in connection with Stalin's "show trials"—sham proceedings designed to railroad Stalin's political enemies into false convictions.

Democracies have also revived the institution of torture, primarily in the post-World War II period. Under General Jacques Massu, the French army in Algeria conducted a secret program of torturous interrogation and "disappearances" of suspected insurgents. The preferred method of torture was the *gégène*, in which electrodes were attached to body parts—especially the penis—and the detainee shocked with electricity. Other techniques included variations on "water torture"—plunging prisoners' heads into barrels of water or pumping their stomachs and lungs full of cold water with a hose. Like the French, the United States has employed torture at various times and places since 1945. It appears to have grown out of Central Intelligence Agency interest during the 1950s in gleaning intelligence through psychotropic drugs and sensory deprivation. Psychological forms of torture yielded to more physical techniques during the Vietnam War, reaching their apex in the Phoenix program of the United States. Congressional hearings into Central Intelligence Agency excesses in the 1970s curtailed the practice, setting the stage for the UN Convention on Torture and its codification in U.S. law.

Torture Under International and U.S. Federal Law

The irony of the modern revival of torture is its coincidence with efforts to make it illegal, both domestically and internationally. The Nuremberg jurisprudence had defined torture as a crime against humanity in the mid-1940s, and by the end of that decade, two instruments affirmed the illegality of torture under international law: (1) Common Article 3 of the Geneva Conventions, which proscribed "cruel treatment and torture" under all circumstances; and

(2) Article 5 of the Universal Declaration of Human Rights (formalized as a treaty, the UN Covenant on Civil and Political Rights), which banned "cruel, inhuman or degrading treatment or punishment." The UN Convention against Torture (1987) extended these earlier prohibitions with a detailed definition of the offense. Moreover, the convention denied justification of torture on grounds of duress or exceptional circumstances, banned "extraordinary rendition," and affirmed a duty to investigate and to prosecute alleged instances of torture. Finally, it rejected the legality of "cruel, inhuman, or degrading treatment or punishment" falling short of torture (Article 16).

As a signatory to the UN Convention, the United States codified the prohibition of torture in 1994. Section 2340 of the U.S. Code makes torture a criminal act under U.S. federal law. Its definition of torture is capacious, banning not only intentional infliction of "severe mental pain or suffering" "under color of law," but "threatened infliction," seeking to disrupt the "senses or the personality," or threatening imminent death. Congress reaffirmed the illegality of torture under U.S. law with passage of the War Crimes Act of 1996 (18 USC §2441), which incorporates the proscription of torture found in Common Article 3 of the 1949 Geneva Conventions.

Conclusion

Despite these condemnations of torture under international and U.S. federal laws, the American government sponsored interrogations in connection with the Global War on Terrorism that employed torture. (From all accounts, George W. Bush administration officials endorsed the first Central Intelligence Agency-administered torture of a "high-value" detainee, Abu Zubaydah, in the spring of 2002.) As of this writing, no government official has been held legally accountable, and only a handful of the lowest ranking military personnel in the long and involuted chain of command have been prosecuted. Nonetheless, torture remains a grave offense under military law, international law, and U.S. domestic law.

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See also Abu Ghraib; Geneva Conventions; Global War on Terrorism; International Criminal Court; Laws of War; Prisoners of War

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TOTAL WAR

Total war is a concept of warfare long associated with the theories of the 19th-century German strategist Carl von Clausewitz. Total war is limitless in its scope, with all belligerents using all possible resources to break the will and capacity of their enemy to resist. Total war is recognizable in the fact that the distinction between the combatants and noncombatants is blurred as all the resources of the participant states are mobilized to conduct the conflict.

Total War in Theory

Although total war in practice can be traced back to the ancient Greeks, it is Clausewitz who first sets out the idea of total war in theory. After the First World War, Clausewitz was heavily criticized as the inspiration for the large-scale destruction that marked the conflict. When Clausewitz speaks of total war, he talks of the concepts of Absolute or Ideal war. (Clausewitz used the term “total war” only once in his writings *On War*.) To Clausewitz, total war is war in a vacuum without the traditional influence of politics or society, which tends to be a limiting factor on the conduct of war. Clausewitz states that war is an act of force, and there is no logical limit to the application of that force because, in absolute war, the war is indivisible from its component parts.

Napoleonic Wars

The Napoleonic wars represent the transitional era between the dynastic wars between kings that preceded them and the world wars of the 20th century that followed them. The Napoleonic era was also Clausewitz's era, and from this period, he drew inspiration and illustration for his theories. The

basis of the Clausewitzian theory of absolute war (total war) can be clearly seen in the great innovations of the Napoleonic age. The first of these, *levee en masse*, referred to by Clausewitz as the nation in arms, marked the end of the small, professionalized armies of Europe. The citizen armies of the new French Republic took Europe by storm. The strength in numbers and motivation of the French troops was far superior to that of the mercenary and usually much smaller forces of the European kingdoms. The French Revolution signaled the birth of nationalism, an essential ingredient for the conduct of total war. The French Republic introduced conscription, to varying levels of effectiveness, thus breaking down the barriers between civilian society and the military.

American Civil War

The American Civil War took the next step toward total war. The war continued for 5 years, costing more American lives than any other conflict involving the United States. The conflict was mismatched from the start. The Union had 70% of the population and 70% of the railroad miles, as well as 90% of the manufacturing industry.

As a consequence, 95% of those eligible for military service in the Confederacy spent some time serving in the forces. The industrial complexes of the Confederacy were placed on a total war footing, and it was by this shift to total war that the Confederacy was able to continue the conflict for such a surprising length of time. The truly Herculean task of the Confederacy was helped by the excellent work of Josiah Gorges, who served as the quartermaster and chief of staff for the Confederate armies. In total war, the ability to marshal resources and use them optimally is as important, if not slightly more so, than the ability to win individual battles. It is no secret that the outcome of the Second World War, and arguably the First, was swung by the input of American economic strength.

Although the demands of the conflict weighed heavily on the Confederacy, fighting as it was for its continued existence, the situation was by no means as severe in the Union. The Union's economic and manpower advantage meant that the civilians in the Union who lived away from the conflict areas could stay relatively removed from the impact of the war (or as removed as they could be in a civil war

that divided a nation against itself). This was partly because the Union was not fighting for the existence of its state or for its distinctive way of life but fighting to return the rebel states to the Union.

However, the Union did introduce many aspects of total war into the conduct of the conflict. General Philip Sheridan's burning of the Shenandoah Valley and General William T. Sherman's destructive march to the sea represented a conscious use of total war tactics to target civilians and the enemy's will to fight. This signaled the changing nature of conflict wherein the destruction of infrastructure and will to fight becomes more important than the destruction of armies. The Confederacy lost a number of armies during the conflict, but it was not until the Union focused on the destruction of the Confederacy's resource base that it prevailed. For many historians, the American Civil War represents a chilling portent

of the future destructive power of total war as shown by the two world wars of the 20th century.

World War I

The First World War marks the first of the two total war conflicts of the 20th century. World War I dwarfed anything that had preceded it, earning it the title of "the war to end all wars." For the first time in military history, field armies could number in the millions. A key feature in creating armies of this size was the introduction of conscription in most armed forces, even the British abandoning reliance on volunteers in 1916.

With traditional factory workers being drafted into the military, there were fewer skilled workers to produce the essential goods required for the pursuit of warfare. For that reason, many women were



An 1883 drawing by F. O. C. Darley depicting Sherman's March to the Sea. Soldiers are seen destroying railroad tracks and telegraph poles and burning buildings.

Source: Courtesy of the Library of Congress.

employed in armaments factories and other essential industries. This was a historic step in British history, and at the end of hostilities, voting rights in parliamentary elections were extended to women for the first time, partly in recognition of the work done by women in the conflict. War was truly touching all sectors of society, with the British aristocracy weakened by the loss of much of its youth and, in some cases, villages losing almost all their young men.

There was no reason for those civilians not living near the front lines to fear that they would be killed by the instruments of conflict, such as bullets or bombs. Occasionally, some coastal towns were shelled by passing enemy battleships, but in the main, civilians were immune from the direct impact of the fighting, especially in Britain where civilians did not need to fear the unexpected arrival of the enemy in their towns.

However, the diversion of resources to the war effort did have a severe impact on the lives of civilians during World War I. European nations experienced shortages of food and raw materials, and toward the end of the war, Great Britain introduced rationing to ensure that its citizens would not go hungry.

The First World War was a further step toward the realization of theoretical total war as outlined by Clausewitz. However, it did not quite attain this level as the civilian noncombatant was not deliberately attacked. The full resources of the states were focused on avoiding defeat, but the overall destruction of the enemy state was not desired by the participating nations, as shown by the Treaty of Versailles.

World War II

Many historians consider the Second World War to be the realization of total war. The mobilization of resources, both civilian and military, the size of the battlefields and armies fighting on them, the total disregard for civilian life and property, and the unrestricted aims of the Axis nations (Germany, Italy, and Japan) all point to total war as Clausewitz had envisaged it.

Mobilization of Resources

Every resource of a nation was used as never before in an attempt to gain victory during the Second World War. Britain, having learned from the experience of the First World War, immediately implemented a total war posture and introduced

conscription in April 1939, even before war began. Women were once again mobilized for service in factories and to work the land. The Soviet Union successfully undertook the unprecedented move of relocating its entire industrial base east to avoid the invading Germans. Germany was the only nation to officially embrace total war, but not until 1943, with women previously prohibited from factory work or service in the military.

Size of Armies and Battlespace

The size of the armies involved was again a step up from anything that had come before it. The German army that invaded the Soviet Union consisted of almost 4 million men, and an estimated 8 million Soviet military personnel died in the war. The battlespace was made larger by the technological advances of the age. The tank made it possible to travel long distances to fight, and planes made it easy to strike deep behind the front lines. At the Battle of Midway, the opposing fleets were separated by hundreds of miles and the battle was fought from the air.

Disregard for Civilians

The war was marked by a distinct lack of concern for the welfare of the noncombatant. The German Blitzkrieg deliberately forced refugees onto the roads in an attempt to disrupt enemy military traffic. The Blitz also targeted civilians, aiming to compel them to surrender. The Allies replied in kind, the most obvious example being the controversial bombing of Dresden. The destruction of property was also unabashed. The historic monastery at Monte Cassino in Italy was destroyed, as was England's Coventry Cathedral.

Unconditional Surrender

The policy of unconditional surrender was also a key factor in the pursuit of total war. Because the surrender was expected to be unconditional, it was very difficult for any side to conclude a compromise peace or to surrender without having exhausted all their strength to gain victory.

Nuclear Weapons and the End of Total War

The Second World War was brought to an end by the atomic bombs dropped on Hiroshima and Nagasaki. This act also brought the era of total

war to an end. Since 1945, no Western nation has mobilized all its resources in an out-and-out battle for victory. To do so would be pointless. The use of nuclear weapons could only result in a hollow victory, with mass civilian deaths and irradiation of the earth eradicating any gain. In fact, total war without nuclear weapons only results in hollow victories: Britain became penniless and empireless as a result of the Second World War, most of Europe was destroyed and bankrupt, the rule of communism in Russia and Eastern Europe was secured for the next 45 years, and America was saddled with the debt of Europe. For the aggressors in World War II—Germany and Japan—the conflict led to abject destruction and their occupation by foreign powers for years afterward.

The Civil-Military Divide and the Future of Total War

At the end of Chapter 3 of Book 8 of *On War*, Clausewitz asks whether the total war of the French Revolution would continue to be a model for world conflicts or whether a gradual separation between military and people would again be seen. More than 180 years since Clausewitz's death, we are now in a position to answer his question. The era of total war continued for 130 years following the end of the Napoleonic era. The deployment of nuclear weapons at the end of the Second World War changed the complexion of future military conflicts. The use of the full power of a nation in a conflict, when armed with nuclear weapons, became anathema. If it is likely that both sides will lose in a total war conflict, the example of Britain and the British Empire following the Second World War being a good illustration, then in a nuclear war, this result becomes a near certainty. Since the explosion of a Soviet nuclear weapon in 1949, the involvement of civilians in a Western country's wars has been limited, with perhaps the exception of those drafted to serve in Korea or Vietnam. In many countries, the military has become more and more institutionalized and separate from the society it serves, having once again become the relatively small band of specialists it was before the wars of the French Revolution and Napoleon. Perhaps this cycle will repeat and we will again see total war, but, for a time at least, total war is a thing of the past.

Graeme Smith

See also Civil War, American; Clausewitz, Carl von; Economy and National Defense; Mobilization; World War I; World War II

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TRAINING, AIR FORCE ENLISTED

In 1947, the U.S. Air Force officially broke away from the U.S. Army, becoming a separate branch of the U.S. military. No longer bound by the army way of doing things, the air force developed its own set of regulations and procedures for training and educating recruits. Today, the process of training and educating those who enlist requires a strict minimum of eight weeks, during which time enlistees can expect to have both their physical and mental states challenged. After this initial training, on-the-job training commences. Throughout, the goals of the air force remain the same: to instill recruits with technical skills, self-confidence, teamwork, emotional stability, and physical endurance.

Background

Air force training started at Lackland Air Force Base (AFB) in the 1930s on what was then called Kelly Field, with Brigadier General Frank D. Lackland in charge of expansion and training. At the time, the main concern was to train men to become pilots in the Army Air Forces. After the bombing of Pearl Harbor on December 7, 1941, the need for cadets grew exponentially as the effort to use precession bombing tactics throughout World War II required more bombardiers, pilots, and navigators. Soon, the influx of recruits began to outgrow Kelly Field, and in 1941 construction began on the San Antonio Aviation Cadet Center (SAACC). After the war, though, admissions dropped significantly and the SAACC ceased to exist.

On September 18, 1947, the U.S. Air Force became an independent branch of the U.S. military

with the implementation of the National Security Act and the swearing in of Stuart Symington as the first secretary of the air force. Now reopened and renamed, Lackland AFB became “the gateway to the air force” for all enlisted personnel. Here, the air force trained the airmen who participated in the Berlin Airlift and the Korean and Vietnam Wars. Also, until 1962, Lackland AFB provided a channel through which enlisted personnel, such as commissioned college graduates with no prior service and airmen possessing undergraduate degrees, could enter the air force or its Officer Training School. In 1993 the Air Force Officer Training Corps was moved to Maxwell AFB, Alabama, but even today Lackland AFB remains the site where all air force cadets enter and train.

Types of Training

The air force basic training center, located in San Antonio, Texas, serves to acclimate male and female recruits to military life, both physically and emotionally. Ideally, basic training imbues men and women not only with a feeling of self-worth but with a certain pride stemming from their participation in America’s defense and technological systems. Increased from 6½ weeks to 8½ weeks in 2008, basic training strives to teach the fundamentals of air force service, including confidence, academic performance, physical stamina, and marksmanship. Recruits also receive special aid and guidance in choosing an occupation that will work well with both the candidate’s strengths and the needs of the air force. After graduation, trainees progress to the second step of the training process.

Basic training graduates go directly to Technical Training Centers for formal in-state residence training conducted in places such as Keesler AFB in Biloxi, Mississippi, and Sheppard AFB in Wichita Falls, Texas. In a classroom setting and during practice sessions, the new airmen learn the basic skills needed for specialties such as radar systems, computer systems, survival training, and aerial gunnery. After three months at their first permanent duty station, airmen enroll in various courses to learn their job functions, operations of the air force, technical orders, and directives to learn a specific task. After the airman’s day is finished, he or she must study and prepare outside of the set training schedule to excel. Airmen are not left alone in their job learning

experience. Supervisors teach and train the airmen with a hands-on approach. Developing these skills and succeeding in training transforms the young airmen into skilled noncommissioned officers (NCOs).

The Civil Air Patrol, while an independent civil organization, is strongly supported by the U.S. Air Force. Air force personnel are assigned to the congressionally chartered volunteer organization that serves as an important conduit for enticing young men and women into considering the air force. The Air Force Junior Reserve Officers’ Training Corp (JROTC) serves as another venue for inculcating young people with the ethos of the air force and an interest in aviation.

Developments in Training

As new technology emerges, the air force adapts its training, making necessary course changes. Recruits are now certified in chemical and biological warfare defense. Also, all new recruits have to participate in a rigorous physical training program. The air force has doubled its physical fitness requirements, going from three workouts per session to six. Workouts include a timed 2-mile run, push-ups, sit-ups, and leg lifts. At Scorpion’s Nest, an encampment where recruits are taught the ins and outs of field operations and living, airmen are exposed to the elements that they may encounter during their tours of duty. They are taught camp security, what to do under fire, camouflage techniques, and the importance of controlling light, noise, and trash. The air force recently extended these events into a full week called Warrior Week. The instructors find it to be a critical exercise in the physical and mental development of what it means to be in the U.S. Air Force. As of 2008, two additional weeks of basic military training were added to include Basic Expeditionary Airman Skills Training (BEAST) to acclimate airmen to the conditions they might experience when deployed.

Air force data on basic training at Lackland AFB reveal that the failure or “washout” rate for recruits for fiscal year 2010 was only 5.7% out of the 42,000 who enlisted. This was a great improvement over previous years. From 2004 to 2008, some 8% washed out, and in 2007 more than 10% did. In large part, higher retention rates are a result of the air force’s decision to lengthen the training cycle from 5 to 8½ weeks. In 2009, the first year of the training overhaul, the failure rate was only 6.3%.

This has proved very important not only because the air force benefits from having more and better trained recruits but because the retention of candidates reduces expenditures. It costs \$46,000 to train each new recruit, money wasted if they fail to complete the program.

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in its space and cyberspace missions, aerial flight remains the service's primary area of emphasis. To provide qualified officers to operate its aircraft, the USAF has devised a rigidly defined process to screen, select, train, and continually develop pilots for myriad missions and airframes. The USAF Major Command responsible for this program is Air Education and Training Command (AETC). The USAF's process for selecting and training pilots is considered to be among the world's finest and is the model for a number of other countries' programs. The initial training of USAF pilots is formally known as Undergraduate Pilot Training (UPT).

Selection

Competition to become a pilot in the USAF is keen, and the level of interest in pursuing this goal remains extremely high—not only for those seeking a commission in the USAF but also among members of the general public. The formal selection process begins in the three primary commissioning sources for USAF officers: (1) Air Force Reserve Officer Training Corps (AFROTC), (2) the U.S. Air Force Academy (USAFA), and (3) Air Force Officer Training School (OTS). As a result of an improved and more stringent selection process instituted in the years following the end of the Cold War, the washout rate among student pilots has fallen dramatically.

For cadets enrolled in AFROTC, the first step toward earning their wings is the completion of the Air Force Officer Qualifying Test with high scores—particularly high scores in the “pilot” section of the test. From here, AFROTC cadets interested in becoming pilots are required to complete the Basic Aptitudes Test, which is designed to gauge individual ability to operate the controls of an aircraft. Once the Basic Aptitudes Test is completed, pilot candidates are selected from among those AFROTC cadets who are interested, are medically pilot qualified, and have the most competitive physical fitness, Air Force Officer Qualifying Test and Basic Aptitudes Test scores, highest GPAs (grade point averages), and strongest recommendations. For OTS trainees, the process generally follows that prescribed for AFROTC cadets, though it can begin during the selection process for OTS itself.

For USAFA cadets, the process is no less arduous, though in recent years, USAFA has not filled its allotted quota of training slots, as cadets increasingly

TRAINING, AIR FORCE PILOTS

The U.S. Air Force's (USAF) primary mission is to “fly, fight and win” in air, space, and cyberspace. Though the USAF is experiencing dramatic growth

seek career field assignments in areas more directly transferable to the business world. For those USAFA cadets wanting to be pilots, selections are made based on desire, GPA, physical fitness, recommendation of their Air Officer commanding, and passage of a stringent medical examination.

Initial Flight Screening and UPT Bases

New second lieutenants selected for pilot training report to initial flight screening at Pueblo Memorial Airport in Pueblo, Colorado. Initial flight screening is designed to provide students with basic flight instruction and the associated academics to prepare them for UPT. More specifically, the fast-paced nature of instruction at initial flight screening provides an opportunity to evaluate whether or not a student is equipped to handle the coming rigors of UPT. Those unable to cope with the pace of instruction are eliminated from the UPT process.

UPT takes place at one of four Air Education and Training Command Air Force Bases (AFBs) or at designated Naval Air Stations through a joint program with the Navy, Marine Corps, and Coast Guard. All USAF UPT bases are located in the southern third of the United States: Columbus AFB, Mississippi; Laughlin AFB, TX; Sheppard AFB, Texas; and Vance AFB, Oklahoma. On arriving at their designated base, pilot trainees are assigned to a Flying Training Squadron that will be their home through the primary phase of training.

Primary Phase

All primary phase UPT takes place in the T-6 Texan II Joint Primary Air Training System, a single-engine, turboprop aircraft that seats student and instructor in tandem. Instruction includes practical experience in the principles of flight, operation of the aircraft, safety, formation flying, instrument flying, ramp operations and taxiing, takeoff and landing, flight in the air traffic pattern and local area, cross-country flight, and emergency procedures. The program of scheduled, predefined flight scenarios that is flown by the student is known as the “syllabus.”

During the primary phase, students are continually evaluated on their academic and practical skills. After a series of flights and successful completion of an instructor evaluation flight, commonly known as a “check ride,” the student pilot is permitted to fly the aircraft alone, commonly referred to as the

“solo” flight. After soloing, the student continues to receive instruction in the operation of the aircraft, flies solo, in formation, with an instructor, and begins to develop the skills needed to operate a more complex aircraft until completing the syllabus for the T-6. In the final stages of the T-6 syllabus, the student is placed on one of the USAF’s airframe and mission tracks: the tanker/transport track, fighter/bomber/reconnaissance track, and the helicopter, or rotary, track.

Advanced Phase

On entering the advanced phase training, student pilots are assigned to a new squadron and begin a more focused syllabus. The majority of USAF student pilots are assigned to the tanker/transport track or the fighter/bomber/reconnaissance track. For the tanker/transport track, students in the USAF pilot training program complete their advanced flight syllabus in the T-1 Jayhawk, a twin-engine jet similar to many small corporate jets, where the student and instructor are seated side by side, with additional seating available in the passenger compartment. For some tanker/transport students, many of whom are slated to become C-130 pilots, the advance phase will take place in the T-44 and TC-12 twin-turboprop aircraft at Naval Air Station Corpus Christi. Training in the tanker/transport track prepares pilot trainees to manage a large airframe over long distances, in all types of weather conditions.

Students selected for the highly competitive fighter/bomber/reconnaissance track complete a training syllabus in the T-38 Talon, a twin-engine jet capable of supersonic flight, which resembles a 20th-century light fighter jet, and seats the student and instructor in tandem. Training in this aircraft prepares pilot trainees to operate in all manners of flight and at the edge of the performance envelope.

A smaller number of students are placed on the rotary track and proceed to Fort Rucker, Alabama, where they receive instruction in the UH-1 helicopter from the U.S. Army. Graduates of the rotary track can be assigned to operational squadrons flying the UH-1 and HH-60 helicopters or the CV-22 tilt-rotor aircraft. While part of a smaller community, many of the pilot trainees selected for this track are eventually assigned to Air Force Special Operations Command, where they can expect to execute particularly intense flight operations.

On completion of the advanced phase of training, all student pilots receive their aeronautical rating, wings, and membership in an elite fraternity of professionals. From here, these new pilots proceed to training on a specific airframe in preparation for joining an operational USAF flying squadron. Some of the new pilots remain in Air Education and Training Command to serve as first assignment instructor pilots after completion of Pilot Instructor Training at Randolph AFB, Texas.

Formal Training Unit and Continuing Development

The majority of new pilots report to one of several Formal Training Units (FTUs) throughout the USAF to receive training on their assigned airframe. It is in this advanced stage of training that new pilots learn how to put the flying skills they acquired in UPT to use in an operational environment. The FTU teaches students to fly as participants in USAF operations, both in peace and war.

Although the initial process of training USAF pilots ends when they receive their wings at their graduation, or “winging” ceremony, training will continue throughout a pilot’s career. For all pilots, constant training, regular evaluations, and continuing formal courses are hallmarks of a USAF pilot’s career. In fact, USAF pilots spend more hours in the air and on-the-ground training than they are likely to spend in or supporting combat. For some pilots, combat or combat support is something they never experience.

Comparison With Other Services

Since the early 1990s, the USAF and other military services have been working to meld their pilot training programs into a more consistent and coherent process, though the USAF and Navy still maintain their own distinct programs. As a result of these efforts, the differences between the two programs have diminished. In fact, many air force pilot trainees complete their basic phase through the Navy’s program, and vice versa, suggesting that there remain few practical differences between the two programs. In the coming years, given shrinking military budgets and increasing number of joint operations, it is likely that the separate service training programs will be merged into a singular program at the basic level; similarly, at the advanced level, training for the

fighter/bomber/reconnaissance and tanker/transport tracks will be merged with the other services in a fashion similar to that employed by the air force with its rotary track.

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See also Training, Air Force Enlisted; Training, Naval Officers

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TRAINING, ARMY ENLISTED

Training is of vital importance to every military organization. What training is, what to train on, how training is conducted, what needs to be focused on, and who is to be trained are the central issues that face the military. Simply stated, training enables a soldier to fight and win, which is the basic mission of the U.S. Army. Today, the forces that constitute the military of the United States arguably are both the best trained and the best equipped in history along with possessing extremely high morale as a result of the nation’s investment. For today’s army, basic training provides not only a grounding in the fundamental skills of soldiering but also teaches prospective soldiers to prepare for the nation’s individual conflicts. A “train as you fight” mind-set remains the central theme of modern training.

History

From ancient times, drill centered on moving the unit as a cohesive force and closing with the enemy and destroying it. The Greek phalanx and later the

Roman legion required each man to maintain his position in the formation to prevent a collapse and defeat of the unit. Using a combination of sword, shield, spear, and bow, ancient armies defeated their enemies. Even as late as the Civil War, the musket with its limited effective range was the primary infantry weapon. Operating within its functional ability, the musket needed a formation to lay down a wall of fire to destroy the opposing formation. Only training could mold a conscripted army into an effective fighting machine. British enlisted men feared their officers and noncommissioned officers more than their enemy. However, with the advent of the rapid-fire rifle, there was a fundamental change in warfare and hence the training necessary to achieve victory. Combat leaders, as usual, failed to comprehend how modern technology was influencing how warfare was conducted. Even as late as World War I, soldiers trained in an outmoded manner and the results on the battlefield were disastrous. Modern weapons such as the machine gun and rapid-fire artillery cut down troop formations easily. As in the American Civil War, military leaders of the time failed to comprehend the effect that technology had on warfare. The U.S. Army continues to use Field Manual (FM) 22-5, *Drill and Ceremonies*, to instill discipline in new recruits and move soldiers in a formation from place to place. Despite the use of strict, linear formations for establishing discipline, military training today is geared to meet the present threat and develop effective means with which to counter these threats.

The manner in which a soldier trains will be reflected in the way he or she engages his or her enemy on the battlefield. Training provides both the knowledge and the basic skills a soldier needs to carry out assigned missions in a competent manner.

Until the end of the 20th century, the U.S. Army had a rigid system of training for its soldiers—the Army Training Program (ATP). The Army Training and Evaluation Program (ARTEP) and the Individual Training and Evaluation Program (ITEP) set the standards to meet the exigencies of modern combat. The standards are continually revised to include new threats, such as improvised explosive devices. Most deaths and wounds to American military personnel are a result of improvised explosive devices. Today, the fundamentals of both individual and collective training are the “Five Ps”—planning, preparing, presenting, practicing, and performing. Following

the “Five Ps” can make the difference between life and death when dealing with the danger posed by improvised explosive devices.

Each service has a different metric for establishing its initial training standards. The U.S. Army still has a basic training standard of 9 weeks. Those who serve in the combat arms, such as armor, infantry, or artillery, have One Station Unit Training, which combined with basic training lasts 16 weeks. Additionally, different Military Occupations Specialties (MOS), such as the medical and administrative, have varying lengths of Advanced Individual Training (AIT). The Marine Corps has a 12-week basic training cycle, the navy training cycle consists of 8 weeks of boot camp, and the air force uses an 8½ week initial training cycle.

Lieutenant General Arthur S. Collins Jr. was a major force behind the revamping of army training during the 1960s and 1970s. He was a West Point graduate in 1938 and was a combat leader at the divisional level during World War II. He spent a great deal of his later army career in the planning and training of U.S. Army forces. He understood that there were fundamental flaws in the manner in which the U.S. Army planned and trained for combat and sought to rectify these issues. He had a philosophy concerning training that was reflected in his book *Common Sense Training: A Working Philosophy for Leaders* initially published in 1978. He believed that training was composed of four requirements. These were soldiers, equipment, a training area, and, last, a state of mind. He believed that the last, spirit and mind, were intangibles and thus the hardest to acquire.

In the early 1950s, the army focused on the decentralization of training. Unfortunately, this concept meant different things to different leaders throughout different parts of the army. Training was often accomplished to satisfy a requirement and was not representative of the threat represented by the Soviet bloc. Unrealistic training led to difficulties fighting irregular forces in Vietnam.

During the Vietnam War, the needs of the rest of the army were subordinated to the needs of the forces engaged in combat in Southeast Asia. Training suffered because units throughout the army were little more than training and replacement depots for Vietnam. The attrition caused by combat losses in the war zone meant a loss of cohesiveness as many of the best combat leaders faced numerous

rotations as replacements. Noncommissioned officers, the backbone of enlisted training, were in short supply and had insufficient time prior to their reassignment to the war zone to effectively train and mold their units. This, combined with the maladies of drug abuse, racial conflict, and the indifference of many of the draftees, created an atmosphere that negatively influenced the readiness of the U.S. Army. Many described the army during the early years of the post-Vietnam era as “hollow” and not ready should another war erupt. Many believe that today training has suffered as a result of the continuous demands over the past decade caused by the wars in both Iraq and Afghanistan.

After Vietnam, the army instituted a realistic training program suited to specific missions of units. All units received training in physical fitness along with weapons familiarization. The army instituted what came to be known as “prime time” training where for a specified number of hours per week, training was conducted at the unit level. During the 1970s, training also became more centrally controlled. The army conducted numerous divisional-level schools, where soldiers could be sent away from their assigned unit and receive army-wide standard training on post. These courses were supposed to be the foundation of developing the individual soldier. Unfortunately, often the unit would send individuals incapable of successfully completing the training at these schools instead of their best soldiers, claiming that these soldiers were essential to unit readiness and could not be spared. The soldiers the army needed to train the most did not attend and hence were not as well equipped to disseminate their knowledge to their enlisted subordinates. Unfortunately, many of these substandard soldiers received promotions to higher grades because of this training, and the more highly qualified but “could not be spared for schooling” became discouraged.

The focal point of this centrally controlled training was the U.S. Army Training and Doctrine Command (TRADOC), established in 1973. TRADOC was created by the senior leadership of the army to respond to the continually changing nature of modern warfare and to learn from the lessons of the Vietnam conflict. TRADOC controlled all phases of military training from basic training to service schools, and brigade rotations to major training centers such as Fort Irwin, California, and

Fort Polk, Louisiana. There, soldiers developed skills to enable them to prepare for the perceived threats of the future. TRADOC is responsible for the development of warfighting doctrine throughout the U.S. Army. This was accomplished under the constraints of both the budget and threat level presented by possible and acknowledged adversaries worldwide. The Army National Guard and the U.S. Army Reserves also fall under the aegis of TRADOC for purposes of enlisted training. In recent years, both the National Guard and the reserves began receiving up-to-date equipment rather than obsolescent materiel from the Active Component. Considering the numerous deployments of each, in retrospect, this was an insightful decision.

By the mid-1970s, a new term came into vogue within the army—*collective training*. The training of crews and small units to operate in a cohesive manner became paramount. Change has been the code word of the U.S. Army as it transforms itself from the traditional division to the brigade combat system by which units are being deployed to Afghanistan.

All enlisted soldiers are trained to react on making initial contact with an enemy force by relating the size, activity, location, unit, time, and equipment (SALUTE) of the force to the next level of command. This is stressed in individual- and unit-training scenarios. The information relayed through the chain of command will assist in a proper riposte by U.S. forces.

During the 1970s, the Multiple Integrated Laser Engagement System (MILES) came into use. It provided a realistic assessment of how effective weapons systems were. It could be used from individual weapons to the main guns of the M-1 Abrams Tank. The army conducted large-scale brigade exercises at locations such as the National Training Center at Fort Irwin, California; the Joint Readiness Training Center at Fort Polk, Louisiana; and the Combat Maneuver Center at Hohenfels, Germany. However, the majority of this training was predicated on a conventional enemy force such as that of the former Soviet Union. Although this was effective against the conventional threat posed by the Iraqi army in both the Persian Gulf War and the Iraq War, this training failed to prepare the U.S. Army for the irregular asymmetrical conflict that was to follow.

Additionally, during the 1980s, a new training paradigm came into being. “Prime Time Training” became the standard element of army-wide

unit-training schedules. Generally speaking, either a morning or an afternoon was devoted to training the unit. Certain core subjects would be taught throughout the army, such as first aid, operating in a contaminated area, and vehicle and aircraft recognition. This time could be also devoted to unit-specific training, such as a personnel services company operating in a field environment or a medical supply organization doing likewise.

As a result of TRADOC's effort, the U.S. Army has revised both FM 100-5, *Operations*, and FM 25-100, *Training the Force*. Because of the terrorist attacks of 9/11, there has been an increased emphasis on training enlisted personnel in languages at the Defense Language Institute at the Presidio in Monterey, California, as well as sending them to the U.S. Army

Chemical School at Fort Leonard Wood, Missouri, to cope with chemical, nuclear, and biological threats.

A prime example of how training has evolved over the years is physical fitness training. Years ago, physical fitness consisted of the "daily dozen" consisting of push-ups and sit-ups along with other exercises intended to develop strength along with a run. The physical fitness test also consisted of a grenade throw. The army realized that the vast majority of soldiers would never use a grenade in combat except for the infantry. Today, fitness is designed to be more practical. It consists of stretching, so that muscles adjust prior to the start of an exercise routine. Running builds up stamina for the rugged terrain in Afghanistan, while weight training develops the upper body strength necessary in today's



U.S. Army soldiers from Charlie and Delta Company, 1st Battalion, 175th Infantry Regiment, Maryland Army National Guard combine efforts July 24, 2007, during a joint urban cordon and search exercise as part of the army readiness and training evaluation program in the mock city of Balad at Fort Dix, New Jersey. The soldiers are preparing for a scheduled deployment to Iraq.

Source: : U.S. Army photo by Staff Sergeant Russell Lee Klika (released).



The new Army Physical Fitness Training Program includes stretching and running along with group exercises designed to increase cohesiveness and to spread morale among the brigade.

Source: : U.S. Army photo by Private First Class Ryan Hallgarth.

high intensity and physically demanding combat environment.

Conclusion

Eerily reminiscent of the Vietnam era, we see indications that the army is at increasing risk of improperly training its soldiers because of the commitment of forces to Afghanistan and until recently Iraq. Many instructor positions have been “outsourced” to private contractors with only approximately 30% of those slots being filled by army personnel. This leads to a perception among the enlisted forces that something is amiss. This possibly affects morale when soldiers question why noncommissioned officers are not the instructors who provide their combat training.

There is one major change since the Vietnam era. Previously, soldiers were deployed to the combat zone on an individual basis. They had to adjust to new squad members, and they might not be at the same level of competency as each other. Today, soldiers who are deployed to Iraq and Afghanistan go as a unit. This provides for a greater degree of unit cohesiveness since these individuals trained together prior to overseas deployment and understand each other's strengths and weaknesses.

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See also All-Volunteer Force; Army, U.S.; Training, Army Officers

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TRAINING, ARMY OFFICERS

The U.S. Army officer education system is designed to prepare officers for increasing levels of responsibility as they progress through their careers. In general, education for company-grade officers—lieutenants and captains—is focused on tactics and on the specific skills required for their branch. The education for majors is not branch specific and focuses on the employment of divisions and corps, while also training the majors to serve in staff positions in battalions and brigades. At the highest levels of officer education, the War College, select lieutenant colonels and colonels are educated on the strategic and political levels of war.

Early Officer Education

Until the late 19th century, the U.S. Army provided no formal education for officers after commissioning, following a common assumption that the ability to command came from experience and inherent characteristics. The United States Military Academy at West Point prepared new officers to assume the duties of a junior officer on graduation, with an emphasis on basic military skills, leadership, and personal integrity. While most army officers were graduates of West Point, others were commissioned from the enlisted ranks or directly from civilian life, sometimes with little formal education beyond high school. In 1862, the Morrill Act, which established the land-grant colleges, required that such colleges teach tactics, which was the beginning of the Reserve Officers Training Corps, although the system for using civilian colleges as a source for commissioned officers would not become formalized until the National Defense Act of 1916. In the years before the United States entered World War I, General Leonard Wood began a series of training camps, called Plattsburgh camps after the site of the first one in Plattsburgh, New York. Plattsburgh

camps acquainted educated civilians with the military and later became the model for officer candidate schools, which produced officers, especially during wartime when there was a need to rapidly expand the officer corps. The early years of an officer's career were essentially an apprenticeship during which time a junior officer would learn the skills to command a company under an experienced captain. While officers were encouraged to engage in self-study of the military profession, and some officers were able to earn advanced degrees at civilian colleges, for most officers formal education ended with commissioning.

Birth of Professional Military Education

After the American Civil War (1861–1865), the military began to address the need for formal military education for officers after commissioning. The change came, in part, from the recognition of the shortcomings of many officers who led the large Union army during the war and also from the influence of developments in Europe in providing formal education for midcareer officers. Schools such as the Prussian *Kriegsakademie* had become centers for educating senior company grade and field grade officers in a higher understanding of war. Under General William T. Sherman, the School of Application was founded at Fort Leavenworth, Kansas, in 1881, as one of the first formal schools for officers. The school at Fort Leavenworth was renamed as the Infantry and Cavalry School in 1886 and as the School of the Line in 1907. Selected graduates of the year-long course attended the General Staff School the following year.

The army created its War College in 1901 at Washington Barracks, D.C., to provide formal education to a select group of lieutenant colonels and colonels in solving strategic problems in war, partly from the recognition of the deficiencies in the strategic competence of the U.S. Army exposed by the Spanish-American War (1898). The War College closed during World War II but reopened in 1950 at Fort Leavenworth. It moved to its present location at Carlisle Barracks, Pennsylvania, the next year.

The Twentieth Century

The development of mass armies during the two World Wars, and the concurrent massive expansion of the officer corps, led to the formalization

of branch-specific training programs for new officers after commissioning. After completing a commissioning program, new lieutenants would spend anywhere from a few weeks to several months attending schools intended to make lieutenants more immediately useful in their first assignments, with further schooling ideally before taking company command. The branch schools were held at Fort Benning, Georgia; Fort Riley, Kansas; and Fort Sill, Oklahoma. After World War II, as a result of studies into the performance of company commanders in the war, the army began to reform its education of junior officers to better prepare officers for the challenges of command. Schooling for company grade officers was formalized into the Officer Basic Course (OBC), attended immediately after commissioning, and the Officer Advanced Course (OAC), to be attended between the 5th and 12th year of service. The branch-specific OAC, normally about 5 months in duration, would further hone officers' skills and prepare them for their duties as captain. Both courses were focused at the tactical level. OAC provided instruction in combined arms operations and the functions of a division's general staff. However, attendance at the advanced course was originally not required for company command.

The important role played by officers who had graduated from both the School of the Line and the General Staff School in preparing the mass army for World War I and in organizing the major operations it fought in France led the army to combine the two schools when they reopened in 1919. In 1923, it was renamed the Command and General Staff School. About half of the Regular Army officers were selected to attend the school in the interwar years.

The Modern Officer Education System

The basic pattern of officer education was in place by the end of the 1950s. During their careers, officers progressed through the Officer Basic Course, Officer Advanced Course, Command and General Staff Officers Course (CGSOC), and finally, the War College. While all officers attended their basic and advanced courses, only about half were allowed to attend the CGSOC in residence. Those who were not selected for the resident course usually had the option of taking it through the Total Army School System (TASS) or through distance education (DE). Courses held through TASS are conducted by the

Army Reserve and usually combine weekend training with 2-week-long resident phases. While the Command and General Staff College and the War College either closed for the duration of the World Wars or ran large, abbreviated versions of their courses, the schools have since remained open during wartime. In 1981, a new course, which the Combined Arms and Services Staff School quickly dubbed "CAS3" or "CAS cubed," was added after the Advanced Course. CAS3 was conducted by the Command and General Staff College, with the resident version lasting between 6 and 9 weeks, depending on the year taken. The purpose of the course was to equip officers to serve as staff officers at the battalion and brigade levels and also to force officers to function with officers from other branches.

After studies in the early 1990s, the army reorganized its precommissioning and basic courses into a series of phases dubbed the Basic Officer Leaders Course (BOLC). Initially, BOLC consisted of three phases, with the precommissioning education as BOLC I—United States Military Academy, Reserve Officers Training Corps, or Officer Candidate Schools. After commissioning, new second lieutenants attended a 6-week course in basic combat and leadership skills, BOLC II. After completing BOLC II, lieutenants attended a branch-specific OBC, BOLC III. OBC acquaints new officers with the specific skills needed to perform as platoon leaders in their assigned branch. The instruction is focused at the tactical level. BOLC II was eliminated in October 2009, and BOLC I and III were redesignated as BOLC Phases A and B. Following completion of OBC, most officers are assigned to line units and assume their leadership roles. Some will delay joining their new units to attend more specialized training, such as Ranger, Airborne, or Air Assault schools, which they attend alongside enlisted soldiers. While serving as lieutenants, some will be selected for further specialized training such as the Army Reconnaissance Course, Infantry Mortar Leaders Course, or Battalion Motor Officer Course. Before taking command of a company, or like-sized unit, many posts or divisions require officers to attend a precommand course, normally of 2 weeks or less, that acquaints future commanders with the details of running a company. In 2004, the Officers Advanced Courses were changed, and much of the material from CAS3 was merged into the Officers Advanced Courses to create the new Captains' Career Courses

(CCC). The separate CAS3 course was discontinued. In Captains' Career Courses, instruction is still geared to the tactical level of war, but it deals with the employment of battalions and brigades.

At the field grade level, officer education becomes focused on the operational and strategic levels of war and is not branch specific. In the early 2000s, the army revamped the CGSOC curriculum, although it remained focused on the division and corps levels. The newly restructured course was dubbed Intermediate Level Education (ILE). The course is divided into two halves—Common Core (ILE-CC) and the Advanced Warfighting Course (ILE-AWC). Admittance to the course had long been competitive, but beginning in 2003, most active army officers have been allowed to take at least the Common Core part of the instruction in residence, with Fort Leavenworth graduating about 1,500 officers per year. Officers from the Operations Support Career Field (OSCF), Information Operations Career Field (IOCF), and Institutional Support Career Field (ISCF) normally attend a 3-month version of ILE-CC at one of several satellite locations—Fort Belvoir or Fort Lee, Virginia; Fort Stewart, Georgia; or Redstone Arsenal, Alabama. Some board-selected Reserve Component and Special Branch officers also attend ILE-CC at the satellite locations. About 2,000 officers per year, mostly from the Army Reserve and Army National Guard, take the ILE-CC through DE or TASS. Officers who take the Common Core at one of the satellite locations, through DE or TASS, and about 20% of officers who take it in residence at Fort Leavenworth, must take the AWC portion through DE if they desire to complete the entire ILE program. Officers in more specialized branches outside Combat Arms complete a branch or functional area credentialing course, which takes the place of AWC. Students who attend the entire ILE course at Fort Leavenworth have the option of earning a Master of Military Arts and Sciences (MMAS) degree from the Command and General Staff College by completing and defending a thesis and taking oral examinations, or they can earn a master's degree while in ILE through programs offered by civilian universities. About 150 selected volunteer graduates of the ILE course are allowed to attend the Advanced Military Studies Program at the School of Advanced Military Studies, a 10-month MMAS granting program that is also under the Command and General Staff College. Graduates from School

of Advanced Military Studies are usually assigned to a planning staff at a division or higher level for their next assignment. The Command and General Staff College also administers several precommand courses lasting several weeks that are designed to further prepare officers to assume command of battalions or brigades.

The capstone of the officer education system is the War College, where officers take the Senior Developmental Education Course. About 350 students are selected by a board to attend the War College in residence, with another 150 positions in the DE version reserved for active army officers. About 50% of the eligible officers are allowed to attend the War College in one of its forms. At the War College, or at one of its peer programs at the National Defense University, sister services, or the senior-level course at the School of Advanced Military Studies, select lieutenant colonels and colonels become more familiar with war at the strategic level. The curriculum is focused on the Army, Major Command, and Joint/Theater levels. The army's War College consists of a 10-month-long course. Graduates earn a master of strategic studies degree from the War College. Officers can also receive credit for the War College by taking a 2-year version that combines DE with short resident phases.

Reserve Officer Education

For most officers in the Army Reserve or National Guard, as well as some active army officers, attendance at most resident courses is not an option due to budgetary constraints or the inability to take time off from civilian occupations. While all officers, whether active or reserve component, must take the same precommissioning and OBC courses, subsequent courses are available in modified form for reserve component officers. Most reserve component officers attend their Captains' Career Course through a five-phase program that lasts more than 2 years. Reserve component versions of the Captains' Career Courses normally consist of a combination of online training and 2-week-long resident phases. Likewise, ILE-CC is offered as a purely DE version or through TASS. Officers who take it through TASS take a three-phase program, with Phases I and III offered at consolidated regional training centers. Phase II is offered at smaller regional classes normally held one weekend a month. Students may combine taking

some phases through TASS with other phases taken through DE. AWC must be taken, if at all, through DE. Attendance at the War College remains selective, with selection boards for both the 10-month resident course and the 2-year DE version.

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See also Army War College; Command and General Staff College; Commissioned Officers; Officer Candidate School; ROTC; U.S. Military Academy

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TRAINING, COAST GUARD ENLISTED

Training procedures are critical to a strong enlisted Coast Guard force, from basic training for recruits to ongoing training throughout each service member's career. The Coast Guard provides many training opportunities that enhance individuals' professional and trade skills while increasing the sea service's overall capability to perform its missions.

In 2010, the U.S. Coast Guard included approximately 36,000 active-duty enlisted personnel. Coast Guard ranks are from E-1 to E-9. Ranks E-1 to E-3 are referred to as seamen. Rank E-4 and above are called petty officers. Rank E-7 and above are called "chief" petty officers.

Coast Guard "boot camp" for newly enlisted active- and reserve-duty personnel occurs at the Coast Guard Training Center at Cape May, New Jersey. The 8-week course includes training in basic seamanship and other service-related skills, discipline, and physical training. Graduates of basic training are required to complete a series of physical tests, such as calisthenics and runs in a finite time period, treading water for 5 minutes, and completing a swim circuit. These tests are more strenuous than the U.S. Army's basic training requirements. For example, the army requires enlisted recruits to perform 31 push-ups in 2 minutes, while the Coast Guard requires 29 push-ups in one minute to graduate.

Additional skills training is provided at one of the service's 16 Class "A" schools. These are located at one of the Coast Guard training centers: Coast Guard Training Center, Petaluma, California; Coast Guard Training Center, Yorktown, Virginia; Coast Guard Maritime Law Enforcement Academy, Charleston, South Carolina, or Coast Guard Aviation Technical Training Center, Elizabeth City, North Carolina. Graduates of the school receive a "rating," qualifying them with a technical skill on a range of disciplines from Electronics Technician to Boatswain's Mate. A seaman must have a minimum of 30 months remaining on his or her enlistment to attend a Class A school.

There are many ratings that enlisted members can achieve that support the various elements of the Coast Guard's missions. These ratings fall under six groups:

Deck & Ordnance Group

- Maritime Enforcement Specialist
- Boatswain's Mate
- Gunner's Mate
- Operations Specialist
- Intelligence Specialist

Hull and Engineering Group

- Damage Controlman
- Electrician's Mate

- Electronics Technician
- Information System Technician
- Machinery Technician

Aviation Group

- Avionics Electrical Technician
- Aviation Maintenance Technician
- Aviation Survival Technician

Administrative and Scientific Group

- Food Service Specialist
- Health Services Technician
- Marine Science Technician
- Public Affairs Specialist
- Storekeeper
- Yeoman

Reserve Only Group

- Port Security
- Investigator

Enlisted Professional Military Education Group

- PME Rating Knowledge Manager

Coast Guard enlisted personnel can also receive a rating through the Striker Program. This involves a combination of on-the-job training and self-study rather than conventional education conducted in a classroom. A seaman can qualify for five different ratings under this program: Boatswain's Mate, Damage Controlman, Food Service Specialist, Machinery Technician, and Storekeeper.

Class "C" schools provide advance training and specialized skills for enlisted personnel. Class C schools include training and education provided by the Coast Guard as well as the other military services, the Department of Defense, and other government agencies.

The Coast Guard also allocates AFC30-T funds for training not offered by service Class A or C schools. These funds are available for training for both active and reserve personnel. They are made available to cover training requirements for duties in three categories. Category 1 training includes that which must comply not only with federal law but also laws at the state and local levels where applicable. An example of this is that Lead Building

Inspector Training is mandated by federal law and through Asbestos, Lead and Radon in Coast Guard housing regulations, the training for which is not provided in A or C class schools.

Category 2, job critical/mission essential training is set by order of the commandant of the Coast Guard. An example is the requirement for Damage Controlmen at Integrated Support Command Portsmouth to be skilled in welding, which they can obtain at a community college (<http://www.uscg.mil/hq/CGI/>).

Category 3 is professional development related to a service member's current assignment or that which will provide essential enhancement in an individual's skills or abilities. An example of Category 3 training is Basic/Advanced Locksmith training.

Boat Forces Command Cadre School prepares chief petty officers and senior petty officers for leadership and command assignments, including Executive Petty Officer or Engineering Petty Officer billets, at small operating units.

In the course of their careers, enlisted personnel may participate in a number, and wide variety, of professional development training and education opportunities, including Marine Safety Industry Training and Port Safety/Security Industry Training.

In addition, active- and reserve-duty officers can take free online courses on the U.S. Coast Guard Learning Portal.

Enlisted personnel with at least 8 years of military service can apply for Warrant Officer training. Training for warrant officers occurs at the Coast Guard Chief Petty Officer Academy. The Academy is in New London, Connecticut. The Chief Warrant Officer Professional Development Course provides courses for transition into the officer corps.

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See also Coast Guard, U.S.; Training, Army Enlisted; Training, Coast Guard Officers

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Websites

- U.S. Coast Guard enlisted opportunities: <http://www.gocoastguard.com/find-your-career/enlisted-opportunities>
- U.S. Coast Guard enlisted ratings descriptions: <http://www.gocoastguard.com/find-your-career/enlisted-opportunities/enlisted-ratings-descriptions>
- U.S. Coast Guard Training Center Cape May: <http://www.uscg.mil/hq/capemay/education/cgmilcareerdev.asp>

TRAINING, COAST GUARD OFFICERS

Coast Guard officer training primarily takes place at the U.S. Coast Guard Academy, although there are a number of other avenues by which college-educated recruits can train to become commissioned officers. Around 75% of academy graduates earn technical degrees in various areas of study, such as engineering, sciences, or mathematics. The academy's mission statement is as follows:

The United States Coast Guard Academy is committed to strengthening the nation's future by educating, developing, training, and inspiring leaders of character who are ethically, intellectually, professionally, and physically prepared to serve their country and humanity, and who are strong in their resolve to build on the long military and maritime heritage and proud accomplishments of the United States Coast Guard.

In 2010, there were more than 8,000 active-duty officers in the U.S. Coast Guard. This number included both commissioned and warrant officers. They constitute about 20% of the active-duty force. Commissioned officers ranks are from 0-1 (ensign) to 0-10 (admiral). Warrant officers rank range from chief warrant officer 2 to chief warrant officer 4. The Coast Guard has established professional education and training for both ranks.

Commissioned officer education and training begins with precommissioning that includes both academic classes and military training. The primary source of precommissioning education is the U.S. Coast Guard Academy at New London, Connecticut. The academy, with a student body of more than 900, offers a 4-year undergraduate education and bachelor's degree. In 2010, *US News and World Report* ranked the academy as the Number 1 college under the category of "Regional Colleges, North." Incoming cadets must participate in "Swab Summer," a 7-week military training program. This program includes physical fitness training and general military skill building, with emphases on seamanship, swimming, and academics. During the year, the cadet regimen includes military training, academic classes, and athletics. Cadets also undertake a 10- to 14-day "long cruise" on a U.S. Coast Guard cutter. Graduates are commissioned as

ensigns. The academy commissions about 40% of the service's officer corps.

Specific areas of study at the academy include naval architecture and engineering, professional maritime studies, strategic intelligence studies, and mathematics. Course work such as ship and maritime systems knowledge and fundamentals of navigation are found in the professional maritime studies program, for example.

The Coast Guard does not participate in the Reserve Officers' Training Corps (ROTC), which provides scholarships for precommissioning training at civilian universities. However, the Coast Guard's Officer Candidate School (OCS), also in New London, offers college graduates 17 weeks of training in various areas, including nautical science, law enforcement, seamanship, and leadership. Graduates are also commissioned as ensigns. College sophomores and juniors can compete for the College Student Pre-Commissioning Initiative program, which offers scholarships and training in preparation for participation in OCS.

The U.S. Coast Guard does participate in the Junior Officer Training Corps, a federally funded program that provides leadership training to high school students.

Some professionals, such as lawyers, aviators, engineers, graduates of the U.S. Maritime Academy, or former military officers of the army, navy, marines, and air force can apply for Direct Commissioning Programs, a 3- to 5-week precommissioning course.

Commissioning training for reserve officer candidates is done through the Selected Reserve Direct Commission Program, which includes 3-week courses held each summer at the Coast Guard Academy. Reserve officer programs include studies in law, engineering, intelligence, marine safety, computer and information technologies, and reserve program management.

Training for warrant officers occurs at the Coast Guard Chief Petty Officer Academy. This academy is also in New London. The Chief Warrant Officer Professional Development Course provides courses for transition into the officer corps.

Boat Forces Command Cadre School prepares junior officers as commanding officer, executive officer, or officer in charge for assignments in small operating units.

The College Student Pre-Commissioning Initiative is a scholarship program for college juniors and seniors that pays for their tuition and prepares

them for OCS. While continuing their normal course of study, students awarded this scholarship must complete Coast Guard basic training, adhere to the Coast Guard Code of Conduct, and perform Coast Guard duties. The Wilks Flight Initiative is a program for Coast Guard seniors of the College Student Pre-Commissioning Initiative seeking to become Coast Guard aviators. Acceptance into this program guarantees students acceptance into flight training school on completion of OCS.

In the course of their careers, Coast Guard officers may participate in a wide variety of professional development training and education opportunities, such as Marine Safety Industry Training and Port Safety/Security Industry Training. The Coast Guard also offers opportunities for officers seeking postgraduate and advanced education degrees. Eligible officers may submit résumés so that they can be considered for an advanced degree based on their professional experience within the Coast Guard. Examples include a law degree, a master's of business administration, marine safety industry training (port safety and security, merchant marine, etc.), and degrees leading to academy instructor (in fields of physical sciences, such as chemistry, or humanities, such as literature or history). More technically advanced degrees are attainable through this system as well, such as a master of science in acquisition project management, advanced computer and electronics technology programs, and a master of science in marine engineering. In addition, active- and reserve-duty officers can take free online courses on the U.S. Coast Guard Learning Portal.

Senior military education occurs through attendance or nonresident participation at the Pentagon's Senior Service Schools, including the Service War Colleges, the National War College, and the Industrial College of the Armed Forces, or participation in fellowship programs, such as the RAND Military Fellowship. Some of the schools award a master's degree.

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See also Coast Guard, U.S.; Training, Coast Guard Enlisted

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TRAINING, MARINE CORPS ENLISTED

The U.S. Marine Corps portrays an image of being an elite fighting organization able to project American power abroad and implement national policy. To do this, the Marine Corps relies predominantly on enlisted marines. It has the lowest officer-to-enlisted ratio within the Department of Defense. Enlisted marines and enlisted noncommissioned officers (NCOs) are called to perform tasks that, in other services, normally would be carried out by commissioned officers. The Marine Corps was designated by Congress as a “force in readiness,” able to respond at once to support a naval campaign or to suppress international disturbances. Launching from sea-based platforms called Marine Expeditionary Units, marines are required to be flexible and adapt quickly to hostile and nonhostile environments in order to accomplish missions ranging from humanitarian relief to conventional war.

Since there is such a reliance on enlisted marines, their training and education is paramount to the success of the Marine Corps. Emphasizing discipline, leadership, and an adherence to a code of conduct that is considered Spartan, the corps is able to create a professional enlisted warrior. Beginning with an indoctrination program at Basic Training, continuing with a mixture of Marine Corps and Department of Defense operated military occupation specialty schools, and advancing with a combination of a corps-wide school system and unit-training programs, the Marine Corps has been able to consistently produce highly qualified warfighters. This

training progression is the result of more than 200 years of institutional experimentation, critical study, and trial and error. It is this Marine Corps system of training that this entry is directed at.

Recruit Training

The initial training for enlisted marines is designed to separate recruits from their civilian selves and to remold them into a warrior elite that is ethically and morally pure. This is done in the hope that the marine who emerges from recruit training will have a foundation on which sophisticated 21st-century warfighting skills can be built. Marine Corps Recruit Training, or boot camp, is an indoctrination program that all enlisted marines, both active-duty and reserve, must endure. Unlike other services, the Marine Corps does not separate their recruits by military occupation specialties (MOS) for basic training. By not doing this, the corps is able to maintain a culture that is not unique to any individual unit, training facility, or MOS. Boot camp is the common thread that binds all and is responsible for the formation of a collective identity that is embraced by both past and present enlisted Marines.

Currently, there are two recruit training depots in the Marine Corps. The first and most well-known is Parris Island, South Carolina. Situated on 8,095 acres of land, most of which are salt marsh, Parris Island was officially named a Marine Corps Recruit Depot in November 1915. Opened to create a central training facility for the corps, Parris Island was still in the process of being built when the United States entered World War I. On President Woodrow Wilson's mobilization of the armed services, the Marine Corps sent thousands of recruits to the depot for basic training. During the war, training consisted of a mixture of marksmanship, weapons familiarization, close-order drill, and manual labor. The recruits themselves built many of the buildings. As a link to tradition, recruits are still mandated to support the base and its operations. There is an entire week written into the training schedule dedicated to depot maintenance.

Recruit training did not take place exclusively at Parris Island during the First World War. Due to the massive influx of manpower, smaller recruit training bases were established. After the war, most were dismantled. One that remained was a base situated in San Diego, California. Here, the marines remained, and the base became a major

recruiting center. With the outbreak of World War II, the base was again tasked with the training of recruits. It was not until 1948, however, that the base was officially designated Marine Corps Recruit Depot (MCRD), San Diego. Currently, the Marine Corps sends all of its male recruits who enlisted west of the Mississippi River to MCRD San Diego, while MCRD Parris Island trains the male recruits who enlisted east of the Mississippi River, as well as all female recruits.

Recruit training for the Marine Corps is constantly being revised and updated to increase its effectiveness. The current training regimen is 12 weeks long, is separated into three phases, and culminates in a final exercise known as the Crucible. Recruits are taught military subjects such as rank structure, the organization of the Marine Corps, uniform regulations, grooming standards, and the Uniform Code of Military Justice. Close-order drill and the manual of arms are ever present, and recruit platoons are graded based on their performance in these areas. The corps believes in stressing close-order drill and the manual of arms because they teach self-discipline, teamwork, and instant obedience to orders. Marksmanship training is one of the most important aspects of boot camp. Traditionally, marines are supposed to be expert marksmen, and recruit training embraces this history. Surprisingly, there are little, if any, combat skills taught at the recruit depots. Instead, the Marine Corps teaches these skills immediately after recruit training and prefers to concentrate only on indoctrinating recruits into the culture and ethos of being a U.S. Marine.

School of Infantry

Newly titled marines are sent to the School of Infantry (SOI). Located on both coasts, SOI East at Camp Lejeune and SOI West at Camp Pendleton, it is here that marines are trained in the tactics, techniques, and procedures required of them in combat. Since the Marine Corps is an infantry-centric fighting force, it propounds the motto "Every Marine is a Rifleman," meaning all marines, regardless of MOS, are supposed to be able to pick up a rifle and effectively engage the enemy. For noninfantry marines, this requires their attendance at the Marine Combat Training course. During the 29-day course, marines are given a program of instruction designed



U.S. Marine Corps recruits assigned to the 1st Recruit Training Battalion, Charlie Company, and the 4th Recruit Training Battalion, Oscar Company, perform the maneuver under fire portion of the day movement course during basic training at Paige Field in Marine Corps Recruit Depot, Parris Island, South Carolina, February 16, 2010. Maneuver under fire comprises the low crawl, high crawl, back crawl, and sprinting.

Source: U.S. Marine Corps photo by Lance Corporal Vernon T. Meekins.

to thoroughly familiarize them with the basics of infantry combat. Their training includes the firing of most man-portable infantry weapons; the practicing of small unit offensive, defensive, and patrolling tactics; and, since the wars in Iraq and Afghanistan, an introduction to convoy security operations. On completion of Marine Combat Training, noninfantry marines proceed to their MOS school.

Infantry Marines at SOI are sent to Infantry Training Battalion where they are thoroughly trained in the individual techniques required of being an infantryman as well as introduced to the fundamentals of small unit tactics, techniques, and procedures. Since this is their MOS school, infantry marines spend 59 training days in the Infantry Training Battalion. The infantry is the heart and soul of the corps, and the high quality of training that

these young marines receive is essential to their effectiveness when they go to their Fleet Marine Force (FMF) units.

Military Occupation Specialty Schools

After Marine Combat Training, noninfantry marines proceed to their primary MOS schools. There are very few noninfantry MOS schools within the Marine Corps. Most noninfantry marines attend MOS schools run by the other services, or by joint commands. For instance, marines designated as artillerymen go to the U.S. Army's Artillery School at Fort Sill, Oklahoma. Marine Tankers attend the Armor School at Fort Knox, Kentucky. Public Affairs marines are sent to the Department of Defense's Defense Information School at Fort



U.S. Marine Corps Staff Sergeant Joseph L. Boehm (standing) and Staff Sergeant Charles W. Rogall, marine students attending the Infantry Unit Leaders Course, Advanced Infantry Training Battalion, School of Infantry-East, call for the medical evacuation of a simulated casualty during urban combat training on Camp Lejuene, North Carolina, March 16, 2011.

Source: U.S. Marine Corps photo by Lance Corporal Maxton G. Musselman.

Meade, Maryland. There, clustered together in detachments of marines, they go through the same instruction as everyone else. Marine instructors are present at these schools and are responsible for most, if not all, of the marines' practical application exercises.

On initial inspection, the Marine Corps's use of other services' schools may appear to be in reaction to the Goldwater-Nichols Defense Reorganization Act of 1986, which forced the streamlining and integration of the services' training and education

programs. This, however, is not the reason why the Marine Corps sends marines to these schools. There is a long historical precedence for the Marine Corps's use of the other services' schools. Begun on a massive scale during World War I, the Marine Corps sent hundreds of marines to various army and navy schools. This practice continued in the interwar years but decreased substantially during World War II. During World War I, the corps did not have the manpower or the facilities both to establish schools and send marines to fight in France. This was not the case when World War II started. The corps's planners immediately recognized the need to greatly expand the corps's school system because the army and navy were overwhelmed by the huge influx of conscripted servicemen. After World War II, with the demobilization of the military, the Marine Corps shut down many of its more specialized schools and opted to maintain more marines in the operating forces by sending them to the other services' schools.

Unit Training

Once marines are finished with recruit training, SOI, and their MOS schools, they are sent to units throughout the Marine Corps. For most, they are sent to the FME, which is the operations arm of the corps. Ordered to man billets in units throughout the FME, marines begin on-the-job training. On-the-job training is an integral part of the process of creating a 21st-century warfighter, and it is here that the constant guidance and supervision of NCOs is crucial. In noninfantry units, the units are responsible not only for performing their primary MOS duties but also for maintaining proficiency in basic infantry skills.

For infantry marines, training for combat is their sole purpose for existence, and everything they do revolves around learning to be effective in combat. Unlike the U.S. Army where operating with larger units is more prevalent, the largest unit that the Marine Corps trains with is a reinforced infantry battalion. Unit training consists of ranges, field exercises, conditioning hikes, and classes taught by corporals and sergeants, who are considered NCOs in the Marine Corps. NCOs learn how to lead marines, perform their duties and responsibilities, and take care of their marines through on-the-job training. At times, corporals and sergeants are sent to various NCO leadership courses. For the most

part, NCO-specific training in the Marine Corps is either nonexistent or is not relevant for infantry marines despite the corps's recent efforts to change this. Therefore, the preparation for becoming an NCO is largely completed by learning through experience when conducting unit training and by being mentored by senior NCOs.

Enlisted Schools

The Marine Corps maintains various supplemental MOS schools as well as other smaller-scale combat skills courses. These schools are designed to train a cadre of instructors who then take what they learned and teach it to other marines during unit training exercises. Run by various commands, these courses of instruction fall under the direction of Training and Education Command (TECOM), Marine divisions, regiments, and, at times, individual battalions. Recently, the Marine Corps tried to consolidate training under the Training and Education Command, but there are still some schools outside the Training and Education Command's direct supervision.

Many of these courses are run through SOI under the Advanced Infantry Training Battalion.

Conclusion

One of the dominant misperceptions of enlisted marines held by the public is that marines are automatons instantly responding to orders without thought or emotion. This is not the case and is contradictory to Marine Corps doctrine, which requires subordinates to challenge their leaders until a decision is made. All of the enlisted marines' training is designed to instill confidence, encourage initiative, and inspire courage. The 21st-century warrior must be intelligent, thoughtful, and decisive. Marine Corps training seeks to cultivate these qualities within its enlisted marines.

Earl J. Catagnus Jr.

See also Marine Corps, U.S.; Marine Corps University; Training, Marine Corps Officers

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TRAINING, MARINE CORPS OFFICERS

Tracing the professionalization process of the officer corps sheds light on the effectiveness and efficiency of the U.S. Marine Corps. A highly educated, trained, and experienced officer corps generally signifies an effective and efficient military force. Since the occupational objective of a military is to wage war for national interests, many military professionals go through their entire career without participating in the real-life version of their profession. The opportunity for an officer to engage in warfare is minimal; therefore, examining the training of officers is necessary to assess the Marine Corps's potency as an instrument of national policy.

The Marine Corps has a multifaceted officer training program. Introductory training is conducted at Officer Candidates School (OCS) and The Basic School (TBS). Both schools are physically and mentally challenging and are designed to select officers rather than train officers. After TBS, marine officers attend a military occupation specialty school run by the Marine Corps, another service, or the Department of Defense. Following this, officers are assigned to units throughout the Corps. Most officers do not attend Marine Corps established supplemental military occupation specialty schools and combat skills courses because enlisted marines fill the majority of these programs' quotas. Unit training is the primary means for officers to gain experience beyond the classroom. Throughout officers' careers, they are required to enter into professional military education programs that advance their understanding of the complexities of 21st-century warfare.

Officer Candidates School

Drawing from a vast array of sources, the Marine Corps procures officers in much the same way as the other services. The vast majority of marine officers enter the Marine Corps directly from college. Some, on graduation from the Naval Academy, select the Marine Corps to fulfill their obligatory service. In very few instances, West Point graduates choose the Marine Corps. The remaining officers are selected from the ranks of enlisted marines. According to the Marine Corps, the percentage of candidates entering each class comes from the following commissioning pathways: 35% from the platoon leaders' course, 24% from the officer candidate course, 16% from the Naval Reserve Officers Training Corps, 15% from the United States Naval Academy, and 10% from the enlisted commissioning programs. The percentage of candidates who attended colleges other than military academies is 75%. Therefore, the composition of the marine officer corps is predominantly filled with graduates from civilian universities. This is the highest percentage among all the services. In keeping with the corps's reliance on enlisted marines, of all the services, the Marine Corps has the highest percentage of enlisted personnel advancing to the officer ranks.

Located only at Marine Corps Base Quantico, Virginia, OCS is designed to select marine officers instead of train them. This is in stark contrast to marine recruit training where drill instructors attempt to break down individuals and rebuild them as marines. At OCS, the instructors are there to guide the candidates into becoming Marine Corps officers. The motivation, physical stamina, and leadership skills needed to graduate must come from within each candidate. The washout rate for some OCS classes is 30%. Most OCS drops are due to physical injury, but there are instances where candidates drop on request. Review boards are convened periodically to evaluate candidates who are not performing to the corps's standards. These review boards consist of the instructors and marine officers who carefully examine the candidate's scores, appearance, physical performance, and overall desire to become a Marine Corps officer. The official evaluation guidelines for OCS are the following: 50% leadership, 25% academics, and 25% physical fitness. If the candidates are deemed unfit, they are dismissed and dropped from the course.

The three core areas of leadership, academics, and physical fitness are reflected in the training



U.S. Marine Corps officer candidates with Delta Company perform the fire and maneuver portion of the combat readiness test at Officer Candidates School at Marine Corps Base Quantico, Virginia, March 6, 2009. Officer Candidates School trains, screens, and evaluates officer candidates to ensure that they possess the moral, intellectual, and physical attributes for commissioning.
Source: U.S. Marine Corps photo by Lance Corporal Christine A. Shifflett.

schedule for OCS. The candidates' leadership qualities are tested continuously by formal examinations based on classroom instruction, performance when placed in various class leadership billets, and willingness and effectiveness in helping classmates and through several leadership reaction courses. The foundation for the academic evaluation is general military subjects. These include the Uniform Code of Military Justice, Marine Corps history, infantry tactics, land navigation, organization of the Marine Corps, and other pertinent information concerning

the corps. Perhaps the most demanding gradable quality, physical fitness, is measured through a series of events that require the candidates to be placed in high-stress environments. Candidates must maintain a high degree of professionalism and emerge from these events as established leaders. Physical conditioning exercises include obstacle courses, confidence courses, combat fitness tests, and the Marine Corps Martial Arts Program. After successful completion of the 10-week training schedule, candidates graduate and immediately enter TBS located just down the road at Marine Corps Base Quantico.

The Basic School

TBS is where all commissioned second lieutenants in the Marine Corps are ordered after OCS. TBS is a 26-week program designed to teach marine officers the fundamentals of infantry combat. Similar to the enlisted marines' recruit training, OCS does not teach officers much about battle tactics. TBS's mission is to produce basically trained infantry platoon commanders for service in the Fleet Marine Force (FMF). This does not mean that every marine officer is an infantry officer. It does mean, however, that all marine officers are expected to lead marines in combat. The Marine Corps is a light infantry-oriented expeditionary fighting force and, as its history demonstrates, requires that all marines be riflemen regardless of their military occupation specialty. Marine officers, in turn, must be trained to lead these marines.

TBS is divided into four phases of instruction where second lieutenants are trained in individual combat techniques, rifle squad tactics, rifle platoon tactics, and basic tactics needed for officers performing missions within the Marine Air Ground Task Force (MAGTF). The training schedule is packed with a mixture of classroom instruction and practical application exercises. TBS contains several field exercises where the second lieutenants are placed in different infantry leadership billets and graded based on their performance as an effective leader. These field exercises mimic the progression of instruction in that they are focused on developing individual, fireteam, squad, platoon, and platoon-reinforced infantry tactics, techniques, and procedures. Both enlisted marine combat instructors and marine officer instructors grade all exercises and field problems.

TBS is designed to create a common culture among Marine Corps officers. That culture is one that places

the infantry first and all other functions that Marine Corps officers perform second. The Marine Corps believes that by requiring all newly commissioned second lieutenants to experience the hardships of infantry officers and be thoroughly trained in infantry tactics, techniques, and procedures, the noninfantry officers will be in a better position to support the infantry. In the Marine Corps, all noninfantry marines exist solely to support the infantry. This is taught repeatedly to both enlisted marines and officers. On graduation from the infantry-centric TBS, the second lieutenants attend their military occupation specialty (MOS) school.

Military Occupation Specialty School

Similar to the enlisted marines' MOS training, many of the officers' MOS schools are located outside the command of the corps. They attend U.S. Army schools like the Artillery School at Fort Sill, Oklahoma, and the Armor School at Fort Knox, Kentucky. They are also sent to various Department of Defense operated schools, such as the Defense Information School at Fort Meade, Maryland.

Recognizing the institutional differences in warfighting, the corps retains and strictly manages the curriculums of the most crucial schools. Since the Marine Corps is an infantry-centric force that fights differently than its U.S. Army infantry counterpart, it sends infantry officers to the Infantry Officer Course situated next to TBS at Marine Corps Base Quantico. Using the same logic, the corps sends ground intelligence officers to Infantry Officers Course, Scout Sniper Platoon Commander Course, and Ground Intelligence Officer Course. The melding together of infantry and intelligence MOSs is essential for the Marine Corps to execute its mission while using its military intelligence-driven ground combat warfighting philosophy. On graduation from their MOS school, the second lieutenants are mostly sent to the FMF, which is the operational arm of the Marine Corps.

Unit Training

Checking into their FMF units, officers are expected to immediately take charge of their respective organizations. Noninfantry officers oversee communications, administration, logistics, supply, and many other essential infantry supporting units. In addition

to the everyday tasks of efficiently running their “shop,” as it is called in the Marine Corps, noninfantry officers must maintain the proficiency of their enlisted marines in basic combat techniques.

For infantry officers, taking charge of a platoon is what occurs on check-in. From the beginning, they are required to lead enlisted marines who, most likely, have been to combat two or three times already. New infantry officers rely heavily on their platoon sergeants and squad leaders to directly control the enlisted marines and guide their understanding of the realities of ground combat. It is the platoon sergeant’s job to make sure that his platoon commander is always seen as a near-perfect leader of marines. As a consequence, platoon commanders and platoon sergeants are nearly inseparable. Frequent informal consultations and training by the platoon sergeant occur, but always the platoon commander is in charge of the platoon. An infantry marine never questions orders from the platoon commander when they are issued.

Training in FMF units is continuous. Field exercises, sand table problems, and various training evolutions without troops are the primary means of an infantry officer’s training. At times, FMF units allow Marine Corps supplemental MOS schools and combat skills courses to be filled by marine officers. This, however, is rare because these schools are designed to provide FMF units with instructors. When these students graduate, they are expected to return to their units and teach their fellow marines. Noncommissioned officers, not commissioned officers, are troop handlers and instructors

Conclusion

The training of the corps’s officers has improved exponentially since the invasion of Iraq in 2003. Most marine officers completed at least one, most likely two, combat tours in either Iraq or Afghanistan. They experienced combat in urban, suburban, desert, and mountainous terrains. They participated in the full spectrum of 21st-century warfare by conducting combat, counterinsurgency, and humanitarian operations. The Marine Corps took the lessons learned from those combat deployments and integrated them into the training of marine officers. The quality of marine officers, in turn, has significantly increased.

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See also Marine Corps, U.S.; Marine Corps University; Training, Marine Corps Enlisted

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TRAINING, MULTINATIONAL

Training conducted by the military forces of two or more nations is termed *multinational training*. The military branches that form the U.S. Department of Defense routinely participate in periodic training with the armed forces of other nations. This training promotes each nation’s collective, as well as individual, security interests against real and anticipated threats throughout the world. Each training event tests, analyzes, and evaluates each participating nation’s contingency planning, response effectiveness, logistical planning, and cooperative defense agreements pertaining to offensive and defensive operations. This entry provides an examination of multinational training and operations that military forces of the United States participated in during World War I (1917–1918), World War II (1941–1945), the Cold War (1945–1989), the post-Cold War period (1990–2001), Afghanistan (2001–present), and Operation Iraqi Freedom (2003–2011) and also examines the mechanics of contemporary multinational training conducted today.

World War I

With the entry of the United States into World War I on April 6, 1917, multinational training began in earnest for the first time. On his arrival in France in

June 1917, General John J. “Black Jack” Pershing, commander of the Allied Expeditionary Force (AEF), began a thorough review of the tactics and training methods used by the Allied armies to train their military forces. Great Britain and France had long maintained military training centers and professional schools to train their respective military organizations. Pershing seized on this idea quickly and began creating his own training centers for the arriving AEF. Recommendations were made to the War Department that combat-experienced officers from Great Britain and France be obtained and sent to the United States to assist in the training of recruits, noncommissioned officers, and commissioned officers for the AEF. While the locations and staffing requirements were being completed for the new AEF schools, Pershing made arrangements for current AEF noncommissioned and commissioned officers to attend military schools that were operated by Great Britain and France. Pershing and his staff faced many challenges in the process of how best to integrate the AEF into the well-established military hierarchy of the British and French military forces. Britain and France had been at war with Germany and its allies for more than 3 years by the time the AEF arrived in Europe. As a result, the British and French leadership pressed for the attachment of the fresh U.S. forces directly to their own forces to bolster their depleted ranks, a move that Pershing vehemently opposed. Pershing was a firm believer in having a single, supreme commander in charge of the coalition forces, instead of a multilevel council made up of officers from each of the nations.

World War II

During World War II, strategic thinking concentrated around the idea that Germany posed a greater risk than Japan and resulted in the United States participating in many multinational training exercises in the European Theater of Operations with allies Great Britain and France. The training primarily concentrated on preparations for Operation Torch, the invasion of North Africa in November 1942, and Operation Overlord, the cross-channel invasion of France that occurred on June 6, 1944. With the defeat of Nazi Germany as the primary goal, the next move for the Allies would be to build on the limited successes achieved in the Mediterranean in 1942. The selection of a supreme commander to

lead a cross-channel invasion of France had been decided on at the Casablanca Conference in 1943. General Dwight D. Eisenhower would ultimately be selected as the supreme commander of the expeditionary forces, but not before much political maneuvering by other well-known and qualified Allied senior officers.

Operation Jedburgh was the first clandestine multinational effort between the British Special Operations Executive, the U.S. Office of Strategic Services, the Free French Bureau Central de Renseignements et d'Action, and the Dutch and Belgian armies. Known as “Jeds,” these multinational teams trained for 2 to 4 weeks near Jedburgh, in the Scottish Borders, and then were parachuted into occupied France over the months leading up to the Normandy landings. In 1945, the “Jeds” operated against the Japanese forces in French Indochina and other occupied Southeast Asia nations and islands. British, American, Canadian, and Free French forces trained together in the months prior to Operation Overlord in June 1944. The best-known exercise, codenamed Operation Tiger, resulted in the deaths of more than 700 U.S. servicemen after they came under attack by German E-boats patrolling in the English Channel.

Cold War Period (1945–1989)

Europe

With the establishment of the North Atlantic Treaty Organization (NATO) in 1949, the need for multinational training in Europe became a priority. In 1958, the U.S. Army activated the 7th Army Training Center at Vilseck, Germany, near the Grafenwoehr Training Area, with the purpose of training American military forces for a potential invasion by the Soviet Union and its Warsaw Pact allies. Established in 1910, Grafenwoehr had served as a military training center for various Bavarian and German armies up until its capture during the closing months of World War II. However, no military training was conducted in the area between the years 1945 and 1958. Beginning in 1969, the annual multinational training exercise codenamed Operation REFORGER (REturn of FORces to GERmany) began to be held and quickly gained worldwide attention. NATO member nations sent their respective military organizations to Grafenwoehr to train alongside their U.S. counterparts and take a more

active part in the exercise. In 1976, the training center was renamed the 7th Army Training Command and given the expanded mission of providing and monitoring all training conducted by the U.S. Army Europe. Established at Hohenfels, Germany, in 1988, the Combat Maneuver Training Center developed and provided realistic combined arms training for the U.S. Army Europe, and the 7th Army's maneuver battalion task forces in force-on-force exercises. The center primarily focused its training on an expected NATO-Warsaw Pact confrontation and hosted military forces from West Germany, Great Britain, Canada, and France.

Korean War

After military forces from the Democratic People's Republic of Korea (North Korea) invaded the Republic of Korea (South Korea) in 1950, the fledgling United Nations scrambled to put together a coalition to resist the aggression. This coalition would eventually be centered on the post-World War II forces of the United States that were currently stationed in Japan. Over the next 3 years, military forces from Australia, Belgium, Canada, Colombia, Ethiopia, France, Greece, Luxemburg, the Netherlands, New Zealand, Philippines, South Africa, Thailand, and Turkey participated in resisting the military forces from North Korea and the People's Republic of China. Hostilities ended in 1953 after the signing of an armistice and the establishment of the Korean Demilitarized Zone. U.S. forces have routinely trained with their South Korean army counterparts in exercises on the Korean Peninsula since the end of the Korean War.

1989 to Post-9/11

Persian Gulf War

Multinational training took a new turn in importance with the invasion of Kuwait by the military forces of the Republic of Iraq on August 2, 1990. On August 7, 1990, under the operational code name "Desert Shield," President George H. W. Bush ordered naval, ground, and air forces of the United States to Saudi Arabia for defensive operations, as well as for offensive operations if needed. Within 48 hours, aircraft and ground units began to arrive. Supplies that had been prepositioned for just such an operation were sent to the region. Within 14 days, the first armored units began to arrive, bringing with

them the new M1A1 Abrams main battle tank. By January 1991, more than 695,000 troops, 1,650 aircraft, and 174 warships from Argentina, Australia, Bahrain, Bangladesh, Belgium, Canada, Denmark, Egypt, France, Greece, Italy, Kuwait, Morocco, the Netherlands, New Zealand, Niger, Norway, Oman, Pakistan, Portugal, Qatar, South Korea, Saudi Arabia, Senegal, Sierra Leone, Singapore, Spain, Syria, the United Arab Emirates, the United Kingdom, and the United States itself were positioned in the Kuwait Theater of Operations. During the military buildup, coalition forces received extensive desert military training from coalition members who were from the Middle Eastern region because many of the troops were unfamiliar with waging war in a desert environment. General H. Norman Schwarzkopf and his commanders knew that operating in a desert environment presented challenges for both the military equipment and, more important, for the troops themselves. Schwarzkopf also knew that during the Iran-Iraq War, Saddam Hussein had ordered the use of chemical agents against Iranian military forces and stressed this point to his commanders. Among the troops sent in support of the coalition were chemical warfare specialists from the Czech Republic who were familiar with the chemical weapons that Iraq had obtained from Warsaw Pact members and could possibly deploy during the conflict. Operation Desert Shield became Operation Desert Storm in January 1991 with massive coalition airstrikes being made on Iraqi defensive positions along the Kuwait-Saudi border and around major Iraqi cities. A few weeks later, after months of training together in the Saudi desert, coalition forces began the ground campaign to liberate Kuwait. Coalition forces continued to stay in the region beyond the official end of the conflict in April 1991 primarily due to the fact that Iraq still maintained a large military force despite the destruction of its forces in Kuwait.

Operation Enduring Freedom

The terrorist attacks on the United States on September 11, 2001, triggered an immediate multinational response beginning with NATO enacting Article 5 of its charter by declaring that the attacks on the United States were also an attack on all NATO members. John Howard, prime minister of Australia, quickly utilized the provisions of the Australia, New Zealand, and United States Security Treaty

(ANZUS) to provide assistance. President George W. Bush then ordered air, ground, and naval forces from the United States to begin military operations in Afghanistan under the operational code name “Enduring Freedom.” In October 2001, U.S. forces attacked Afghanistan in an effort to capture members of the terrorist organization known as al Qaeda and its leader Osama bin Laden, as well as to free Afghanistan from Taliban control. Joined by military forces from the United Kingdom and a group of ethnic tribes known as the “Afghan Northern Alliance,” U.S. forces quickly secured strategic airports and major cities, including Afghanistan’s capital, Kabul. The Taliban regime quickly folded and fled into the rugged mountain regions famous for their impenetrability. In 2002, military operations shifted toward counterinsurgency operations against remaining Taliban strongholds as the provisional Afghan Transitional Authority assumed governmental duties in Kabul.

Realizing that in order for the new government in Afghanistan to survive its military force would have to be completely rebuilt, in 2002 the United States began the arduous task of building a new Afghan National Army (ANA) with the creation of the Office of Military Cooperation, Afghanistan. Assisted by military personnel from Bulgaria, Canada, France, Germany, New Zealand, Romania, the United Kingdom, and Mongolia, the initial training for the ANA occurred at the Kabul Military Training Center and at a former Soviet military base outside the town of Pol-e-Charki. Established by UN Security Council Resolution 1386 in 2001, the International Security Assistance Force (ISAF) secured the Afghanistan capital of Kabul and its surrounding areas and would eventually be tasked with the overall responsibility for military operations in August 2003. U.S. reserve forces that had been originally mobilized for use in Iraq were diverted to Afghanistan to supplement ISAF and Special Operations Forces. ISAF continues to lead the multinational effort to train and equip the ANA, although major concerns remain about the financing and leadership of the ANA.

Operation Iraqi Freedom

In April 2003, a multinational coalition consisting of military forces from Australia, Denmark, Georgia, Italy, the Netherlands, Poland, Romania, Spain, Ukraine, the United Kingdom, and the United

States again invaded the Republic of Iraq in a mission given the operational code name “Iraqi Freedom.” Iraq was quickly overwhelmed within a few weeks of the start of the campaign, resulting in the removal of Saddam Hussein from power and the Coalition Provisional Authority being installed. In the war’s aftermath, coalition leaders began to rebuild Iraq’s military forces in similar fashion to that of the ANA in Afghanistan. The Coalition Military Assistance Training Team, a section of the Multi-National Security Transition Command, Iraq, established to organize, train, and equip a new Iraqi army, began its first recruitments in August 2003. Established at the request of the Iraqi Interim Government, the NATO Training Mission, Iraq emphasized training and mentoring for Iraqi officers, noncommissioned officers, and enlisted personnel. Coalition forces soon captured Hussein and turned him over to the Coalition Provisional Authority for trial. Over the next 2 years, insurgents began a campaign of violence against coalition forces until in 2007, when President George W. Bush ordered additional U.S. forces into Iraq to suppress the attacks that had steadily been increasing. As the surge began to take effect and insurgency attacks declined, coalition forces determined that the Iraqi army had become proficient enough to begin military operations on its own beginning in 2008. As the United States began to reduce its combat presence in Iraq in 2010, the name of the mission changed from Operation Iraqi Freedom to Operation New Dawn.

Contemporary Multinational Training

With the launching of Operation Enduring Freedom and Operation Iraqi Freedom, multinational training again evolved to include new partners conducting operations in Afghanistan and Iraq. To meet this need, the 7th Army Training Command became the Joint Multinational Training Command (JMTC), and the Combat Maneuver Training Center became the Joint Multinational Readiness Center in 2005. The JMTC and the Joint Multinational Readiness Center provide a state-of-the-art training platform for NATO and other multinational allies to build and sustain their operational capacity. The command’s capabilities and proximity to European, Asian, and African partners make it the unrivaled choice to support Security Force Assistance programs such as the ISAF in Afghanistan; the Multi-National Forces, Iraq; the NATO Training Mission, Iraq; and

other coalition initiatives. The Joint Multinational Readiness Center is the largest U.S. Army Europe–maneuver training area in Europe with more than 60,000 coalition soldiers training there annually.

The demanding training regimen includes professional opposing forces, observers, controllers, and trainers at the Hohenfels Training Area who provide intensive, “real-world” maneuver-combat training from the individual to the brigade staff level. According to JMTC, nearly 4,000 multinational soldiers have completed specialized functional training at the Command Arms Training Center; more than 5,000 have completed the Operational Mentor and Liaison Team training at Hohenfels Training Area; and nearly 600 International Military Students from 27 countries have completed the Warrior Leader Course at the 7th Army Non-Commissioned Officers Academy. In 2010 alone, the JMTC’s simulations center conducted 8 major theater engagement exercises. Since 2003, there have been 55 significant events with more than 10,000 multinational participants.

Challenges and Goals

Language

Language has long been an obstacle for the military forces from different nations who train and fight together. Language proficiency is a vital part of the training for members of specialized units that operate clandestinely, such as the U.S. Army Special Forces. Most recently, the participation of the United States in Operation Enduring Freedom and Operation Iraqi Freedom placed a need for linguistic experts who were proficient in Arabic, Dari, and Pashto. After careful screening, native speakers from the host nation were assigned as interpreters to units to bridge the language gap.

Culture

Respect for a host nation’s customs and beliefs also pose a problem for the military forces from different nations that train and fight together. Some Middle Eastern nations with Muslim majorities forbid their citizens to consume alcohol. This belief poses problems for the military forces of nations whose cultures allow alcohol to be consumed when they participate in training exercises in the Middle East. Working women and military women are sometimes viewed negatively in these countries, especially Saudi

Arabia. Military commanders from nations where a majority of people practice Christianity have to be vigilant during multinational training events and operations so as to avoid a possible confrontation not only between the various military units but also with the host nation and its inhabitants.

Politics

Political considerations are always paramount when the various military forces from different nations train and fight together. The selection of commanders, the forces involved, and logistical concerns all can change at a moment’s notice due to political concerns. Toward the end of World War II, the Allies’ focus shifted from the defeat of Nazi Germany to how Europe would be governed in the war’s aftermath. As evidenced by the adversarial activities of the Soviet Union and the United States during the Cold War era, alliances can, and do, fall apart.

Richard B. Davis

See also Alliances; ANZUS Security Treaty; Coalition, Warfare; Coalition Provisional Authority; Defense, Department of; Global War on Terrorism; Iraq War (2003); Iraq War, Planning for; Korean War (1950–1953); North Atlantic Treaty Organization; Peacekeeping; Persian Gulf War; Plans, Operational; Realism in International Relations; United Nations; Vietnam War; War in Afghanistan; World War I; World War II

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TRAINING, NAVAL AVIATORS

Naval aviation demands determination, skill, and physical prowess. All naval aviators undergo extensive training, first at the Aviation Preflight Indoctrination (API) in Pensacola, Florida, and then

at one of the three 22-week-long primary training pipeline programs where the rigorous curriculum tests future aviators physically and academically while also acquainting them with the basis of naval aviation. Marine Corps aviators are also trained at U.S. Navy facilities. The chief of naval air training, located in Corpus Christi, Texas, oversees the Naval Air Training Command, and it is his or her duty to safely train and produce combat-quality aviation professionals for two different environments—water and land.

Naval Aviator Qualifications

Naval aviator applicants must be commissioned as officers before turning 28, be a citizen of the United States, and have a bachelor's degree from an accredited college/university or from the United States Naval Academy in Annapolis, Maryland. The applicant must be a commissioned officer at the rank of ensign.

To meet these requirements, prospective aviators must choose one of several educational options. Candidates may enroll in a Naval Reserve Officers' Training Corps (NROTC) program at their college/university. Along with regular academic courses, the candidate must also participate in and attend military classes and drills and report to midshipman cruises during the summer. Another option is the Officer Candidate School (OCS) at the Naval Air Station in Pensacola, Florida. This is a 12-week intensive training course in military studies and the basic rules and regulations of the navy, with intensive physical conditioning (especially swimming) and a basic course in naval propulsion. Alternatively, candidates may enroll in the United States Naval Academy, but only about 10%, or 1,300, of applicants are accepted there each year. The bulk of naval aviators, nearly 80%, come from the U.S. Naval Academy or NROTC programs, whereas fewer than 20% come from OCS.

Aviation Selection Test Battery

The U.S. Navy uses the Aviation Selection Test Battery (ASTB) to narrow down the applicant pool. Only 50% of the 10,000 candidates who sit for the exam each year will pass.

The exam lasts for 2½ hours and consists of six tests: (1) math, (2) reading, (3) mechanical comprehension, (4) spatial apperception, (5) aviation and

nautical information, and (6) aviation supplement. Those who pass the ASTB then proceed for their flight physical.

Physical Exam

Applicants must also pass a flight physical that, among other items, focuses on a candidate's ability to withstand high g-forces as well as the more general rigors of flight. Applicants must have 20/20 vision and cannot be colorblind or have depth perception issues (the navy will accept applicants who have had laser corrective eye surgery). Approximately 25% of applicants fail their flight exam. Of those who pass, only half are invited into training programs as the supply of physically sound candidates exceeds the navy's demand for pilot trainees.

Ground School

Ground school coursework consists of training in basic engine properties, aerodynamics, navigation, and specific aircraft systems and lasts approximately 4 months. This includes ground school coursework, flight simulator sessions, and actual flight time in the T-34C Mentor. Upon completion, naval aviators are sent to one of three specific aircraft training programs: (1) maritime pipeline, (2) jet pipeline, or (3) helicopter pipeline.

Flight School/Training

Student aviators first enroll in Introductory Flight Screening to learn how to fly. Students must complete 25 hours of flight training and one cross-country flight. This later requirement tests the student's knowledge and ability in managing an aircraft in flight. Those who have a pilot's license can skip this step and proceed to the next stage.

Student naval aviators (SNAs) go through a long and rigorous training—typically, 18 months to 4 years. For 6 weeks, they go through aviation pre-flight indoctrination to learn flight rules and regulations, aerodynamics, aviation physiology, turbine engines, and air navigation in a classroom setting in Pensacola, Florida, at the Naval Air Station. Trainees learn how to use special equipment to cope and survive if they find themselves in water after an aircraft mishap. After this process, they will go on to learn primary flight training at Whiting Field in Milton, Florida, located on the Panhandle, or at Corpus Christi, Texas, for 22 weeks. Trainees will

start hands-on training with a T-34C Turbo Mentor, which is followed by ground school (aircraft systems, local course rules, and emergency procedures), familiarization, basic instruments (used during maneuvers), precision aerobatics (rolls, loops, and tactical maneuvers), formation, radio instrument navigation, night familiarization, and visual navigation. By the time training ends, trainees will have spent 100 hours in the air/flight simulator.

Intermediate Student Naval Aviators Training Paths

With the completion of the training already described, SNAs begin more training at various bases. In Oklahoma at Vance Air Force Base, aviators begin training on the T-1 Jayhawk and the E-6B Mercury. At the Naval Air Station in Corpus Christi, Texas, aviators train on the T-44A Pegasus or TC-12 Huron. Helicopter training takes place at Whiting Field, Florida, on the TH-57B/C. Those who qualify are chosen to go further into the advance program listed below.

Advanced Student Naval Aviators Training Paths

Students in the Advanced Strike pipeline—at Kingsville, Texas, or Meridian, Mississippi—train for 23 more weeks with 67 additional flights and learn advanced instruments, carrier qualification tactical formation flying, bombing techniques, and capabilities. When their training is complete, the pilots fly versions of the F-18 Hornet and Super Hornet as well as other top-of-the-line aircraft.

E2/C2 pipeline SNAs go to carrier qualification in the T-45 Goshawk with 20 additional flights for more than 8 weeks. After completion, they go to Corpus Christi, Texas, to complete multicrew and multiengine training, which takes 16 weeks in the T-44A. When the SNAs get their wings, they fly E-2 Hawkeye or C-2 Greyhound aircraft.

Rotary-Wing pipeline SNAs learn to fly helicopters at Whiting Field, Florida, where they learn night maneuvers, tactics of rotary-wing aviation, use of night vision goggles, navigation, and how to land on a moving platform. When this training is completed, they report for Seahawk training.

Maritime pipeline SNAs complete training in Corpus Christi, Texas, flying a twin engine T-44 Pegasus or TC-12 Huron. Emphasis is placed on

single-engine flight in various weather conditions. When SNAs receive their wings, navy aviators fly the P-3 Orion, whereas their Marine counterparts fly the KC-130 Super Hercules.

Student pilots selected for helicopter training report to Naval Air Station Whiting Field, Florida, and complete advanced training in the TH-57 Sea Ranger, where they learn the characteristics and tactics of rotary-wing flight. In addition, they learn shipboard landing on the helicopter landing trainer, the navy's only ship for teaching helicopter pilots how to land on a moving vessel. When they earn their wings, navy pilots report to Fleet Replacement Squadron for SH-60, CH-46, or MH-53 training whereas Marine helicopter pilots use the AH-1, CH-46, MH-53, or UH-1 FRS.

Attrition Rate

Attrition in the training of naval aviators is costly for the navy. For each failure of an aviator prospect, it is estimated that \$500,000 to \$1 million is lost. Although the reasons for attrition vary, the most common causes are poor academic performance, problems performing flight maneuvers, and people choosing to leave. For the past 30 years, the attrition rate has remained steady at between 15% to 25%. The majority of these failures occur during the first 100 hours of flight training.

The Growth of Naval Aviation, 1909 to 2009

The U.S. Navy's official interest in controlling the skies developed as early as 1898. By 1909, with the displays of the Wright brothers' first flight at Kitty Hawk, North Carolina, naval officers were pushing for the purchase of aircraft. Soon the navy and Captain Washington I. Chambers, officer in charge of aviation, established the National Committee for Aeronautics to work on aerodynamics and hydrodynamics. The first naval officer to be in the program was Lieutenant Theodore G. Ellyson in December 1910. On March 4, 1911, the first funds for naval aviation were appropriated, providing \$25,000 to the Bureau of Navigation. Greenbury Point in Annapolis, Maryland, became the site of the first naval aviation base on July 6, 1911. The navy received its first aircraft from Curtiss Company in July 1911. Ellyson assisted Glenn H. Curtiss, who showed the airplane's capability at sea when he completed the first successful hydroaeroplane flight,

landing his seaplane near the USS *Pennsylvania* where the ship's crew hauled the plane aboard.

Naval aviators first saw action on April 20, 1914, during the Mexican crisis. Three pilots, 12 enlisted men, and 3 aircraft sailed from Pensacola, Florida, to join the Atlantic Fleet off Tampico, where they conducted reconnaissance missions flying from the USS *Mississippi*. Although naval aviators proved their worth, only one air station was in operation, with 48 aviators and students and 54 aircraft, by the time the United States entered World War I in April 1917. Given the extraordinary demands of war, training programs and air stations were established across the country and the Naval Reserve Flying Corps produced thousands of aviators, ground officers, mechanics, and technical specialists. Technological developments in American naval aviation during World War I included the long-distance flying boat and constant air offensive attacks. The flying boat was impressive, and naval aviators urged its adoption as a means of taking air power to sea.

During the interwar period, the growth of naval aviation diverged from the moribund situation then prevalent in the other services. By 1919 navy leaders were pushing for the development of the aircraft carrier, which became a reality with the commissioning of the USS *Langley* in 1922. By the time the United States entered World War II in December 1941 the growth of the fleet air arm necessitated an enlarged training program designed to accommodate 800 students per month. Shortly after Pearl Harbor, that number grew to 2,500 trainees per month.

During the Cold War, the navy's reliance on aircraft carriers to project American military power far from the republic's shores meant that aviator training remained a critical component of the postwar navy. By the time America entered its first Cold War conflict in Korea, navy aviators were routinely trained to fly both rotary and newer jet aircraft, while in the following decade the war over Vietnam required new training to deal with advanced surface-to-air missiles and a new generation of MiG fighters. Throughout the Cold War, navy aviator training also produced air crews that carried on the vital work of antisubmarine warfare, tracking and preparing if need be to engage the mammoth Soviet submarine fleet.

The performance of U.S. Navy and Marine aviators in the Global War on Terrorism and campaigns

in Iraq, as well as existing plans to construct the new *Ford*-class supercarrier, point to the continuing need for trained aviators.

Future of Naval Aviation

Naval aviation is in the process of transitioning to newer models/aircraft. The chief of naval air training is modernizing and downsizing from seven-type model series of aircrafts with 11 configurations to four-type model series and configurations. In primary training, the T-34C Turbo Mentor that has been in use for 30 years is being replaced by the T-6B Texan II, which has more horsepower, a completely digital glass cockpit, and ejection seats. Training Air Wing Five at Whiting Field, Florida, is currently transitioning to the T-6B, and Training Air Wing Four in Corpus Christi, Texas, will be complete in 2014. A new Multi-Service Pilot and Multi-Service Naval Flight Officer Training System enables a greater degree of course flow flexibility while providing more objective grading to ensure specific and required knowledge, skills, and experiences developed throughout each training stage. A tracking system follows the naval aviators from first flight to final flight to ensure that the aviators are progressing properly and to provide further training for identified weaknesses.

Lindsey R. Whitley

See also Airborne Warning and Control System (AWACS) Aircraft; Aircraft, Attack; Aircraft, Fighter; Helicopters; Navy, U.S.; Training, Air Force Pilots

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TRAINING, NAVAL ENLISTED

Naval training is a career-long process that begins with basic training and only ends when a sailor leaves the navy. The environment sailors operate in, whether it be on a ship, in an aviation squadron, in a submarine, or in a shore-based command, demands that they be flexible, adaptable, and resilient in the face of oftentimes rapidly changing scenarios. For example, sailors serving on ships are all required to be firefighters, small arms marksmen, and even food service attendants. Additionally, the recent conflicts the United States has entered into have demanded that sailors be prepared to operate in the deserts of Iraq or the mountains of Afghanistan in addition to the traditional realm of the oceans. Navy training is designed not only to give sailors technical know-how and teach them their traditional roles but also to prepare them to be adaptable.

Historical Precedents

During the early history of the U.S. Navy, the enlisted ranks were primarily filled by experienced mariners recruited in American and foreign ports. In the late 1800s, naval leaders made a conscious decision to systematically recruit sailors from interior regions of the United States with no prior maritime experience. This decision required the navy to develop a formal training program that would train unprecedented numbers of new sailors without previous maritime service. Initially, the navy established several training vessels, but in the early 1900s, it shifted most basic training, or boot camp, to land-based training stations that were initially established at Newport, Rhode Island; San Francisco, California; and Norfolk, Virginia. In 1911, the navy established the

Great Lakes Naval Training Station near Chicago, Illinois. Not all sailors went through boot camps, however, and naval vessels continued to recruit sailors directly to serve on them. Not until 1925 did the navy end the practice of direct recruiting by naval vessels. The navy maintained a number of land-based training centers until the early 1990s, when the Base Realignment and Closure Commission began to shut many of these facilities down. In 1996, the Great Lakes Training Station became the sole training center for naval enlisted recruits.

Boot Camp

The first step in transforming civilian recruits into U.S. Navy sailors begins when they report to boot camp. The navy's boot camp is held at Naval Station Great Lakes in the city of North Chicago, Illinois. With the closure of the Navy Training Centers in San Diego, California, and in Orlando, Florida, the Base Realignment and Closure Commission recommended that basic training be consolidated to a single source—at Recruit Training Command (RTC) at Great Lakes, Illinois. Today, RTC Great Lakes is responsible for the initial processing, orientation, and training of almost 40,000 civilians each year, transforming them into sailors in 8 weeks. This schedule is equivalent with basic training for the air force but is shorter than basic training for the army (10 weeks) and the Marine Corps (13 weeks). This difference is due to the fact that navy basic training is designed to provide only a baseline of skills common to all sailors independent of their intended rating (occupation).

The arrival and initial processing of navy recruits at basic training is similar to all services. Recruits typically arrive at night, are met by a Recruit Division Commander (an RTC staff training instructor), and begin their initial welcome to the navy. Each recruit is required to make contact with someone at home and inform them of his or her safe arrival. In addition to preliminary paperwork, personal civilian property is accounted for and taken for safe keeping, initial uniforms are issued (initially only a navy sweat suit), drug testing is conducted, and the recruits receive intensive medical, dental, and psychological testing to ensure their fitness for serving in the navy. Throughout the week, recruits also receive initial instruction on basic subjects such as standards of conduct, the Uniform Code of Military Justice, navy standards for personal organization, grooming, and navy values.

The processing week also introduces recruits to physical training. Navy Basic Training is designed to be rigorous and challenging in order to prepare men and women for a life different from what they may be accustomed to. The physical training program includes 1-hour of daily workouts 6 days a week, incorporating common shipboard skills with aerobic and strength training. During the fourth week of training, recruits are given their first opportunity to pass the Navy Physical Fitness Test. The physical fitness test includes a body fat measurement, sit-ups, push-ups, and a 1.5-mile run. Recruits are required to pass this test before graduation with a combined score of "good" (well above minimum navy standards). Recruits who cannot pass the test are rolled back to a follow-on recruit class until the test is passed, or, if after multiple attempts they remain unable to pass, they are dismissed from training.

During the next few weeks, more classroom instruction is added to provide more intensive instruction on basic procedures, operations, structures, and terms common to navy life. Classroom instruction in topics such as ship and aircraft recognition, military customs and courtesies, naval history, and first aid provide recruits with a foundation for future, follow-on training. Other classroom topics such as pay systems, equal opportunity, sexual harassment, basic financial planning, and additional instruction on the Uniform Code of Military Justice provide recruits with key life skills that will make their transition to military and professional life smooth.

In addition to classroom training and lectures, the next few weeks of boot camp include a great deal of hands-on, technical training. While most recruits will go on to serve on ships, submarines, or in aviation squadrons, Naval Basic Training at RTC is designed to provide a baseline of knowledge common to all sailors. Using a concept similar to the Marine Corps where every marine is trained as a rifleman, all sailors receive training in basic seamanship, damage control, water survival, and weapons handling. Basic seamanship training includes line handling skills used to moor and anchor ships in port, knot tying, and watchstanding such as look-out training, radio communications procedures, and other ship-based teamwork exercises. In addition to gaining individual technical knowledge and skills, recruits are also tested in their ability to function in a team, with everyone given an opportunity to assume

a leadership role. The damage control phase of training is a full 5 days of classroom and hands-on training that includes live training in a firefighting and flooding simulator. The water survival phase provides recruits with skills to enable them to survive if lost at sea and instruction on lifeboat operation and organization. In addition to the teaching and testing of these skills in a pool, at a minimum, recruits are required to pass the Navy Third Class Swimmer test at this point of basic training. While some specialized ratings will demand higher swimming skills, this minimum standard is a requirement for graduating from basic training. It is common for recruits to not have the requisite skills or background to pass this test, and these individuals are given extra instruction so that they are able to pass before graduation. As with the physical fitness test, if a recruit is unable to pass the swimming standards, he or she can be rolled back to another class or dismissed from training.

An additional focus of basic training was added as a result of the demands placed on sailors to stand security positions in the post-9/11 world. Prior to 9/11, recruits received only a minimum amount of small arms training in the form of small arms recognition and basic weapons safety concepts. Today, virtually all sailors are required to have a working knowledge and competent skill with small arms for security duties. RTC now includes 3 days of hands-on and classroom training on common navy small arms, including the Beretta 9mm pistol and Mossberg 12-gauge shotgun. In addition to classroom instruction and live-fire training, all recruits carry inert weapons during all watchstanding and security duties throughout their basic training. Live-fire training is still not conducted at RTC and is the responsibility of an individual command. However, the new focus placed on weapons safety and knowledge allows sailors to be more rapidly qualified.

Throughout the initial weeks of training, the focus of boot camp takes on a heavier concentration of teamwork and leadership skills. Training becomes more "real" to the recruits as they are learning skills that will be used in their pending profession. The pinnacle of the entire training period is known as "Battle Stations." This event stretches over 2 days and is designed to push recruits to their physical, mental, and emotional limits so that they are better prepared to function in real events. Based on the Marine Corps's Crucible, Battle Stations take an integrated approach, merging the classroom and

hands-on training received up to this point and then putting it to use in a real-world simulation that not only includes day-to-day operations of a ship but also incorporates damage with sophisticated special effects such as smoke, heat, sounds, and even smells, simulating combat. In all of the events of Battle Stations, recruits are graded as individuals and as a team. Team leaders are rotated to provide multiple opportunities for recruits to learn and gain confidence in individual and leadership abilities. If a team fails to meet a minimum standard, it is afforded the opportunity to attempt the scenario again until it passes, or otherwise all members of the team are rolled back to a follow-on class.

The Battle Stations scenario is set onboard the "USS *Trayer*," a 210-foot long mock-up of an *Arleigh Burke*-class destroyer. The scenario was conceived following the lessons learned from the attack on the USS *Cole* in Aden, Yemen, where 46 sailors were killed or injured and the remaining crew was able to save the ship from sinking only through training and ingenuity. The Battle Stations exercise consists of 17 events that are all designed to simulate an actual event a ship will or could go through during combat operations. The 12-hour test begins with a team of 8 to 11 recruits manning simulated watchstanding positions on USS *Trayer* and quickly shifts to simulated damage from enemy attack. Teams are tested in a variety of events such as dewatering a flooded gun magazine while simultaneously having to pass simulated 5-inch ammunition to support defending the ship. This event was based on actual events following the attack on USS *Tripoli*, which struck a mine in the Arabian Gulf in 1990. Team members are forced to make decisions to either save themselves, save the ship, or carry out their mission. They are then presented with a scenario in which they must escape from a space that is threatened with fire while having to move an injured sailor through a small hole cut in a bulkhead. This test simulates events from a large fire on USS *Forrestal* in 1967. Another scenario presents the recruits with a scenario from USS *Cole* with multiple casualties (simulated with life-sized dummies) and damage following a suicide bombing attack complete with smoke, sparking wires, and damaged walls and equipment. In all of the events of Battle Stations, teamwork is stressed above all else. None of the events can be passed by a single individual without the support and integration of effort from his or her fellow recruits.

The final event of Battle Stations comes only after the recruits have passed each of the challenges and is the point when recruits are referred to as sailors. Up until this point, each recruit has worn a hat labeling him or her as such. During the capping ceremony, the Recruit Division Commanders who have trained their charges over the past 8 weeks remove the recruits' hats and replace them with blue hats with "sailor" emblazoned in gold. This ceremony marks the end of the recruit phase of training.

Advanced Training

On graduation from boot camp, virtually all sailors attend some sort of specialized training before reporting to their first command. Generally, sailors report directly to technical school—"A" school—after graduation. These "A" schools are tailored to specific ratings or specialties, and sailors are usually assigned to these schools on the basis of requests made at the Military Entrance Processing Station. The navy has more than 60 specialized fields for recruits to choose from, broken down into occupational categories such as seamanship, aviation, and engineering. "A" schools are located on military bases around the country, and include institutions like the Submarine Leaning Center at Groton, Connecticut; Center for Security Forces in Virginia Beach, Virginia; Centers for Explosive Ordnance Disposal/Diving and Naval Aviation Technical Training at Pensacola, Florida; and the Center for Seabees and Facilities Engineering at Port Hueneme, California. Depending on the complexity of the subject field, training at these centers can take anywhere from several weeks to a number of months. On completing "A" school, many enlisted recruits assume their place in the fleet. Others, however, may require additional specialized training depending on the rating, or occupation, to which the sailor has been assigned. Ratings in the navy include mechanical ratings (e.g., gas turbine, diesel, or nuclear engineering; aviation machinist; electrician), electronics ratings (e.g., information technology, fire control, or electronics technician), special warfare ratings (e.g., SEAL or explosives ordnance disposal), or service support ratings (e.g., administration, logistics, or media services).

Naval training continues well beyond the completion of "A" school and the achievement of a rating. Indeed, it continues throughout a sailor's career and does not stop even after he or she has become an

expert in his or her rating. As sailors gain seniority, additional demands and expectations are placed on them, and they must continue their training to succeed and move up in rank. Navy training is fundamentally designed to be a career-long process to keep skills sharp and enable sailors to meet the constantly shifting challenges placed before them.

Andrew N. Davis

See also Navy, U.S.; Training, Army Enlisted; Training, Coast Guard Enlisted; Training, Marine Corps Enlisted; Training, Naval Officers

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TRAINING, NAVAL OFFICERS

In the U.S. Navy, training and education for future and current officers take place across a spectrum of topics to ensure that commissioned officers are prepared for their duties in a number of different environments. Officer training is conducted primarily at the United States Naval Academy in Annapolis, Maryland, in the Naval Reserve Officers' Training Corps (NROTC) at higher education institutions around the country, and at Officer Training Command in Newport, Rhode Island. Graduate-level training is conducted at the Naval War College (NWC) in Newport, Rhode Island. The major commissioning programs for future officers are at the Naval Academy, the NROTC, and the Officer Candidate School (located within Officer Training Command Newport).

The U.S. Naval Academy

Naval Secretary George Bancroft founded the U.S. Naval School at Fort Severn in Annapolis, Maryland,

in 1845. Concerns over mutinied ships and poorly trained officers had prompted Bancroft to open the school where officers were educated through a fixed curriculum in subjects including mathematics, navigation, gunnery and steam, and French. In 1850, the Naval School would become the Naval Academy, and the original 10-acre campus gradually expanded to 338 acres. In 1933, Congress authorized the Naval Academy to award bachelor of science degrees, which are today offered in 18 major fields of study. Female midshipmen, who now comprise about 13% of incoming plebes, were first admitted to the Naval Academy in 1976 after Congress authorized opening the service academies to women the previous year.

Applicants to the Naval Academy must, in addition to applying to the institution, secure a nomination supporting their admission, usually from a member of Congress. The navy's stated mission for the academy is to educate future officers "morally, mentally, and physically," so the Naval Academy's educational approach involves combining professional military-related courses with more traditional academic subjects. Hands-on experience and training are emphasized, as are physical fitness and athletic programs. Midshipmen are educated in their chosen major field alongside required courses in subjects such as the natural sciences, engineering, the humanities, and others. These subjects are supplemented by courses aimed at developing leadership and professional skills in major areas such as sailing, seamanship and navigation, and waterfront readiness. Integrity at the institution is governed by an Honor Concept enforced by a Brigade Committee of upperclassmen. After completing their course of study, Naval Academy graduates commission in the navy or Marine Corps and serve a minimum of 5 years in uniformed service.

Naval Reserve Officers Training Corps

The NROTC, founded in 1926, provides college and university students a 4-year professional training program to be completed alongside baccalaureate coursework. The first group of 128 NROTC-educated midshipmen graduated from six schools in 1932. Since that time, the program has expanded to 59 NROTC units at more than 150 colleges and universities in the United States. NROTC offers opportunities to commission as an ensign in the navy or Navy Nurse Corps, or to commission as a second lieutenant in the Marine Corps. All students

enrolled in NROTC are referred to as midshipmen while in the program. The NROTC also provides scholarships to deserving and academically accomplished midshipmen students, with an obligation of 4 years of military service for those taking the Marine Corps and Nurse Corps options, and 5 years for those midshipmen taking the navy option. Those students not receiving NROTC scholarships are obligated to 3 years of military service.

The NROTC's mission, like the Naval Academy's, is to morally, mentally, and physically prepare midshipmen students for careers as Naval Reserve officers. Acceptance to the program depends on academic achievement and physical fitness, as well as agreement to military service. From initial summer cruise training (focused on career orientation and Atlantic/Pacific training) to regular physical training, midshipmen receive professional education that covers a range of fields, including naval science, calculus, physics, and national security.

Officer Training Command

Officer Training Command in Newport, Rhode Island, offers five officer accession programs. These include (1) the Officer Candidate School, (2) the Officer Development School, (3) the Direct Commission Officer Indoctrination Course, (4) the Naval Science Institute, and (5) the Limited Duty Officer/Chief Warrant Officer Program. Captain Vernon P. Kemper is the current commander of Officer Training Command, and the command's mission is to educate civilians, enlisted personnel, and commissioned officers through the range of programs offered.

Officer Candidate School, a 12-week program to prepare civilians or already-enlisted men and women to become commissioned officers, educates these future officers in military, academic, and nautical subjects. Classes at Officer Candidate School are generally comprised of two companies of 35 to 100 candidates. Coursework covers nine major areas, ranging from military law to warfare, and is supplemented by military training in drills, physical training, and personal standards and appearance.

The Direct Commission Officer Indoctrination Course is provided for direct commission reserve officers as they train for their new commissions. Over 2 weeks and more than 90 hours of coursework, officers train for fleet assignments and gain fundamentals of leadership and military doctrine in

the process. As with most officer training programs, a mixed approach of academic and physical education provides those in the Direct Commission Officer Indoctrination Course with working knowledge of navy programs, history, regulations, and tactics while encouraging physical health and well-being.

Staff Corps Officers and Restricted Line designators are prepared for their commissions in 5-week programs at the Officer Development School. Candidates take courses on naval policy, operations, and thought; receive training to handle and understand mental health issues and military law; and undergo rigorous physical training. The Limited Duty Officer/Chief Warrant Officer Academy has become a source of technical specialist education and career development in military law and naval history.

Finally, the Naval Science Institute provides the newest officer training program, the Seaman to Admiral 21 Program (STA-21), an enlisted-to-officer program. A by-product of the 1960s enlisted-to-officer training promoted by Chief of Naval Operations Jeremy Boorda (the first Chief of Naval Operations to have been an enlisted man), the program was given a reboot in 1994. Sailors at STA-21 continue to receive regular pay while on scholarship for their training, which totals around 18 university semester hours in six subjects—(1) naval science, (2) sea power and maritime affairs, (3) engineering, (4) weapons, (5) navigation, and (6) seamanship and operations. STA-21 candidates must also participate in heavy physical training and pass the navy Physical Fitness Assessment.

Naval War College

The NWC's mission is to provide professional military education to officers and enlisted men and women. Admiral Stephen B. Luce persuaded the Department of the Navy to establish an NWC in 1884, as no institution yet existed to educate naval officers on warfare. Since its inception, the NWC has been home to numerous U.S. military luminaries, including Alfred Thayer Mahan, Chester Nimitz, and Raymond Spruance. About 600 students graduate with master of arts degrees from the NWC each year, and its well-regarded distance learning option graduates around 1,000 students each year.

NWC coursework is focused on strategy, national security, wartime operations, and joint operations. Maritime Staff Operators training and the Maritime Advanced Warfighting School provide professional military education for officers and senior enlisted

personnel in the planning and execution of staff assignments. The NWC's focus on a career continuum of ethics, strategic development, and leadership development provides combat-ready leadership and incorporates partners from countries around the world in its educational goals.

Conclusion

The U.S. Navy provides numerous avenues of officer training for civilian recruits, enlisted sailors, and current officers. As the navy seeks to maintain its status as a powerful, high-tech, 21st-century force, the education and training of future navy leadership ensures that officers remain physically fit, up-to-date, and competent with technology, theory, and practice.

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See also Navy, U.S.; ROTC; Training, Naval Enlisted; U.S. Naval Academy

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TRANSPORTATION, Air

Air transportation is one of three methods the Department of Defense (DOD) can choose to move personnel, equipment, and materiel rapidly to and from nearly anywhere in the world. This method has become, in large part, the preferred mode of transportation for the U.S. military. The overall unit in charge of strategic planning and readiness for all transportation missions for the DOD is the

U.S. Transportation Command (USTRANSCOM), one of the military's nine Unified Combatant Commands. The Air Mobility Command of the Air Force is the primary branch for the transportation of cargo through air, although the other branches do have some complementary airlift abilities.

Air Transport After the Cold War

At the end of the Cold War, the DOD realized that there were shortcomings in their current system of transportation of supplies throughout the services as well as around the world. At the time, a joint Air Force-Navy unit called the Military Air Transport Service was tasked with fulfilling the defense department's worldwide air transport needs. Various events ranging from the Berlin Airlift (1948–1949) to the support of military operations in Vietnam during the 1960s began to highlight these shortcomings in the air transport system. Perhaps the most important of these failings was the lack of substantial integration between the two branches and no overall commander responsible for resource allocation and decision making. Even after Military Air Transport Service was disbanded in favor of the Air Force's Material Air Command, the deficiencies still remained. As a result of this lack of cohesion, government officials demanded a better system for handling air cargo.

This led to the reorganization of the defense department's structure and assets, as well as a more integrated logistical and support system. Under the Goldwater-Nichols Department of Defense Reorganization Act of 1986, each branch still maintained separate transportation assets but reported directly to its new parent organization, USTRANSCOM. In turn, USTRANSCOM was to act as the intermediary between the DOD leadership and the individual services, as well as receive advice from the Joint Chiefs of Staff. The first major test of the effectiveness of the new structure was Operation Desert Shield/Operation Desert Storm in Iraq in the early 1990s. USTRANSCOM provided effective strategic airlift in terms of the aircraft involved and the amount of cargo moved and also served as an example of cooperation between the military branches.

Aircraft

The aircraft suitable for satisfying transportation requirements varies depending on mission requirements. Each branch utilizes its own aircraft to move

its cargo from location to location, although there are some interservice commonalities. The venerable C-130 Hercules, operated by every branch except the army, is used primarily as a medium-lift, medium-to-long range aircraft modified to fit each service's specific requirements. The air force specializes in moving large and heavy cargo and almost exclusively uses airplanes for its lifting needs instead of helicopters. The army has no official fixed-wing transport capabilities and must rely on one of the other services for support but usually provides extensive in-theater air transportation with several versions of the UH-60 Black Hawk. The navy, Marine Corps, and Coast Guard all have conventional airplanes as well as helicopters capable of fulfilling some of their transportation needs but are largely forced to either rely on the air force for heavy cargo movement or use various maritime options. For dignitary and high-profile passenger transportation needs, all of the branches use civilian aircraft modified to the services' requirements.

Logistics and Strategy in Air Transportation

There are many logistical issues that must be overcome to effectively maintain an efficient air transportation system. The manner in which mission requests are received and executed must be streamlined to prevent confusion, misappropriation of assets, and slow response times. Air units must also constantly report on their capabilities and limitations to their headquarters to ensure that missions are able to be safely and rapidly filled. During extensive or prolonged operations that necessitate elevated levels of air transportation support, commanders must also be wary of allocating too many aircraft for one theater while leaving too few for other operations. Finally, the amount of available funds for operations must also be closely monitored, as operations and maintenance cost can force missions to be altered or even cancelled.

Benefits of Air Transportation

Speed

Perhaps, the most beneficial aspect regarding air transportation is the ability to rapidly move almost anything from one part of the world to another. This is largely because of improved technology regarding navigation, engine efficiency, and lighter, more

streamlined airframes. Although the speeds of an aircraft vary and are always dependent on its laden weight and atmospheric conditions, traveling by air to distant locations is usually far quicker and easier than traveling by land or sea. This is perceived as an overwhelming advantage when rapid mobility and flexibility are becoming increasingly important regarding the military's global posture. Because of this relative ease, the U.S. military is able to place and sustain its forces around the world. Additionally, if an aircraft is capable of being refueled while still in the air, there is effectively no location that is unreachable by an aircraft.

Commonality of Cargo Containers Sizes

Second, the element of commonality in equipment allows for rapid and effective air transportation. All the services use uniformly shaped pallets and cargo netting to hold and transport most loads. These pallets and netting are designed to fit inside all of the primary transport airplanes and even some of the larger helicopters. In addition, any cargo that is not put on a pallet is designed to fit inside the fuselage of most conventional airplanes and be tied down. Although there are maximum size and weight restrictions for each aircraft, this means that nearly any load can be moved via air by almost any fixed-wing aircraft. As a result, every branch except the army is capable of delivering any small or medium loads by their airplanes to anywhere in the world in support of the other services instead of that service relying on its own transportation.

Obstacles to Air Transportation

While all of the following issues require consideration, several can be overcome with proper planning and logistical support.

Weight

Among the obstacles to air transportation is weight. Both helicopters and conventional airplanes have a maximum takeoff weight that cannot be safely exceeded without causing stress to the airframe and making it unsafe to fly. This forces those relying on air transport, to move personnel or equipment, to wait for suitable aircraft to fulfill their needs, or opt to use multiple aircraft if the load can be divided.

Adequate Space and Resource Allocation

Similarly, the need for adequate space influences air transportation. Obviously, large numbers of personnel can be better accommodated in bigger aircraft rather than smaller ones, making these aircraft in high demand to move large groups without breaking up the contingent. But large aircraft are also the most suitable for moving the heavy equipment needed for most operations, forcing planners to face a constant and delicate balance between mission needs and resource allocation. In addition to cargo room, having the necessary landing room for large airplanes is also a major consideration in planning an operation. While normally not an issue for helicopters and the CV-22 Osprey, an aircraft capable of taking off and landing like a helicopter but flying like a conventional airplane, traditional transport aircraft usually require longer runways because they are heavier and need more room to speed up and slow down. This limitation forces ground troops to undertake the time-consuming task of establishing a suitable runway for heavier aircraft or relying on medium-lift aircraft for support. Airdrops and the use of helicopters are two elements that can work to nullify this shortcoming, but they have their own inherent problems. Helicopters do not operate very well at higher altitudes because of the thin air, and airdrops run the risk of being damaged during the descent.

Maintenance

One aspect that requires careful planning is the constant maintenance required for transport aircraft. Because the military sustains the needs of real-world transportation missions, as well as supports other units training for a variety of scenarios and locations, transport aircraft are among the most flown in the world. As a result, maintenance on them is constant and to be expected. Yet any unscheduled maintenance, particularly if it involves critical systems, may force a deviation from scheduled plans and cause missions to be delayed or cancelled. If aircraft maintenance is not adequately prepared for and efficiently handled, it may dramatically affect forward-deployed personnel and force them to alter their plans.

Weather Conditions

Although modern aircraft are usually suitable for operating in all climates and weather, extreme

conditions may nonetheless affect how air transportation needs are met. Ice buildup on aircraft or washed-out runways can dramatically affect flying schedules. Equally dangerous is the possibility of low-flying aircraft kicking up debris on the ground and having it either ingested in one of the engines or cause damage to the aircraft's skin or nearby ground personnel. Helicopters in particular must confront this situation on every takeoff and landing. In addition, the powerful downbursts caused by rotating blades can create reduced visibility in certain environments. In desert environments, these are known as "brown outs," and in snowy conditions, they are referred to as "white outs." Although usually not dangerous in themselves, they may lead to temporary disorientation and vertigo; these are factors that aircrews must be able to deal with.

Aircrew Fatigue

Even though they are highly skilled at operating the aircraft, aircrew members invariably limit how air transportation is utilized, usually because of availability or endurance. Most crews are limited to a set number of hours they are allowed to fly per 24-hour period and are required to schedule rest breaks. Although this can be avoided by using more than one crew on multiday trips, airmen are likely to experience increased fatigue when continuously pushed to the limit. In addition, an augmented aircrew takes up more space than a regular crew, although this is usually a nominal factor when transporting cargo other than personnel. Finally, flight crews are required to be current on all their flight qualifications and cannot maintain proficiency if not given adequate time away from missions for their training. The constant strain on air crews to perform their tasks flawlessly, without the opportunity to safely make mistakes, can quickly erode their skills and can lead to accidents.

The Future of Air Transportation

Military airlift is expected to become increasingly important in future operations around the globe. Although moving supplies and personnel overland or by maritime means has its benefits, only air transportation can provide the flexibility of rapid global force positioning that military planners often require. In recognition of the critical role air transportation will have in future operations, the DOD has initiated plans to upgrade some of its medium- and

heavy-lifting aircraft. The Air Force's C-5 Galaxy fleet has gone through several modifications, such as receiving upgraded avionics packages and more efficient engines, extending the lives of existing airframes for at least 25 years. The ubiquitous C-130 Hercules has also undergone modernization and refits by all the armed services with several extensive modifications to suit the myriad missions that are regulated to this venerable aircraft. In addition, more C-130s are being built with newer engines, an improved flight deck with digital displays, and extensive computer automation of various systems that erases the need for a flight engineer or a navigator, all in an effort to pair technology with current and future operational needs. The futuristic CV-22 Osprey is part of the next generation of medium-lift aircraft, with its unique lifting and flying abilities, and will likely have an expanded role in military operations around the world.

Helicopters will also fulfill critical roles in future military air operations. While not as fast or capable of carrying loads for extended distances, helicopters fill the important mission of point-to-point air movement efficiently. Although capable airframes like the UH-60 Black Hawk and the CH-47 Chinook have been in service for several decades and undergone many improvements and modifications, increased operations have stressed the fleets of transport helicopters, forcing military planners to begin looking for other suitable airframes or to completely overhaul the existing fleets.

One aspect that might affect the wider use and evolution of air transportation is the cost of fuel. The fuel consumption of both real-world and training flight operations has led top-level military strategists to consider alternative fuel sources to decrease the dependence on oil. The air force, the U.S. military's largest user of oil, outfitted some test aircraft with modified fuel systems that use a synthetic blend of fuel and found a cleaner burn with little or no decrease in performance. While the results are promising, switching aircraft from an oil-based fuel system to one that uses a blend would be extremely costly and time-consuming.

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See also Air Mobility Command; Aircraft, Transport; Goldwater-Nichols Department of Defense Reorganization Act; Logistics; Mobilization; U.S. Transportation Command

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TRAUMA, MILITARY SEXUAL

Military sexual trauma (MST) refers to unwanted sexual attention of a harmful nature (physical or verbal) experienced by men and women in the military. The definition is broad and covers a wide range of behaviors from sexual harassment (unwanted sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature) to sexual assault (rape, inappropriate sexual contact, or attempts to commit these acts). The event may occur on or off a military installation, in a combat zone, or stateside, or it may be a form of torture of a prisoner of war. MST is a term that is used widely in the Department of Veterans Affairs (DVA), where harmful effects of sexual harassment and sexual assault are placed in one category. The Department of Defense (DOD) seldom uses the term *MST* but rather separates sexual harassment and sexual assault into two categories. However, when unwanted sexual attention traumatizes military members, MST is an appropriate label to describe the event, whether it is sexual harassment or assault.

This entry discusses some of the mental and physical effects of sexual trauma and gives a brief history of U.S. legislative acts that address MST. There is also a brief discussion about some of the initiatives

taken by the DOD and the DVA to treat victims of MST and to prevent such acts from occurring in the future.

Physical and Mental Effects of MST on Victims

MST gained national attention in the early 1990s when several U.S. Naval and Marine Corps aviation officers were accused and convicted of sexually harassing and assaulting active-duty military women at an annual symposium. This widely publicized case, which became known as the Navy Tailhook scandal, sensitized the public to the sexual trauma that was taking place in the U.S. Navy and in other services. It served as a catalyst for the DOD to establish a comprehensive policy to respond to sexual harassment and sexual assault.

Sexual trauma in the military is often interpreted as being unique as compared with other social institutions such as work and school. Given the institutional realities of the military, MST can be particularly stressful as the victim and the perpetrator usually live and work where the event has taken place. In some cases, the perpetrator is in a position of authority over the victim, exacerbating a feeling of helplessness in the victim that can lead to reluctance to report the crime. Studies have shown that occurrences of sexual assault exceed the rates being reported. MST victims are often reluctant to report sexual assault to authorities because they fear ostracism, harassment, peer gossip, and that nothing will be done about it. Some researchers argue that the rate of MST is higher during wartime compared with the rates found during peacetime.

A substantial proportion of veterans screened during victim advocates (VA) health care visits reported recent sexual trauma. The rates of sexual harassment and sexual assault are high among military female veterans, and to a lesser degree, male veterans. Still, it is important to note that the incident of MST reported by military men has been significant. In a 2008 study that examined a cross-sectional sample of 89,960 veterans of Operation Enduring Freedom (in Afghanistan) and Operation Iraqi Freedom between 2002 and 2006, Rachel Kimerling and colleagues found that MST had been reported by 14.5% women and 0.6% men. Of these, 71.6% of the women and 73.9% of the men had been diagnosed with mental health conditions.

Similar findings were reported in 2010 with a sample of 164,603 Operation Iraqi Freedom/Operation Enduring Freedom veterans. In this study, 15.1% of the women and 0.7% of the men reported that they had experienced MST. Veterans who reported MST were significantly more likely to report mental health conditions than those who had not.

MST has been found to be the leading cause of several psychiatric and psychological illnesses, including posttraumatic stress disorder, depression, mood swings, anxiety, the inability to engage in intimate relationships, isolation, insomnia, drug and alcohol abuse, nightmares, compulsive working, and avoiding places or things that remind one of the trauma. In a national study of MST among military veterans who served in Iraq and Afghanistan and who used Veterans Health Administration mental health or primary care services between October 2001 and September 2007, MST was associated with increased odds of mental health diagnoses.

Additionally, several scientific studies have shown a relationship between sexual assault and physiological effects on victims. In a nonclinical statewide study, women who experienced sexual assault were more likely to have hypertension and high cholesterol than women in the study who had not been sexually assaulted. Similarly, looking specifically at women veterans who used Veterans Administration health care services, Susan Frayne and colleagues found that women veterans who had a history of sexual assault while on active duty were more likely to be treated for asthma, emphysema, and heart attacks than women veterans with no sexual assault history. Among some of the other reported illnesses, sexual assault victims are more prone to have arthritis, diabetes, and chronic lung disease.

Although most of the studies on effects of sexual harassment have been on female victims, there are some studies that show psychological effects to be similar in men. While gender differences in the effects of sexual assault have not been measured extensively, there have been some studies reported. A few studies show that compared with female rape victims, male rape victims suffer additional forms of stigmatization resulting from role expectations of men in Western societies. Examining preliminary data on men and women in treatment for acute sexual assault, Kimerling and her associates reported that male victims were significantly more likely to

have current psychiatric symptoms. In addition, they found men in the study to be more likely than women to have experienced a lifetime history of mental illness and psychiatric hospitalization.

High association between MST and negative health effects is partly attributable to the direct effects of the assault. For example, some sexual assault victims contract sexually transmitted diseases and/or sustain physical injuries during the assault. There are also indirect factors resulting from MST that may explain poor health in victims. Studies have found that MST victims are more likely than non-victims to smoke cigarettes, abuse drugs or alcohol, and/or engage in high-risk sexual behavior. Not all victims of MST experience debilitating symptoms. Investigators have found that responses of veterans vary according to their previous trauma history, their appraisal of the traumatic event, and the quality of social support following the trauma.

Legislation Addressing MST

Over the past decade and a half, Congress has directed both the DVA and the DOD to implement legislation addressing MST. During the early 1990s, a growing number of women veterans claimed that they had been sexually traumatized while on active duty. In 1992, women veterans testified before the Senate Veterans Affairs Committee in a series of hearings about suffering adverse effects from MST. Following these hearings, Congress passed Public Law 102-585, authorizing the DVA to extend health care services to all women veterans who had been sexually traumatized while on active duty. Health care was not provided for male victims of MST until later. In 1994, the Veterans Health Programs Extension Act was passed (PL 103-452), extending veterans health benefits to men who claimed to have been sexually assaulted while serving in the military.

DVA's authority to provide treatment to sexual assault victims was extended to December 2004 through the 1994 Veterans Millennium Health Care and Benefit Act. Sexual trauma services became a permanent benefit for veterans as a result of Public Law 108-422 in 2004. Since 1999, under PL 103-452, the DVA is required to conduct universal screening for MST of all veterans enrolled in the Veterans Health Administration. Veterans who are physically or mentally impaired because of in-service sexual trauma are eligible to receive VA disability benefits.

Reported acts of sexual abuse in the services influenced the 1995 DOD Directive 1350.2, which outlines policies on prevention and responses to incidents of sexual harassment in the armed services. Due to an increase in reports of sexual assault among men and women on active duty since Operation Enduring Freedom and Operation Iraqi Freedom, Congress directed the DOD to implement a sexual assault prevention policy in 2004. The policy calls for enhanced education and training programs in an effort to prevent sexual assaults. It also mandates an improved system of investigating and prosecuting military sexual offenders, as well as providing treatment and support for victims.

Support Programs and Treatment for MST Victims

Department of Veterans Affairs

The DVA established a Military Sexual Trauma Support Team to monitor MST screening and treatment and to coordinate MST-related education and training. The DVA has specially trained women veterans' coordinators, sexual trauma coordinators, and counselors in VA regional offices, medical centers, and Vet Centers to extend services to MST victims. Included in sexual trauma services is primary health care at DVA medical centers.

The DVA uses psychotherapy, including both cognitive and behavioral interventions, to address health concerns and to educate patients about the trauma. When appropriate, drug therapy is also used to correct biological imbalances and relieve symptoms associated with posttraumatic stress disorder and depression.

Department of Defense

In the late 1980s, the DOD began implementing several initiatives for the purpose of responding to and preventing sexual harassment. A Defense Equal Opportunity Council composed of senior officials to advise the assistant secretary of defense for force management and personnel on equal opportunity matters was established in 1987. The following year, the DOD administered a survey on sexual harassment of active-duty military personnel. Survey results revealed that 64% of the women and 17% of the men reported at least one instance of unwanted, uninvited sexual attention while at work in the

12 months prior to taking the survey. The study was replicated in 1995, 2002, and 2006. Each replicated survey revealed that overall reporting rate of sexual harassment had declined.

Each of the active services (navy, air force, Marine Corps, and army) has special protocol to address the issue of sexual assault. Sexual assault response coordinators and the VA work closely with the MST victims, assisting them with addressing issues such as safety against revictimization or retaliation for filing a report. The sexual assault response coordinator and the VA are also responsible for referring MST victims to medical, counseling, and legal support services. Service members who have been sexually assaulted have two reporting options: restricted or unrestricted reports. When a sexual assault victim files an unrestricted report, the victim is given medical care, and an official investigation is conducted. As of June 2005, victims of sexual assaults in the military justice system may file a report without consenting to an investigation. Restricted reporting allows victims confidential access to medical care, counseling, and victim advocacy services without reporting the event to law enforcement. Therefore, under the restricted reporting option, an official investigation of the assault will not be conducted unless the victim consents. MST victims may change their reports from restricted to unrestricted at any time; however, evidence gathered during the forensic examination is destroyed 1 year from its collection date.

Continued Need for Government Oversight

The 21st century has witnessed American women being assigned to military submarines for the very first time. During the war in Iraq, women soldiers accompanied U.S. Marine combat units on patrol and in house-to-house searches. With more women joining today's military and serving in roles that were previously held exclusively by men, MST will continue to be an issue in the foreseeable future. In August 2008, the U.S. Government Accountability Office recommended that the services provide the DOD with longitudinal data to allow for trend analyses. It is necessary for the U.S. military to continue studying ways of eradicating MST, and it behooves the U.S. government to provide oversight to ensure that military services are implementing appropriate policies to prevent and resolve sexual trauma.

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See also Court-Martial; Crimes, Military; Rape; Uniform Code of Military Justice; Women

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TRAUMATIC BRAIN INJURY

Traumatic brain injury (TBI) is a type of acquired brain injury that occurs when a sudden trauma causes damage to the brain. Such injury can result

when the skull is pierced by an object or when the head collides with another object violently. Symptoms resulting from TBI can range from mild to severe, depending on the extent of the damage. Consciousness may or may not be lost, and there may be symptoms of headache (which in the case of severe TBI, gets worse or does not abate), confusion, agitation, fatigue, dizziness, weakness, and vomiting. There may be sensory issues such as vision and hearing problems as well as changes in smell or taste in addition to slurred speech.

TBI has often been called the signature wound of the Iraq and Afghanistan wars. In the case of personnel serving in the military actions of Operation Enduring Freedom and Operation Iraqi Freedom, most injuries are reported as resulting from improvised explosive devices. It is believed by veterans' advocates that between 10% and 20% of veterans of Iraq and Afghanistan, or 150,000 and 300,000 people, respectively, have some level of TBI. Among wounded troops, the rate of TBI rises to 30%.

In 2005, the Brain Trauma Foundation, supported by a grant from the Defense and Veterans Brain Injury Center, created the Guidelines for the Management of Combat Related Head Trauma. In response to a \$4.6 million grant from the Department of Defense, the Brain Trauma Foundation has developed a portable eye-tracking device that can be used on servicemen and servicewomen in the field to instantly determine if they have suffered any brain damage as a result of blast injury or another type of head injury. The researchers at the Brain Trauma Foundation have been working with engineers and researchers at the U.S. Army Research Institute of Environmental Medicine to develop this device that could revolutionize the way TBI is diagnosed and make it more likely that servicemen and servicewomen with brain injury get the care that they need. Another example of new methodologies is the Military Acute Concussion Evaluation for use on the battlefield. Military Acute Concussion Evaluation is a series of questions incorporating the Standardized Assessment of Concussion asked of injured soldiers as part of a mandated screening for all concussive combat injuries. However, the Military Acute Concussion Evaluation array is only useful for the first 12 hours after injury.

Still, TBI is the most common combat injury in the current theaters of American operations. In injury cases that do not involve penetration of the

skull, there are three primary types of damage. These involve *blast pressure* injuries and are characterized as *straight line*, *twisting*, and *contract/expanding* injuries. Straight line injuries are another name for concussion injuries, in which the brain is slammed around inside the skull, as in a car crash. Twisting injuries are caused by motion also and are characterized by the brain twisting on the spinal cord, resulting in tissue tearing and the brain scraping against the bones of the skull. Contracting/expanding injuries result from violent pressure changes in the brain as a result of exposure to shock waves from blast trauma. These injuries result in neurons changing shape. Prior to late 2011, many types of TBI were misunderstood, but new research is beginning to elucidate exactly what occurs in the brain as a result of these injuries.

Military leaders pledged to fix problems in diagnosing and treating brain injuries in 2007, but these efforts have been inadequate. There are certain disturbing trends noted in diagnosis and treatment. These include the fact that military screening systems routinely miss brain trauma in soldiers, whether in the field or back home. Millions of dollars have been spent on an exam called the Automated Neuropsychological Assessment Metrics (ANAM), which has been criticized as very unreliable. Even when injuries are diagnosed, the information often doesn't make it into soldiers' permanent medical files. Handheld medical devices for the transmission of data often fail in war zones. Hard copy records from combat areas have been lost, burned, or abandoned because no one knew where to ship them. When this official documentation is lost or nonexistent, wounded combat veterans have had to fight another battle for treatment. The military's traditional disdain for mental and emotional problems has affected treatment options, and some veterans have inappropriately been prescribed psychotropic drugs instead of rehabilitative therapy that could help retrain their brains. Others have received no treatment at all, or have been branded as malingerers.

In comparison with casualties in earlier conflicts, military casualties in Afghanistan and Iraq incur a greater percentage of injuries to the face, head, and neck, in part because of the frequency of combat injuries caused by improvised explosive devices. Personal protective equipment and armor have reduced death rates; however, this may have resulted in increased incidence of required TBI treatment

as head injuries that were previously fatal are now survivable. Consequently, cases of TBI are often missed. Moderate or severe TBI is very likely to have resulted in medical care in a military setting, and records of this care should be available to the psychiatrist. Other factors contribute to the possibility of a missed TBI diagnosis, including an incomplete appreciation of TBI consequences and the attribution of symptoms to other psychiatric diagnoses, and misperceptions of blast injury mechanics. On this latter point, a 2008 study of blast injuries in a civilian trauma center showed a missed diagnosis rate of 36% for primary blast-induced TBI cases. The complexity of trauma patients with other injuries may contribute to a missed TBI diagnosis, as may the incorrect belief that loss of consciousness is necessary for TBI.

Unfortunately, damage from these types of injury is not confined to the battlefield, or even to the injured warrior alone. Another issue associated with TBI is the prevalence of posttraumatic stress disorder (PTSD) in brain-injured veterans. The prevalence of PTSD in veterans of the Iraq and Afghanistan conflicts who are comorbid for concussive injuries is in the range of 33% to 39%, while the range of PTSD for veterans without concussive injuries is in the range of 10% to 17%, making the rate of PTSD among veterans with concussive injuries more than 100% higher than that for veterans without these injuries. Since most concussive combat injuries take place in an environment of traumatic stress, it is no surprise that PTSD is a concurrent phenomenon, and the impact of PTSD on the loved ones of the returned veteran is well known. Prior to the wars in Afghanistan and Iraq, the majority of studies on concussions and TBI were conducted with civilian injuries. The past decade allowed the military to successfully track soldiers with TBI.

On April 28, 2008, President George W. Bush signed into law the Traumatic Brain Injury Act of 2008 (P.L. 110-206). This legislation provided funding for fiscal years 2009–2012 for trauma-related research, treatment, surveillance, and education activities by the Centers for Disease Control and Prevention, the Health Resources and Services Administration, and the National Institutes of Health. It mandated improvements in the collection and dissemination of epidemiological studies on the incidence and prevalence of TBI in the military and veteran populations. The bill also ordered a study of

the ways in which members of the armed forces who have acquired a disability resulting from a TBI are being reintegrated into their communities. Legislation has been introduced in the U.S. Congress to reauthorize funding for traumatic brain injury programs but remained in committee as of June 2013.

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See also Medicine, Military; Medicine, Veterans; Wounds and Injuries

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TREASON

Treason was defined in the U.S. Constitution as

consist[ing] only in levying War against them [the United States], or in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

In 1948, Supreme Court Justice Robert Jackson stated that treason was “very narrowly defined in the U.S. Constitution and great difficulty is placed in the way of proving it by overt acts.” The Global War on Terrorism led to efforts by the federal government to expand the definition of treason and treasonous activities that had only limited success in the courts. At the same time, the administration of Barack Obama has killed Americans allied with al Qaeda and other terrorist organizations through covert actions, most notably through the use of unmanned aerial vehicles.

The framers of the U.S. Constitution defined treason narrowly because of the tyrannical use of “constructive treason” under English Common Law. Political opponents in Britain on several occasions brought capital charges against those accused of political crimes against the state (in practice, the British monarch). The consequence was that political dissidents were often executed for speaking against the king. The well-known case of Algernon Sidney, whose writings on political theory were used to support his execution in 1683, is said to have inspired a British law, Statute of 7 William III (1694), that required two witnesses, witness testimony, and a written indictment against the defendant in treason cases. This statute was the model for the framers of the U.S. Constitution, and the crime was thus defined in American law as action against the nation as a whole rather than used to condemn political expression against a political figure or party. This was also the reason for the requirement that the acts condemned under the treason statutes must be performed in wartime for the purpose of giving aid and comfort to the enemy.

Although the framers of the Constitution sought to narrowly define the crime of treason, Congress has sought to skirt these limitations in the Alien and Sedition Acts of 1798 and later in the Espionage and Sedition Acts during World War I. During the Cold War, the charge of treason was often hurled by Senator Joseph McCarthy of Wisconsin and other militant anticommunists against government officials in the administration of President Harry S. Truman. Charges of treasonous conduct proved central to the case of Julius and Ethel Rosenberg, even though they were not formally charged with treason.

Julius Rosenberg, an electrical engineer from New York City, was accused with his wife, Ethel, of acquiring the secret of making an atomic bomb from the highly classified U.S. government's Manhattan Project and providing it to the Soviet Union at a time when America owned a monopoly on the technology and scientific knowledge of the weapon's construction. The Rosenberg spy ring was active only for a short time during World War II, and the information, obtained primarily through Ethel Rosenberg's brother David Greenglass, a Manhattan Project machinist, was provided to the Soviet Union at a time when that country was a wartime ally of the United States. Nonetheless, the Rosenbergs were convicted and sentenced to death under wartime espionage statutes. Judge Irving Kaufman specifically referred to treason when sentencing the couple in 1951. As a result, though the Rosenbergs were convicted of conspiracy to commit espionage, the penalty carried out in 1953 was widely seen as having been imposed for implied treason despite the fact that treason carries a greater burden of proof for a conviction. Additionally, since the widely publicized trial was held during the Korean conflict of 1950–1953, the attendant hysteria surrounding McCarthyism is believed to have influenced popular opinion, which led the federal courts to expedite the couple's conviction and execution.

In 1985, Jonathan Pollard, a U.S. Navy intelligence analyst, was arrested for providing classified U.S. intelligence material to Israel. Pollard's defense in court (and in the media, where his views were widely disseminated) was that he and his wife were providing material that an ally (Israel) should have been getting from American sources but was being denied. The Pollards claimed a moral right as Jews to assist Israel in every way possible. However, Secretary of

State Caspar Weinberger submitted a classified statement to Pollard's judge, which apparently described the damage Pollard had caused to American security (it is believed that Pollard's stolen material was being provided to the Soviet Union during the 1980s, with Pollard's knowledge). Since Pollard was convicted based on classified statements and not in open court, there is some question regarding the statutes under which he was sentenced to life imprisonment and the reasons for this unusually harsh sentence. Much like the Rosenberg case, Pollard was convicted of conspiracy to deliver national defense information to a foreign government. Since his imprisonment, Israeli leaders and influential Americans have called for Pollard's release.

The USA PATRIOT Act, passed shortly after the terrorist attacks of September 11, 2001, expanded the definition of terrorism to include any acts that "appear to be intended to intimidate or coerce a civilian population; to influence the policy of a government by intimidation or coercion" (PL 107-56/Section 802). The PATRIOT Act also enhanced the penalties for treason. The issue appears to be again that penalties for treason (which is notoriously hard to prove) may be invoked for lesser crimes.

John Walker Lindh was a young man from California who converted to Islam and served with the Taliban in Afghanistan. Though the treason statutes were invoked at the time of his arrest, it was not conclusively proven that he had taken up arms specifically against the United States. He did, however, admit to aiding the Taliban at a time when a state of war existed between the United States and Afghanistan, so he was sentenced to 20 years in a plea bargain that took treason charges off the table.

In 2006, a Southern California man named Adam Yahiye Gadahn (formerly Adam Pearlman), a member of al Qaeda, was the first American indicted for treason since 1952. Gadahn has appeared in many al Qaeda videos as "Azzam the American," advocating the murder of Americans and the destruction of Los Angeles. Although Gadahn publicly renounced his U.S. citizenship, destroying his passport on video, he did not complete the official paperwork that would have legally separated him from U.S. citizenship and protected him from prosecution for treason. In June 2013, Gadahn was listed on the Federal Bureau of Investigation's most wanted list.

There is some question about the applicability of treason statutes to recent cases. There have been

several high-profile cases of espionage involving the sale of military secrets to China. The most significant of these is Noshir Gowandia, a naturalized American born in India in 1944. Gowandia was a project engineer on the B-2 stealth bomber and helped design the technology that makes the plane resistant to heat-seeking technology. Later, he was a contract engineer at Los Alamos National Laboratories. Upon his arrest in 2005, Gowandia had collected more than \$110,000 from the Chinese government for designing an improved exhaust nozzle for Chinese cruise missiles. Though technically Gowandia could have been sentenced under the treason statutes as an American citizen, his 32-year prison sentence was for unlawful exportation and transmission of classified information.

In addition to the controversies stirred up by treason charges and trials, questions over the rights of American citizens have arisen in response to the targeted killings of individuals such as Anwar al-Awlaki. Born in New Mexico to Yemeni parents, al-Awlaki earned a degree in engineering at Colorado State University in 1994. He later came to believe that the United States was attempting to destroy all Muslims, and he joined al Qaeda and advocated a violent jihad against America. He successfully recruited individuals for the cause, closely communicating with Nidal Malik Hasan, accused of the 2009 Fort Hood shootings, and Umar Farouk Abdulmutallab, convicted of attempting to blow up Northwest Airlines Flight 253 in December 2009. In 2010, the Obama administration approved al-Awlaki's inclusion on a list of terrorists marked for capture or for killing, and on September 30, 2011, al-Awlaki was killed in Yemen by a predator drone.

The treason statutes in American law arose from humanitarian and egalitarian impulses on the part of the framers of the Constitution. During the 20th century, the Espionage Act was used to skirt the narrow constitutional definition of treason, and, more recently, the USA PATRIOT Act has extended the definition. The continuing Global War on Terrorism may see the increasing use of treason statutes in an effort to hold accountable members of al Qaeda and other terrorist organizations.

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See also Constitution, U.S.; Global War on Terror; U.S. Supreme Court

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TRICARE (MILITARY HEALTH PLAN)

TRICARE is the health care program of the Department of Defense (DOD) for active-duty members of the armed forces. It serves members of the army, navy, Marine Corps, air force, Coast Guard, Public Health Service, and National Oceanic and Atmospheric Administration and includes activated

National Guard and reserve members, their families, and survivors. In addition, it also offers the health care for retired service members and their families separately.

Summary of Programs

Based on the different statuses and needs of beneficiaries, TRICARE offers multiple health care plans. Active-duty service members and their families can receive medical treatment from military treatment facilities or a contracted civilian medical provider through TRICARE Prime without any fee or co-pay. This program is similar to a civilian health maintenance organization (HMO). After service members fill out an enrollment form and submit it to the regional contractors, they are assigned primary care managers, who oversee routine medical care and make referrals to specialists in the network as needed.

TRICARE Extra and TRICARE Standard offer health care services on a fee-for-service plan, similar to a civilian preferred provider organization (PPO). TRICARE Standard is available for active-duty family members but not for the military members themselves. This plan enables beneficiaries to choose civilian medical providers beyond the TRICARE Prime network with the additional costs of deductibles and co-pays. No prior authorizations are needed for specialists as is needed under the TRICARE Prime plan. TRICARE Extra offers beneficiaries discounts in the TRICARE Extra network of service providers without enrollment and monthly pay.

TRICARE for Life was established in 2001 to reimburse costs that exceed the coverage of Medicare for retirees aged 65 years and older or for families with Medicare benefits. Beneficiaries need not pay enrollment fees to use TRICARE for Life, although they must be enrolled in Medicare Part-B.

TRICARE Reserve Select, established in 2005, is available to selected members of the reserves and their families. Beneficiaries can share medical costs that were charged in a TRICARE-authorized service provider with TRICARE Reserve Select after they pay monthly premiums for themselves and their families. Beneficiaries can use military treatment facilities if space is available. Dental coverage is provided for all active-duty members automatically, and family members may enroll and pay additionally for

this coverage. TRICARE also includes a prescription drug benefit.

Budgetary Problems

In 1993, TRICARE replaced the Civilian Health and Medical Programs of the Uniformed Services, which had provided supplemental care for active-duty and retired family members in military and Public Health Service facilities, to contain the medical cost and to increase the satisfaction of patients. This reform initiative was in the context of introduction of “managed care” into the government health care system in both federal and state levels.

Despite its purpose of reducing military health care costs, the budget of TRICARE programs expanded drastically in the following years. The medical expense of the DOD more than doubled between 2001 and 2009, from \$17 billion to \$44.8 billion, and further increase is anticipated. The reason the expanding cost is composed of several factors, including the increasing cost of civilian medical care, the start of TRICARE for Life and TRICARE Reserve Select, and relatively lower contribution of beneficiaries than private health care plans.

The growing medical cost has over the past several decades consumed a greater share of the defense budget. Although the DOD has sought to impose higher charges to beneficiaries since fiscal year 2007, Congress has refused to make significant changes.

In 2011, Secretary of Defense Robert Gates called for an increase in the user fees charged to military retirees. Gates declared that the ballooning cost of health care threatened military effectiveness if the growth in health care spending were not reduced. Among the proposals made by Gates and the administration of President Barack Obama were calls to increase the premium charged to wealthier military retirees. Veterans groups protested these cuts and successfully lobbied Congress to forestall any significant increase in the cost sharing expected of military personnel or retirees.

Conclusion

The introduction of managed care into military medicine did not wholly resolve the problem of rein-ing in health care expenditures. At the same time, to tighten the availability of health care in a single uniform way seems not to be the answer. In the minds of defense officials, the accessibility to health care by

service members and their families is crucial to sustaining an all volunteer force. As the U.S. Congress and executive branch examine possible options for decreasing costs, the trade-off between budget cutting and the accessibility of military health care will continue to be a central issue.

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See also Medicine, Military; Medicine, Veterans

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as a democratic, secular, and social state governed by the rule of law. The Turkish political system is based on parliamentary democracy. The executive power is vested in the government. Parliamentary elections are held every 4 years. Under recent constitutional amendments, the president will be for the first time directly elected every 5 years starting in 2014. The ruling party in 2012 was the Adalet ve Kalkınma Partisi: Justice and Development Party (AKP), which has Islamist roots. It secured a majority of seats in the Turkish Grand National Assembly in three consecutive general elections—in 2002, 2007, and 2011.

Turkey has been a member of North Atlantic Treaty Organization (NATO) since 1952, which constitutes its main defense commitment. However, NATO's contribution to Turkey's defense is no longer taken for granted. Reluctance on the part of some NATO members to invoke Article 5 guarantees, which states that any armed attack against one member of NATO is an attack against all, undermined the Alliance's credibility with the Turkish public and some decision makers. In 1990, just before the launch of Operation Desert Storm in Iraq, Ankara asked for deployment of NATO's Allied Command Europe Mobile forces as a sign of NATO's solidarity. Although Germany, Belgium, and Italy detached combat aircraft and the Netherlands deployed Patriot batteries to Turkey eventually, the tone of the public debate in some member states set in motion Turkish questioning of NATO's relevance to the country's post-Cold War security needs. The Turks were further alienated from NATO when French and German objections prevented it from invoking Article 5 in the case of Iraqi aggression against Turkey on the eve of the U.S. occupation of Iraq in 2003.

Defense and Security

Turkey's military is headed by a set of commanders known as the General Staff, with the chief of general staff reporting directly to the prime minister. The civilian-headed Ministry of Defense has an extremely limited jurisdiction over military matters and serves primarily as a procurement agency for the military. Under the general staff, there are three armed services: the army, the navy, and the air force. The two paramilitary services—the gendarmerie and the coast guard—are under the authority of

TURKEY

Located at the crossroads of Europe, the Middle East, and the Caucasus, Turkey is considered a multiregional power. It shares borders with Georgia, Armenia, Azerbaijan and Iran to the east; Iraq and Syria to the south; and Greece and Bulgaria to the west. Ankara, in central Anatolia, is the capital city. Turkey's population was nearly 80 million as of July 2012. The current constitution identifies the country

the Ministry of Interior in peacetime but are placed under the operational command of the army and the navy, respectively, in mobilization.

The Turkish military has traditionally played a prominent role in politics. It intervened directly three times, in 1960, 1971, and 1980, to oust civilian governments during the Cold War. The last military intervention was less direct than the previous ones and was carried out against the Islamist Welfare Party–led coalition, which was forced to step down in 1997. After the first coup in 1960, the Turkish military carved itself a constitutionally sanctioned role in politics. It remained the ultimate arbiter in domestic and international security issues over several decades. The armed Kurdish separatist movement led by the *Partiya Karkerên Kurdistan* (the Kurdistan Workers Party [PKK]) and the rise of political Islam offered further justifications for the military's expanded intrusion into politics well into the first decade after the Cold War. Political reforms in pursuit of EU membership have shifted the balance of power away from the military and toward civilians since 1999. The gradual alignment of civil-military relations in Turkey with democratic norms has resulted in a noticeably diminished role and voice for the military in politics. In the process, the previously military-dominated National Security Council lost its influence in foreign affairs and security policy. Although the National Security Council has survived the EU reforms, its composition has changed dramatically in favor of civilians. Moreover, its monopoly as the only specialized security policy institution of the country eroded with the introduction of the Undersecretariat for Homeland Security in February 2010.

Furthermore, several high-ranking serving and retired officers have been indicted and are currently being tried for their alleged involvement in an elaborate coup plot by an underground group called the *Ergenekon*. Included among the detainees in the *Ergenekon* and other related cases are a former chief of staff, the former commanders in chief of the Turkish navy and the Turkish air force, as well as the former commanding general of the First Army in Istanbul. The case may lead to a landmark decision in the evolution of civil-military relations in Turkey.

Throughout the 1990s, Turkey consistently ranked among the top 10 arms buyers of the world. Troubled relations with neighbors, including Greece,

Syria, Iran, and Iraq, and the PKK-led insurgency, justified extremely high levels of defense and security spending. After 1999, improved relations with neighbors and the stabilization of the PKK insurgency helped substantially reduce the defense and security budget, which needed to be curbed severely after a homegrown financial crisis hit the economy in 2001 with a 40% devaluation of the Turkish currency. The economy has steadily recovered, but with no corresponding increase in the defense budget. The defense and security budget has accounted for 1.8% to 2.4% of the gross domestic product in the first decade of the 21st century.

With slightly less than half a million servicemen and -women, Turkey is second only to the United States in terms of manpower among NATO countries. The army troop strength currently stands at about 370,000, the navy at about 50,000, and the air force at 60,000. These figures indicate a moderate decline since 2000. Conscripts still constitute the bulk of troop strength. In 2002, professionals accounted for nearly 17% in the army, 48% in the navy, and 55% in the air force. There are no definite plans for transformation into an all-volunteer, all-professional force in the foreseeable future. However, a partial professionalization is in progress in the army since the 2008 decision to man the army's five elite commando brigades with volunteers only.

Turkey has emerged as a major contributor to the United Nations, NATO, and other international operations since the end of the Cold War. In 1950, Turkey sent troops to fight in Korea under the United Nations Command and in the early 1990s participated in UN peacekeeping operations in Somalia. Ever since, Turkish army, navy, and air force units have been deployed for international missions from the Balkans to Afghanistan. Ankara also took the lead in developing multinational and regional peacekeeping capabilities, including the Southeastern European Brigade and the Black Sea Naval Co-Operations Task Force. Turkey has also declared a joint battlegroup with Italy and Romania. Finally, Turkish Corps III with headquarters in Istanbul is one of the four rapid-deployable corps (NRDC-T) of NATO. Turkish Corps III assumed the command of ISAF-VII mission in 2005. Since 2011, NATO has allegedly deployed three Patriot missile batteries to Turkey. German, American, and Turkish officers activated

the Patriots on May 1, 2013, to protect against any possible Syrian air attack.

Turkish Foreign Policy and U.S.-Turkey Relations

Since the foundation of the Republic in 1923, Western orientation has remained one of the hallmarks of Turkish foreign policy. Until the end of the Second World War, the West was identified mainly with Europe. Consequently, early republican diplomacy sought admission into the European States System or what was left of it after the First World War. The Soviet Union's ascendance to power after 1945 had immediate consequences for Turkey's security. Stalin's demands for joint control of the Turkish Straits and territorial claims in Eastern Anatolia propelled Turkey into the U.S. orbit. On March 12, 1947, Turkey along with Greece became recipients of U.S. military assistance under the Truman Doctrine against the military and ideological threat of the Soviets. Turkey's admission to NATO, again along with Greece, set the seal on Turkey's place among U.S. allies in the Cold War. The U.S.-Turkey alliance survived occasional crises such as Washington's secret deal with Moscow to withdraw the Jupiter missiles from Turkey in exchange for withdrawal of the Soviet missiles in Cuba in 1962; President Johnson's strongly worded letter to Turkey on the consequences of a possible military move in Cyprus in 1964; and, finally, the U.S. arms embargo on Turkey after Turkey's eventual military intervention in Cyprus 1974. Finally, the Turkish parliament vetoed the stationing of American troops on Turkish soil during the Iraq War in March 2003, causing tensions between Ankara and Washington.

During the Cold War, Turkey remained a Western outpost and hosted U.S. military installations and nuclear weapons. Turkey's real estate value for Western security evolved in line with the ebb and flow of tensions between the United States and the Soviet Union. The Soviet invasion of Afghanistan and the Islamic Revolution in Iran enhanced Turkey's significance for the United States and NATO in the last decade of the Cold War. As the Middle East came into sharp focus for Western security, the new U.S. strategy outlined by President Carter provided for Turkey's return to the Middle East, a region from which Ankara

had carefully distanced itself. The Defense and Economic Cooperation Agreement of 1988 revised the framework of U.S.-Turkey strategic cooperation to accommodate out-of-area contingencies.

The sudden end of the Cold War carried a potential to fundamentally alter the parameters of the relationship. However, the Persian Gulf War gave a new lease on life to Turkey's alliance with the United States. The U.S. investment in Turkey under the Defense and Economic Cooperation Agreement paid off when the Turkish government allowed the United States to operate combat and support aircraft out of Incirlik Air Base in southern Turkey. U.S.-Turkey cooperation during the Cold War temporarily masked the lack of a new strategic consensus between Ankara and Washington.

After the Cold War ended, the relationship began to feature elements of cooperation and competition, particularly in the case of Iraq. Between 1991 and 2003, Ankara and Washington substantially differed on the future of Iraq. While Turkey hosted U.S., British, and French aircraft under Operation Provide Comfort (subsequently named Northern Watch) to enforce the no-fly zone above the 36th parallel in Iraq, it had to deal with the consequences of an authority vacuum in the area. While the operation was meant to protect Iraqi Kurds, it also turned the area into a safe haven for the PKK, which stepped up its campaign against Turkish targets after 1991.

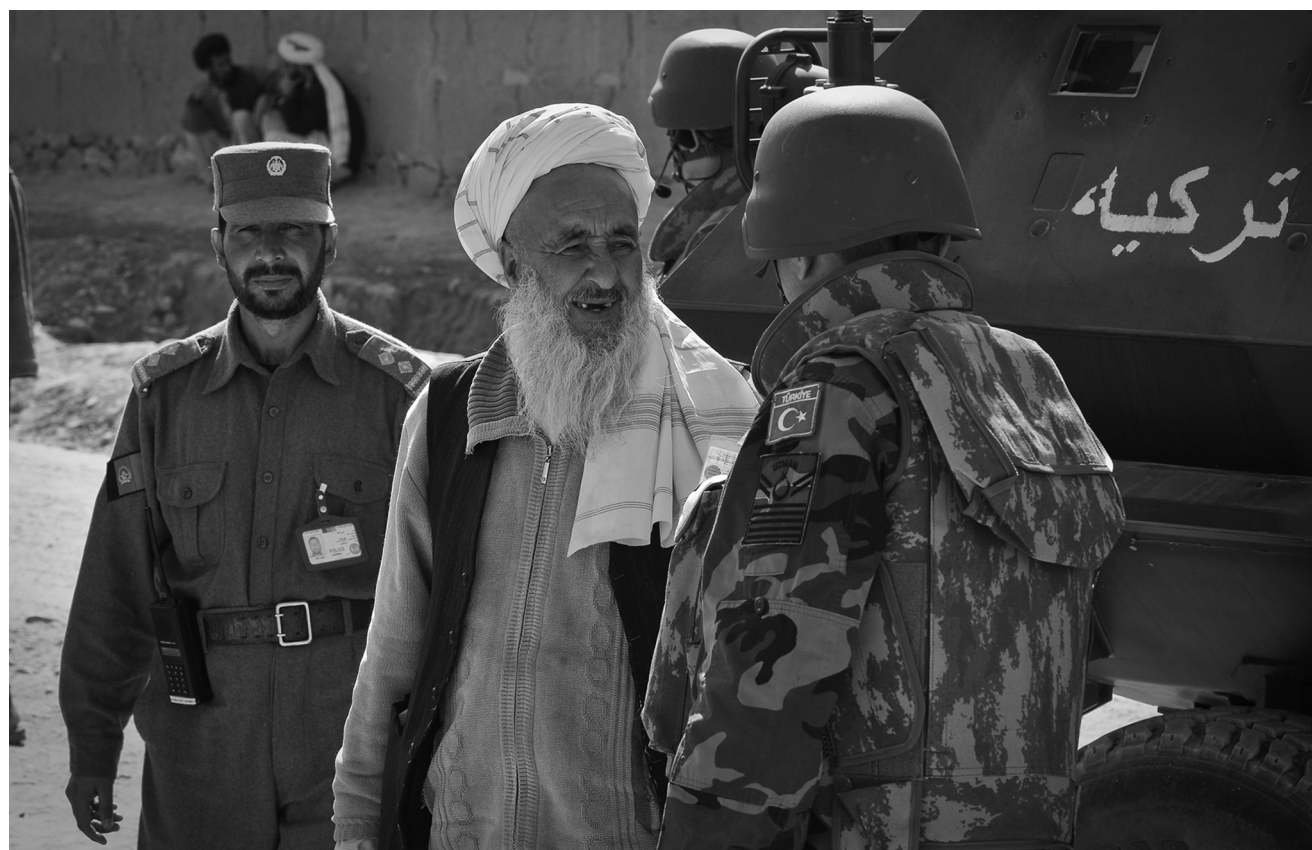
Along with the Persian Gulf War in 1991, the PKK insurgency set in train a major transformation of Turkish military. Having realized that sticking to Cold War tables of organization and equipment compromised mobility, flexibility, and the streamlined command and control needed to tackle post-Cold War threats, the Turkish General Staff switched to a battalion brigade-based army from a regiment division-based one. Dual deployment units were created with parent command deployed in the west, but sizeable units were detached to the southeast. Concurrently, the Turkish navy began to shift its focus away from the Black Sea, a major naval theater of the Cold War era, to the Aegean Sea for contingencies involving Greece and Cyprus. A new naval base was built in Aksaz, Marmaris, across from Rhodes.

The Turkish military mounted major operations (once with a corps-size unit) into Northern Iraq in pursuit of the PKK. In addition, Ankara had troubled relations with most of its neighbors,

including Greece, Armenia, Iran, and Syria. In the 1990s, Turkey's handling of its neighbors was marked by unilateralism and the use or threat of force. Such action did not meet the approval of Washington, which attempted to restrain Turkey by delaying delivery of critical military hardware, such as AH-1W Super Cobras, *Perry*-class frigates, and SH-60 Seahawks. Hence, the United States joined a host of other allies, such as Germany, Canada, and Norway, that imposed arms embargoes on Turkey, citing allegations of human rights violations. Under the circumstances, Israel stood out as an alternative supplier that would not attach any strings to arms deals with Turkey. In 1995, Ankara and Tel Aviv laid the foundations of close military relations, named after the first major military contract awarded Israel, "the Phantom Alliance," for upgrading of 54 Turkish F-4E Phantom II fighter aircraft. This was also regarded as a strategic act of balancing by Turkey against a potential military collaboration between its neighbors.

In 1998, Ankara successfully coerced Damascus to stop providing shelter to Turkey's public enemy number one, the PKK chief, Abdullah Ocalan, who was subsequently captured in the Greek Embassy in Nairobi, Kenya, by Turkish security agents with the help of the Central Intelligence Agency. After his capture, PKK attacks on Turkish security forces lost substantial momentum. The Ocalan affair and the 1999 earthquakes in Turkey and Greece helped the two countries mend fences and resulted in the removal of the Greek veto on Turkey's EU candidacy.

The 9/11 terrorist attacks on the United States and growing U.S. unilateralism in the Middle East gradually set Ankara and Washington apart. Turkey lent support to U.S.-led operations in Afghanistan to uproot the al Qaeda terrorists. Nevertheless, when the George W. Bush administration shifted its attention onto Iraq, Ankara's support could not be taken for granted. First, Turkey was apprehensive about the consequences on its territorial integrity of U.S. military action in Iraq. Toppling Saddam Hussein



A Turkish soldier speaks with a resident in Paymonar, Kabul province, Afghanistan.

Source: U.S. Navy photo by Petty Officer 1st Class Mark O'Donald.

could clear the way for the establishment of an independent Kurdish state in Turkey's neighborhood. Second, the recently elected AKP government was inexperienced and confused about how to respond to Washington's demand for basing about 60,000 U.S. troops in Turkey for its upcoming occupation of Iraq. On March 1, 2003, the Turkish Parliament voted down the government's proposal that would allow the United States to open a northern front against Saddam Hussein from Turkey. Many observers considered this a watershed moment in U.S.-Turkey relations that spelled the end of the strategic partnership phase. The AKP government also distanced Turkey from Israel after the latter's attack on Gaza in 2008. Relations between Ankara and Tel Aviv continued to sour. The AKP government excluded Israel from participation in the annual Anatolian Eagle exercises. A moment of crisis with Israel came in May 2010 when Israeli commandos killed nine Turkish citizens onboard M/S *Mavi Marmara* while trying to stop an aid flotilla en route to Gaza. Moreover, Turkish and U.S. assessments of Iran's nuclear ambitions did not initially overlap, nor could they agree on the best method for dealing with Iran. In May 2010, Turkey and Brazil struck a deal with Iran on a nuclear fuel swap, which did not go down well with the United States. Shortly after this deal, Washington secured Russian and Chinese support for sanctions on Iran. Turkey defied the U.S.-brokered resolution and voted against the sanctions on Iran in the UN Security Council. All of these developments raised the issue of whether Turkey was turning its back on the West.

Despite differences of opinion over Israel and Iran, Turkish-U.S. relations improved markedly under the administration of President Barack Obama. One reason is the changing regional context in the aftermath of the Arab Spring, also known as the Arab Awakening.

Serhat Guvenc

See also Europe; Iran; Iraq; Iraq War (2003); Israel; Middle East Conflict; Persian Gulf War; Syria

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U

UNIFORM CODE OF MILITARY JUSTICE

Congress enacted the Uniform Code of Military Justice (UCMJ) in 1950, applying the code of military criminal laws to service members worldwide (Figure 1). The president implemented the UCMJ through the *Manual for Court-Martial*, which contains the Rules for Court Martial and Military Rules for Evidence.

The UCMJ brought into the modern era the U.S. military and criminal justice system, which commenced with the British Articles of War of 1774. The

American Articles of War predated the Declaration of Independence and U.S. Constitution. The Articles of War, written in 1775, governed military justice until after World War II. Military expansion and modern requirements required changes in the military justice system. During this era, approximately 16 million Americans served in the armed forces, with 2 million court-martial offenses that detracted from the war effort.

Overview

The UCMJ reserves jurisdiction over members of the armed forces. This is unlike civilian prosecutions, where the federal or state locality of a specific place reserves jurisdiction. The jurisdiction over service members is worldwide and does not depend on where the offense was committed. The status of the accused must be connected to membership in the armed forces. Therefore, active-duty service establishes military jurisdiction. The UCMJ applies to either regular active duty or reserve components serving on active duty. Moreover, even retired members of the regular components of the armed forces entitled to pay are subject to the UCMJ and court-martial under certain circumstances.

In addition, retired members of reserve components who are in a military hospital are also subject to the UCMJ and court-martial. Others subject to UCMJ include military prisoners, civilian members of organizations assigned to serve with the military, enemy prisoners of war in custody of the military, and persons accompanying the military in the field during times of declared wars.

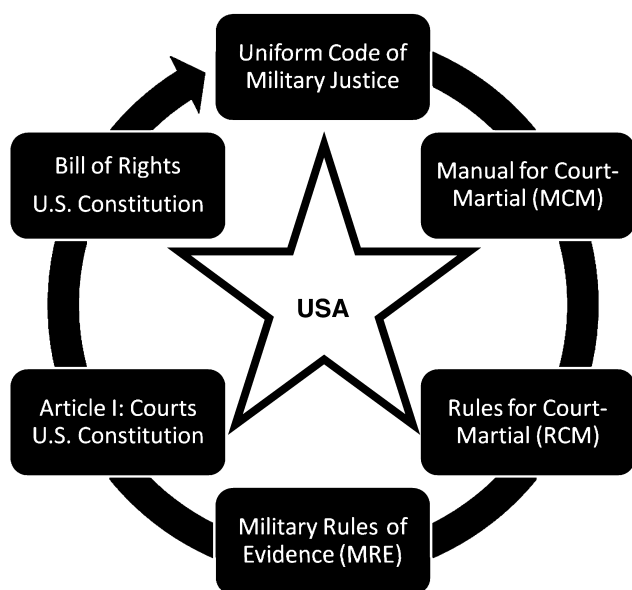


Figure 1 Uniform Code of Military Justice System

The UCMJ gradually evolved from a military model of absolute command into a code that parallels the civilian “due process model.” The commander retains jurisdiction over minor infractions; however, for serious violations, the UCMJ court-martial remains the primary means for punishment. President Harry Truman signed the UCMJ into law on May 5, 1950, as Public Law 81-506, replacing and consolidating the laws of the various services. The law took effect in 1951.

UCMJ Offenses

The code describes substantive criminal law violations and punishable offenses similar to criminal federal and state codes. Serious crimes include homicide, rape and sex offenses, in addition to property and theft offenses, alcohol and drug offenses, and many other traditional crimes. UCMJ defines the legal elements of the offenses; for example, civilian statutes comparable to those listed in the UCMJ as Article 120, Rape; Article 124, Maiming; and Article 128, Assault. However, unlike in criminal law, the code does not distinguish between minor misdemeanors and serious felony offenses.

Military commanders can discipline with nonjudicial punishment, which means they have Article 15 powers under UCMJ, 10 U.S.C. §815. Other serious military offenses under the UCMJ include violations of general order, disrespect or contempt for officers or military leaders, and insubordination. The following specific military offenses are also subject to court-martial: (a) mutiny or sedition (Article 94), (b) insubordinate conduct (Article 91), (c) failure to obey an order (Article 92), and (d) misconduct of a prisoner (Article 105).

Moreover, many of the UCMJ’s offenses are not part of the civilian criminal justice system, while other lesser or minor offenses come under the commander’s purview. These offenses may result in harsh penalties intended to maintain discipline and good order. Certain unique serious military offenses—such as absent without leave, one of the most frequent offenses—have serious consequences for military responsibilities and deployment operations.

Article 134 Offenses

Offenses not covered under the UCMJ find authority and jurisdiction for court-martial under the UCMJ’s general article, Article 134. Many Article

134 punishments meet the approximate punishment requirements that apply to similar civilian offenses. Article 134 has expansive powers, which means that any federal or state offense where there is no related crime in the UCMJ may be assimilated into the UCMJ.

Article 134 would most likely be unconstitutional in civilian courts for being vague and not meeting the criteria of specific legal elements. However, it has suitable applications under military law for violations not listed under the UCMJ. For example, Article 134 can apply to (a) communication by threat, (b) drunk and disorderly conduct, (c) obstructing justice, (d) stalking, and (e) other offenses not specifically listed in the code. Court-martial authority for military offenses in the punitive articles of the UCMJ specify the elements of the offenses in 10 U.S.C. §877.

While some of these offenses have similar civilian legal requirements, others meet specific military requirements. For example, behaviors that are conducive to poor order and discipline and that bring discredit on the armed forces are the immediate target of Article 134. Violations of Article 134 are subject to court-martial, including (a) summary court-martial, (b) special court-martial, and (c) general court-martial prosecution. The punishment is in accordance with the nature and degree of the offense. The exception and limitation is the authority to administer the death penalty.

Death Penalty

The UCMJ authorizes the death penalty for specific crimes. In addition, certain crimes require the death penalty when the Congress declares war. There are differences for death penalty general court-martial versus court-martial in which the death penalty is absent. In death penalty court-martial, the convening authority requires and appoints a minimum of 12 commissioned officers who will serve as panel members (jury members). In cases in which the penalty is not a factor, the general court-martial only requires five officers. Refer to Figure 2 for the comprehensive requirements concerning the general court-martial and death penalty criteria.

UCMJ Article 32 requires a staff judge advocate be appointed as an investigation officer to conduct a thorough investigation before a trial by general court-martial. An Article 32 investigation is similar to a civilian preliminary hearing. UCMJ death

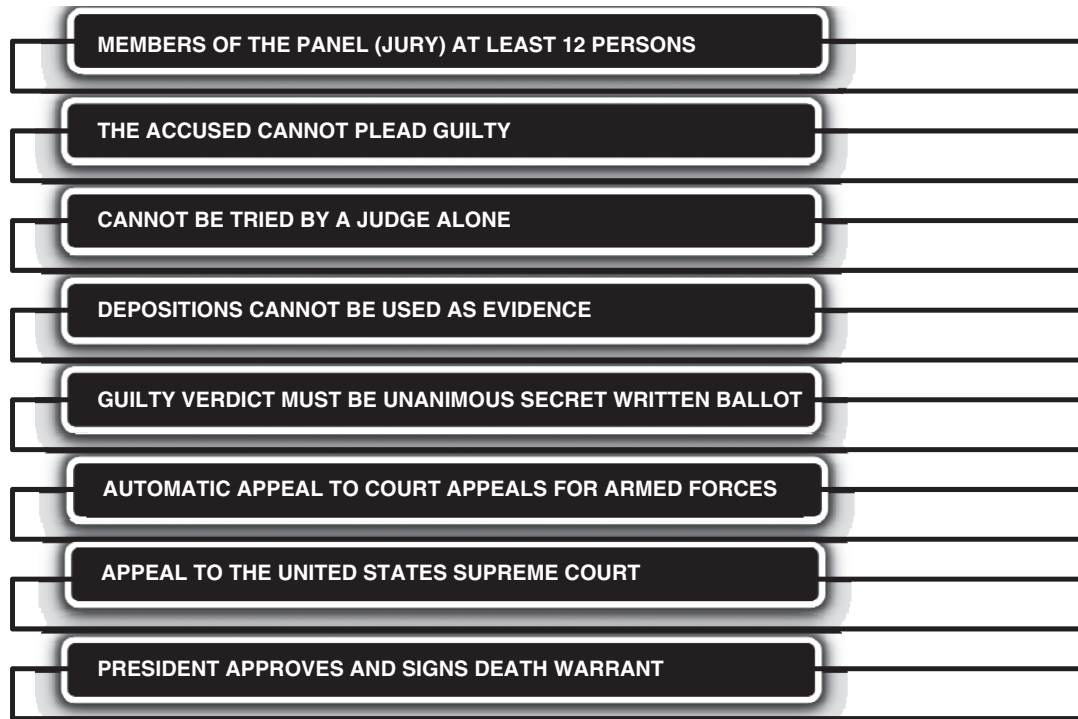


Figure 2 Death Penalty Requirements

penalty cases require the same rules of procedure and rules of evidence as any other general court-martial. Every general court-martial requires a UCMJ Article 32 investigation unless waived by the accused.

The investigating officer concludes the investigation and develops recommendations concerning the validity of specific charges and the proper forum for court-martial or exoneration of the service member. The chief military lawyer of the military reservation (staff judge advocate officer) makes formal statement recommendations under the authority of UCMJ. The convening authority has the power to authorize the potential punishment as a death penalty case and forward the charges for general court-martial.

The charges assigned to a military judge and general court-martial procedures are formally case initiated. General court-martial proceedings are similar to a trial in civilian federal or state courts. There are pretrial motions with regard to the legality of the evidence. The legal issues may involve arrest, search, and illegal evidence procedures.

The voir dire jury selection process seeks to eliminate prospective jurors who might be prejudicial or predisposed and, thus, would provide an unfair and unjust verdict. The prosecutors and defense offer their

opening statements, the presentation of evidence, and witnesses. Closing persuasive arguments by attorneys offer a dynamic close to the court-martial, followed by panel deliberations and voting.

Many of the UCMJ's criminal procedures are similar to federal and state procedural requirements. After the initial posttrial review, the death penalty court-martial is automatically docketed with the Court of Appeals for the respective branch of the service for mandatory case review in accordance with Article 66 of the UCMJ. Posttrial, the accused can make a motion to request clemency from the original convening authority. As commander in chief, the president of the United States formally approves the death penalty and signs the death warrant.

Conclusion

The primary goal of the UCMJ is to provide the necessary means for the commander to enforce good order and discipline. There are similar legal definitions and procedural patterns in civilian and military law. Military law and the UCMJ have specific legal criteria that apply to peacetime and combat military operations. The UCMJ provides the commander

with procedural opportunities for counseling, mentoring, and corrective training, not just punishment.

Military commanders have nonjudicial discipline authority under the UCMJ Article 15, which allows the commander informal procedures and nonjudicial punishments. Article 15 provides the means to discipline members of the armed forces without facing formal court-martial. The accused has the opportunity for appeal or the right to demand a summary court-martial. The balance of due process and military discipline is essential to the military justice system.

Thomas E. Baker

See also Abuse, Family and Child; Constitutional Rights, Personnel; Court-Martial; Crimes, Military; Crimes, War; Hazing; Laws of War; My Lai Massacre

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UNIFORMS

Whether in combat or far from the fighting zone, soldiers and sailors are required to wear special clothing. Uniforms are designed with both purpose and climate in mind. They vary by activity, rank, and service, and their presence speaks to the wearer's status and activity. In full dress blues, a general's uniform announces his rank and accomplishments, commanding respect. Donning a uniform also imparts tremendous responsibility to the wearer as a representative of the U.S. military.

Each service branch has its own uniforms and regulations regarding their usage. These rules dictate who wears what type of uniform, when the

uniform can be worn, and how it is to be worn (e.g., shirts tucked in, with undergarments). Codes also prescribe appropriate behavior when in uniform. Additionally, the military's uniform regulations define personal grooming standards, including hair length and style, facial hair, and jewelry.

Each branch has distinct regulations regarding uniform design and use of materials. Uniforms are designed for utility and for safety. Safety considerations include fire safety, noninterference with activities, and color and camouflage design. Over the years, uniforms have evolved as new materials and service environment dictate change. For example, in 2010, army units deployed to Afghanistan began wearing uniforms with a new camouflage pattern better suited for concealment in the local environment.

Uniforms typically include all relevant pieces of clothing, including undergarments, socks, hats, badges, insignia, and outerwear. No matter the service, uniforms are to be neat and, by their very nature, uniform. Each garment and accessory imparts information about the wearer's position. Each garment can also dictate appropriate behavior. For example, when in formal dress uniforms, servicemen are not required to salute. However, when in service uniforms, saluting is expected.

Clear standards of behavior are expected when in uniform. For example, personnel who are in uniform are not allowed to engage in public displays of affection, except in very limited circumstances. A serviceman or servicewoman cannot smoke or chew tobacco or be seen at any political gathering in uniform unless on official business.

Responsibility for purchasing and maintaining uniforms varies from branch to branch, but broad similarities do exist. The army issues uniforms to its enlisted ranks and gives servicemen and servicewomen a stipend for their upkeep. Officers must purchase their own uniforms and pay for their upkeep. Each of the other branches of armed services also has the same overall categories of uniforms: physical fitness, combat, service, and dress.

Historical Antecedents

The modern military uniform emerged as part of the development of professional armies in 17th-century Europe. On the most basic level, uniforms served to distinguish friend from foe in an age of warfare,

in which soldiers fought in linear formations on an open battlefield. Uniforms were often colorful and heavily ornamented to signify the power and prestige of the monarch, city-state, or republic. In most armed forces, uniforms invariably signify the hierarchical structures of military organizations, and they traditionally reflect the sharp distinctions between officers and the enlisted ranks. In the case of the military, U.S. Navy uniforms underscore the difference, even in dress uniforms, between officers and the enlisted ranks. For instance, officers wear ties with their formal uniforms, enlisted men a kerchief.

Variation in military uniforms remains the norm, and all the branches of the armed forces have traditionally had distinctive uniforms. During the Revolutionary War, American soldiers wore dozens of different uniform styles that reflected the fact that soldiers were raised and provided to the Continental Army by 13 states. Blue color emerged as the most widely used color in uniforms. For the U.S. Army, it would be the norm through much of the 19th century, and it remains the color of the current dress uniform in most cases. But not all dress uniforms are blue. For instance, cadets at the United States Military Academy wear gray dress uniforms that commemorate an American battlefield victory in which forces led by Winfield Scott wore gray uniforms. Several militia units in New York State patterned their dress uniforms after those worn in West Point.

The 20th century witnessed a striking shift in uniforms worn by soldiers on the battlefield. With the vast expansion of the killing field, concealment remained essential to survival, and uniforms were designed to allow combatants to blend into the terrain. Cotton khaki and olive drab became the norm for soldiers in the army during the two World Wars. During the Cold War, the army service units took on a deeper shade of green to offer camouflage for possible combat in northern Europe and in the jungles of Vietnam.

Army

The army has combat, service, physical fitness, and dress uniforms. The primary utility uniform is the Army Combat Uniform (ACU); however, soldiers have access to others, including those used for maternity wear and for specific jobs, like flight, combat crew, hospital, and food service duties. The Army Service Uniform (ASU) is worn by instructors

at West Point, and soldiers during special events, including funerals. For formal events, army servicemen and servicewomen wear the Mess Uniform, which includes a mess jacket, high-waisted trousers, cummerbund, and bow tie. Army uniforms also include headwear—mandatory for soldiers when out of doors. These range from the Army Patrol Cap, worn with Army Combat Uniforms, to a beret or Service Cap, worn with the Army Service Uniform and Mess uniform.

Air Force

Air force uniforms include the Airman Battle Uniform (ABU), Physical Training Uniforms (PTU) and Improved Physical Training Uniforms (IPTU), Formal Dress Uniform (officers only), Mess Dress Uniform (mandatory for officers, optional for enlisted), Semiformal Dress Uniform (enlisted only), Service Dress Uniform (Class A), and Blue Service Uniform (Class B). Additional uniform pieces include outerwear, service and flight caps, berets, footwear, and underwear. Additionally, air force personnel can utilize Flight Duty Uniforms (FDU), Desert Flight Duty Uniforms (DFDU), Informal Uniforms, and other job-specific uniforms, including equestrian, food service, and others.

Air force personnel must purchase their uniforms from the Army and Air Force Exchange Service Military Clothing Sales Store, supplied by the Defense Supply Center, Philadelphia. Though there are some items that can be purchased from civilian sources (purses, pumps, etc.), many must be bought from authorized manufacturers.

Navy

Historically, a sailor's uniform has been a product of his environment, and the navy believes that a sailor's uniform should not interfere with his work. Sailors have access to a variety of uniforms, including Working Uniforms (camouflage), Coveralls (working uniform at sea), Service Khaki (daily wear), Service Dress Blue, Service Dress White, Dinner Dress Blue, Dinner Dress White, and Summer White. In addition, the navy has specialized uniforms for particular positions or situations, including aviators, band members, maternity clothing, and medical personnel.

Officers are responsible for purchasing and paying for their uniforms. Enlisted service members are

responsible for purchasing their uniforms, but they receive a stipend to assist in paying for them.

Marines

Marines take great pride in their uniforms. A marine dons dress blues only after successfully completing boot camp. Marine uniforms include the Marine Corps Combat Utility Uniform (MCCUU—camouflage), Physical Training Uniform, Service Uniform (green and khaki), and a variety of dress uniforms, including the Blue, Blue-White, Red, and Evening Dress Uniforms.

Marines are prohibited from eating while walking in their uniform. They are instructed to not chew gum, use tobacco, or put their hands in their pockets while in uniform. According to the Marine's code, Marines should be known for their "unparalleled standards of professionalism and uncompromising personal conduct and appearance" as well as for their skills on the battlefield.

Susan G. Contente

See also Armor, Body; Customs and Traditions; Helmets

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UNITED KINGDOM

The United Kingdom of Great Britain and Northern Ireland (Britain) is a close ally of the United States and has participated with it in a number of peacekeeping and combat operations since 1989. Militarily, the United Kingdom is not in the very top tier of world powers, but it possesses well-trained and up-to-date forces that can be effectively deployed far beyond its borders.

The United Kingdom is a chain of islands off the western coast of Europe that constitute one sovereign nation. By far the largest of these, in size and population, is the island of Britain. The United Kingdom's population is about 62 million; its capital is London.

The United Kingdom is a parliamentary monarchy, with a House of Commons elected by universal suffrage and possessing most of the country's legislative power. It also has a part-appointed, part-hereditary House of Lords, and a sovereign, currently Queen Elizabeth II, who symbolizes the nation but has no role in day-to-day politics. The executive consists of a prime minister, usually the head of the largest party in the House of Commons, and a cabinet. The most important cabinet ministers are the foreign secretary and chancellor of the exchequer—equivalent to the U.S. secretaries of state and treasury. Britain's constitution, one of the world's oldest, is revered but "unwritten"—it consists of no single legal document but instead multiple customs and legal precedents that have evolved over centuries. British citizens enjoy the same freedoms, such as speech, press, and religion, as those of the United States. Britain is a member of the European Union (EU), the North Atlantic Treaty Organization (NATO), the Commonwealth of Nations, and numerous other international organizations. It has a permanent seat on the UN Security Council.

Socially, Britain is a welfare state on the European model. Its government provides taxpayer-funded health, education, and other basic necessities to all citizens. Traces remain of Britain's former class system, which consisted of a wealthy nobility, a middle class of shopkeepers and professionals, and a very large working class of manual laborers. The social mix has changed, however, and it is common now to speak of most citizens as Middle Britons, neither rich nor poor.

One reason for this change is the decline of industry. In the 19th century, Britain was the world's greatest producer of industrial goods, and most Britons made their living as industrial workers or farmers. Now it produces relatively few goods and does not need a large manual laboring class. The United Kingdom remains wealthy. Between 1992 and 2008, it enjoyed a long period of economic growth, led by an expansion in the service sector and a vigorous banking and financial sector. Currently, Britain is the world's seventh largest economy with a gross domestic product in excess of \$2 trillion and per capita income of nearly \$35,000.



The United Kingdom.

Source: U.S. Central Intelligence Agency.

History Since 1991

The end of the Cold War in 1991, when the Soviet Union collapsed, removed the fear of Soviet aggression but brought many new military-related

challenges to Britain. Some of these were internal, such as guerrilla warfare in Northern Ireland and terrorism associated with increasing immigration. Some involved deployment of Britain's defense

forces overseas to deal with international terrorism or violent regimes.

Britain was for centuries a great military power. It no longer has that status, but its defense forces are modern and formidable, including an independent nuclear capability. All defense forces are under civilian control through the Ministry of Defense. The military has no role, official or unofficial, in politics. The military enjoys the esteem of the British population, although Britain possesses strong antiwar and pacifist organizations, such as the Campaign for Nuclear Disarmament. Britain's involvement in the invasion and occupation of Iraq from 2003 to 2009 was unpopular, but the onus for it was placed on the government, not the military.

The United Kingdom's military is entirely volunteer and professional. It numbers about 180,000 active personnel with a regular and volunteer reserve of about 240,000. Total spending on the military

is about 2.5% of gross domestic product—in 2012 about \$60.8 billion. That compares with U.S. military spending of about 4.4% of gross domestic product, and fiscal year 2010 U.S. spending of \$663.8 billion.

Britain deploys a number of sophisticated weapons systems. The United Kingdom's nuclear force utilizes U.S. delivery systems—four *Vanguard*-class nuclear submarines, each with 16 Trident II submarine-launched ballistic missiles, each of which carries up to three independently targeted warheads. Britain's stock of operational nuclear warheads is thought to be about 160, her total stock including nonoperational warheads about 225. The exact number is classified. The Royal Air Force deploys the Tornado GR4 attack plane, armed with cruise missiles, laser- and GPS-guided bombs, and other weaponry; the Eurofighter Typhoon F2 multi-role/air superiority fighter; and the Boeing C-17



A UK Royal Air Force GR4 Tornado aircraft returns to mission on June 3, 2011, above Afghanistan in support of Operation Enduring Freedom.

Source: U.S. Air Force photo by Master Sergeant William Greer.

Globemaster heavy transport. Its helicopter fleet is modern in both transport and fighting capability. Some of its air fleet, such as Chinook helicopters and the C-17, are American-made.

The Royal Navy is likewise capable of projecting force. Its large warships number 7 destroyers; 7 submarines not counting the 4 nuclear-armed *Vanguard* class; and 17 frigates. Each of these numbers is projected to decrease in the next few years. Britain had had no operational aircraft carriers since 2011, but is building two large aircraft carriers of the new *Queen Elizabeth* class, expected to go into service between 2014 and 2016. Fixed-wing aircraft for them will not be available until 2020, and they will not be fully operational until then. The Royal Navy also has patrol ships and amphibious landing capability.

The British army deploys a variety of armored and patrol vehicles and self-propelled artillery. The Challenger II, in service since 1994, is the main

battle tank, and the AS90 155-mm self-propelled gun the primary heavy artillery piece. Infantry weapons range from assault rifles to 81-mm mortars to shoulder-fired antitank weapons.

The United Kingdom also possesses excellent special forces capable of small-group tactical and intelligence missions. The best known of these are the Special Air Service and Special Boat Service.

Since 1989, Britain's military has engaged in combat or peacekeeping missions in Cyprus, Bosnia, Kosovo, Iraq, Northern Ireland, Sierra Leone, Afghanistan, and Libya and has manned bases in British territory around the globe. Most of these deployments have been in concert with the United States.

Two notable exceptions are Sierra Leone and Northern Ireland. In 2000, British troops intervened in a bloody civil war in Sierra Leone, a former colony. They quickly defeated rebels of the Revolutionary



A British army Challenger II main battle tank from the Royal Scots Dragoon Guards fires at a target during a training exercise in Basra, Iraq, November 17, 2008.

Source: Department of Defense photo by Sergeant Gustavo Olgiati, U.S. Army.

United Front and restored peace. Sierra Leoneans were grateful, and the then prime minister Tony Blair, who ordered the operation, is seen by many in Sierra Leone as a hero.

Northern Ireland operations did not go as well. Between 1969 and 1998, Northern Ireland endured a guerrilla war, known as The Troubles. Most of the fighting was between pro-British, "Unionist" Protestant paramilitaries, and Catholic paramilitaries of the Irish Republican Army, or "Nationalists," who wanted Northern Ireland to become part of the Irish Republic. The war featured bombings and assassinations rather than battles, and the Irish Republican Army frequently carried its bombing campaign into the rest of Britain. In all, 3,526 people, mostly civilians, died in The Troubles. The British army engaged in peacekeeping operations in Northern Ireland for nearly three decades with little success, amid scandals over allegations of torture and a failure to quell the violence.

Fighting was ended by the Good Friday Agreement of April 10, 1998, brokered in part by the then U.S. president Bill Clinton and his special envoy, former U.S. senator George Mitchell. There have been some incidents since 1998, and tensions between Catholics and Protestants remain high, but the peace has held. Northern Ireland is today considered a model for peacemaking between rival ethnic and religious groups.

Britain was involved in two operations in the Balkans. In 1995, British, U.S., and other NATO forces intervened to halt massacres of civilians, mostly by ethnic Serbs, in Bosnia. They did the same in Kosovo in 1999, to halt the ethnic cleansing of Muslim Kosovars by Serbs. This operation consisted of an aerial bombing campaign, followed by an occupation of Kosovo. No ground combat was necessary.

In 1991, Britain provided the third largest contingent of troops participating in coalition forces in the Gulf War in Iraq. The purpose of the operation was to defeat Saddam Hussein's Iraqi forces, which had invaded the Persian Gulf nation of Kuwait. The U.S.-led and UN sanctioned coalition liberated Kuwait.

Public opinion quickly turned against Britain's participation in the 2003 invasion of Iraq. Allegations were made that the invasion was based on faulty or falsified intelligence. The death toll for UK soldiers during the subsequent occupation, at 179, was much lower than for the United States but was seen by the British public as insupportably

large. The Iraq War eroded the popularity of Blair, who was accused of deception and of being too willing to cooperate with the U.S. president George W. Bush. Blair resigned in 2007, and British combat forces were withdrawn from Iraq in 2009.

The United Kingdom also participated in the 2001 invasion of Afghanistan and still has troops there. This war is also unpopular, according to opinion polls, but has not become a major political issue. Finally, Britain took a leading role in the UN-sponsored and NATO-led air operation that led to the overthrow of the Libyan dictator Muammar Qaddafi in 2011.

Britain's closest ally is the United States because of their shared history and values. This closeness, sometimes called the "special relationship," extends to military matters. The British military cooperates closely with the United States in training and operations and permits the U.S. Air Force to maintain bases in the United Kingdom, as well as a naval base at Diego Garcia in the Indian Ocean, part of the British Indian Ocean Territory.

Britain is also a member of the EU. Although EU-U.S. relations are friendly, interests of the two sometimes conflict on matters such as trade and strategic policy. This means that the United Kingdom must engage in a difficult balancing act. However, its "Mid-Atlantic" position is also seen by many thoughtful Britons as providing an opportunity to mediate between the two, speaking to each as a friend. By doing so, Britain can maximize its influence on each party, while maintaining freedom to pursue its own interests. This rosy scenario has been called into question by recent tensions between Britain and other EU members, which could result in a renegotiation of Britain's terms of EU membership or, in the most extreme case, a withdrawal from the EU.

Future Prospects

The United Kingdom, like most of Europe, faces grim challenges in the next decade. The core of its difficulty is economic: Despite the long period of prosperity from 1992 to 2008, the national debt is high, the cost of pensions and medical services for an aging population is projected to be ruinously large, and the political consensus for expensive welfare state measures has eroded. These structural difficulties have been exacerbated by the post-2008/2009 "Great Recession" and the extremely slow recovery from it.

In response, the administration of the Conservative prime minister David Cameron has embarked on an austerity program, cutting all government spending significantly. In October 2010, Cameron announced an 8% reduction in the military budget. This included a reduction of 17,000 active military personnel, the early mothballing of the aircraft carrier *Ark Royal* and its Harrier jump jets, the reduction in the number of other major warships from 32 to 19, and cuts in proposed new weaponry. These cuts may affect its readiness and willingness to engage in military missions outside its borders and its ability to modernize its forces.

Nevertheless, Britain still has territory and interests around the world that must be defended. The threat of terrorism places a premium on military intelligence and rapid-response capability. Britain has responsibilities as a member of NATO. And, the British people value their connection with the United States, including the military connection.

For these reasons, a more drastic drawdown of British forces is unlikely, barring a serious worsening of the economic situation. Public opinion would not stand for British soldiers and pilots being put at risk due to inferior equipment or training. Britain's military is not large, but it is one of the best equipped and most operationally competent in the world and is likely to remain so.

Bernard G. Hagerty

See also Alliances; Coalition, Warfare; Europe; Iraq War (2003); North Atlantic Treaty Organization; Persian Gulf War; War in Afghanistan

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UNITED NATIONS

The United Nations system has undergone myriad changes from the moment of its inception to the present. The most significant of these changes occurred after the end of the Cold War, which saw the organization move from a period of near paralysis to one of decided activism. Nowhere is this shift more evident than in the conduct of peacekeeping operations (PKOs), which were decidedly weaker during the Cold War as the two superpowers avoided encroaching on each other's spheres of influence. This stalemate would be broken in the early post-Cold War era with PKOs in Cambodia, Somalia, and the former Yugoslav Republic.

As of August 2012, the United Nations maintained 15 peacekeeping missions and a special political mission to Afghanistan. The United Nations staffed these operations with 80,000 military personnel, contributed by 115 different countries. These operations in fiscal year 2012–2013 were budgeted to cost more than \$7 billion.

Organization of the United Nations

The United Nations Organization has its roots in the Atlantic Charter of August 1941 issued by President Franklin D. Roosevelt and British prime minister Winston Churchill, which was drafted in a desire to create an effective international body that would not suffer the fate of the failed League of Nations. After the United States entered World War II, Roosevelt coined the term *United Nations* for the wartime alliance fighting Nazi Germany and Imperial Japan. It was not until the discussions at Dumbarton Oaks in Washington, D.C., during September and October 1944, however, that a formal organization for the United Nations was set out and the functions of three of its main organs, the Security Council, the General Assembly, and the Secretariat, articulated. Of particular importance in the discussions at Dumbarton Oaks was a disagreement over a veto power in the

Security Council, which would be resolved at the Yalta Conference in 1945 by assigning veto power to the five permanent members of that body (the United States, Great Britain, France, the USSR, and China). The veto would come to play an important role in the Security Council's peacekeeping efforts as the Cold War unfolded because it rendered any bold action by the council futile in the face of opposition of one superpower or the other.

The final treaty establishing the United Nations was negotiated in San Francisco in June 1945, and this treaty had a sufficient number of nations ratify it for it to take effect in October 1945. The first meeting of the UN General Assembly took place in London, but New York City would become the permanent headquarters of the organization. The charter proclaims the need to save succeeding generations from the scourge of war by the maintenance of peace and the prevention of war. The UN system was organized into six main bodies: To the three mentioned above, the Economic and Social Council, the International Court of Justice, and the Trusteeship Council were added. In addition to these, there exist a series of specialized agencies, many of which also aid in international peace and security.

Role of the Security Council and Secretaries-General in Peace and Security

The Security Council is the principal organ of the United Nations vested with responsibility for overseeing the maintenance of international peace and security. All international conflicts, as stated in the charter, are referred to it for peaceable resolution. The Security Council today consists of 15 member states (5 permanent and 10 rotating). The five permanent members, or P5, are the United States, Great Britain, France, China, and Russia; all five possess veto power over Security Council action. Among the most important provisions of the charter pertaining to the Security Council are Chapters VI and VII. The former confers the responsibility of overseeing the pacific settlement of disputes on the council, while the latter grants the council the power to apply economic sanctions or even to direct military operations with troops volunteered by member states for the purpose of restoring peace.

The efforts of the UN secretaries-general have been of significance in the UN's preservation of

international peace and security. The office of the secretary-general is a relatively weak position as stated in the charter. All references in Chapter XV to the office are vague and entail oversight, maintenance, and the like, rather than being clear articulations of the powers of the office, like those of a president. In addition, the office has no real authority over nation-states, such that anything the secretary-general says must remain a recommendation. As a result, contributions by the secretary-general in the area of international peace and security have depended largely on the personal initiative of the individuals occupying the office. In this sense, the office can be divided into three types of secretaries-general: (1) those who designed and expanded the office; (2) those who consolidated it; and (3) those who have attempted to reform it.

In the camp of the designers was Dag Hammarskjöld from Sweden, who promoted the concept of mission diplomacy and did much to expand the office. Mission diplomacy consisted of two components: (1) quiet diplomacy and (2) preventive diplomacy. The latter of these involved peacekeeping operations, which Hammarskjöld defined broadly as serving to prevent conflict, making the secretary-general an independent office rather than just an instrument or agent of the United Nations. This type of PKO, widely considered as one of the first Chapter VI^{3/4} operations, had its largest manifestation with the UN Operation in the Congo (*Opération des Nations Unies au Congo*, or ONUC).

Among the consolidators was Kurt Waldheim of Austria, who took office in 1972 at a time when the United Nations was in notable decline and the USSR was expanding its sphere of influence and challenging U.S. power. This was the height of Cold War—prompted UN inactivity. Waldheim's stewardship of the UN is significant because it was nonintrusive. Rather than pursuing resolutions to conflicts proactively, he waited for the parties to a dispute to come to him. His idea of conflict resolution was finding a common ground. UN peacekeeping went dormant from 1972 to 1981, while Waldheim was secretary-general, and was invigorated only after the end of the Cold War.

Finally, the group of reformers includes the Peruvian Javier Pérez de Cuéllar, the Egyptian Boutros Boutros-Ghali, and the Ghanaian Kofi Annan. Pérez de Cuéllar inherited a United Nations in financial crisis in 1981, facing conflicts around

a globe that had not seen a PKO in 3 years. Under his command, the United Nations undertook operations in Afghanistan, Angola, and Nicaragua, the last of which consisted of election monitors who successfully oversaw the exit of the Sandinistas and the entrance of Violeta Chamorro, the U.S.-endorsed candidate. Much of Pérez de Cuéllar's success was due to the end of the Cold War and a declining Soviet Union, which restored faith in PKOs and encouraged those who would follow him.

Boutros Boutros-Ghali is notable for having presided over a 1992 Security Council summit meeting at which he was asked for a plan outlining his recommendations for peacekeeping in a post-Cold War world. His answer, a booklet titled *An Agenda for Peace*, advocated preventive diplomacy, armed peacekeeping, and postconflict nation-building. His belief was that the secretary-general should handle peace enforcement without General Assembly or Security Council authorization. In addition to this, he wanted a UN rapid reaction force, all positions that portended a new era in peacekeeping.

Kofi Annan also produced a reform document, titled *Renewing the United Nations: A Programme for Reform*. In it, he set forth a series of recommendations to reinvigorate the United Nations; he also supported a rapid reaction military force, a UN military corps to lead PKOs, an office of special representative for PKOs, and nation-building. As this makes clear, the Security Council and secretaries-general have been the principal forces in peacekeeping and its reform, but there are other bodies involved in this function of the United Nations.

The General Assembly, the Economic and Social Council, and the Specialized Agencies

From the first days of the United Nations, other organs and specialized agencies within the organization have played a minor—but no less important—role in its maintenance of international peace. To begin with, the General Assembly, especially during the years of inactivity of the Cold War, provided a sort of escape valve for operations that may have been blocked by the superpowers. According to Article 10 of the charter, the General Assembly may discuss or make recommendations on any matter relating to the charter and the maintenance of international peace and security, a provision limited only by Article 12, which limits this to matters that are

not being considered at that moment by the Security Council. This gives the General Assembly much power in the realm of peacekeeping as it is able to circumvent the Security Council veto, a particularly important point during the Cold War. In fact, this allowed the General Assembly to oversee the Korean War in the 1950s.

The UN Economic and Social Council is significant because, as set forth in Chapter X of the charter, it works in unison with the General Assembly and various specialized agencies of the United Nations to make recommendations on matters of an economic and social nature, in addition to issues relating to education, health, and culture. The recommendations it makes may seek to promote or protect human rights and civil freedoms across the world, and it can call international conferences on these matters or any other within its purview.

Connected in many ways to the Economic and Social Council—and reporting to it—are the various specialized agencies within the United Nations, which include the World Bank, the Food and Agricultural Organization, United Nations Educational, Scientific and Cultural Organization, and a number of others that promote economic development, human rights, public health, and myriad other matters. The World Health Organization, located in Geneva, deals with immigration, nutrition, family planning, immunization, and disease control. It has a very broad agenda that in some cases can touch on issues important to the maintenance of international peace. The World Health Organization has had many successes in establishing benchmarks and solving pressing problems, often with the simplest of responses. Among its greatest successes is its campaign to eradicate smallpox and its efforts to eliminate polio. The Food and Agricultural Organization seeks to raise the levels of nutrition and food production around the world. Like the World Health Organization, the Food and Agricultural Organization also has a broad agenda and often deals with corruption and a number of other issues that ultimately relate to peace and security.

Peacekeeping During the Cold War

Peacekeeping during the Cold War was rather muted. As noted, superpower disagreement in the Security Council led to frequent use of veto power to prevent either side from encroaching on the other's

sphere of influence. Some of the defining characteristics of this traditional form of peacekeeping involved the consent and cooperation of the parties to the dispute, the impartiality of the organization, the exclusively defensive use of force, a limitation to interstate conflicts, and application only to areas outside of the superpowers' spheres. This type of operation sought to freeze the situation rather than to resolve it.

An example of a classic Cold War PKO was the operation in Cyprus. Clashes on the island divided between a majority Greek and minority Turkish population broke out soon after independence. As a result, the UN Force in Cyprus was authorized. Following a Turkish invasion in 1974 and claims of an independent Turkish Cyprus in the northern part of the island, the UN Force in Cyprus was expanded to create a buffer line from one end of the island to the other. The operation initially had a 6-month mandate but stayed in place indefinitely. This was the case because it was popular and no one was threatened by it. In addition, it was within the North Atlantic Treaty Organization (NATO) sphere—both Greece and Turkey were member states. Finally, no war has broken out since the buffer force has been in place. This was a typical, unthreatening Cold War PKO. Among the problems with this approach is that the problem is never resolved among the parties.

Post-Cold War Peacekeeping

The first instance of international organization following the Cold War proved to be a resounding success. The coalition built to repel Saddam Hussein's Iraq from Kuwait gave the United Nations confidence that international cooperation could finally flourish. At the time of Iraq's invasion of Kuwait in August 1990, many questions still surrounded the possibility of collective security, the role of the United Nations as the hub of such coordination, and the willingness of the moribund—but still existent—Soviet Union to accept Western intervention in the Gulf. It was clear that a truly global coalition would be required and—individual state interests notwithstanding—the United Nations provided the perfect justification for such a coalition. States could claim to be acting to protect the integrity of Article 2(4), general repudiation of war contained in the UN Charter, violated flagrantly by Saddam Hussein. The coalition could also justify its campaign against Iraq through a Security Council authorization of force.

This use of the United Nations invigorated the organization and set the stage for the operations of the early 1990s.

The experience of the Persian Gulf War ushered in an era of unprecedented activity and optimism for the organization. During the 1990s alone, more PKOs were undertaken by the United Nations than in the preceding five decades of the organization's existence combined. Weak operations designed to avoid the veto of either superpower were a relic of the Cold War past, and the demise of competing spheres of influence meant an increase of potential areas of operation. In addition to these, a number of changes within the organization, such as the arrival of an ambitious and optimistic secretary-general, also contributed to this confidence.

This optimistic environment also bred a more aggressive type of peacekeeping. During the Cold War, PKOs were limited to humanitarian assistance, buffer forces, and other activities that could take place preceding or following a full-blown conflict. These types of first-generation operations are commonly referred to as Chapter VI½ operations, in reference to the part of the UN Charter authorizing the United Nations to mediate conflicts, as well restore peace and international security. Chapter VI of the charter deals with the pacific settlement of disputes. Since traditional Cold War operations went slightly beyond this, the qualifying fraction was added. First-generation peacekeeping is thus predicated on the absence of ongoing conflict during the UN presence in an area, an assumption of UN neutrality and the assent of all parties to UN presence. Chapter VII, instead, deals with the Security Council's war authorization power, and the Gulf War falls under this category.

Second-generation peacekeeping, accordingly referred to as Chapter VI¾ operations, was a product of the reinvigoration of the United Nations due to this post-Cold War euphoria. This bolder type of PKO is characterized by the ongoing nature of the conflict when the United Nations enters the area and lacks the assent of one or all parties to its presence. Three definitive PKOs of the 1990s fall under this rubric of second-generation peacekeeping, and their disastrous consequences would put a decisive end to the aura of optimism surrounding the United Nations in the early 1990s. They would, in addition, serve to sour American perceptions of the organization and its possibilities.

Cambodia

The first of these operations took place in the war-ravaged region of Indochina. The U.S. policy in the early 1970s of combating Viet Cong strongholds in Cambodia pushed that country's Maoist rebels to the interior, away from the U.S. war with Vietnam. This group, known as the Khmer Rouge, was eventually able to assume control of Cambodia and what ensued over the next half decade was the extermination of almost a third of the country's total population. This was followed by a Vietnamese puppet regime in Cambodia, which was sustained as long as the Cold War went on. Once Soviet support ran dry, however, Vietnam found its presence in Cambodia untenable. At that point, the United Nations became involved in the country to avoid a potential return of the Khmer Rouge.

The optimism of the times was evident in some of the UN goals for Cambodia, set forth in the 1991 Paris Accords, which included the demobilization of armies, the return of refugees, and elections within 18 months. This bold PKO would enter on Vietnamese withdrawal and run the country until a provisional government could replace it. From the outset, however, the UN Transition Authority in Cambodia suffered crippling problems, including a general lack of support from the major actors, a lack of democratic traditions in Cambodia making nation-building nearly impossible, and an unrealistic time frame in which to achieve such lofty goals. In the end, UN Transition Authority in Cambodia oversaw the election of a new government in 1993 that was overthrown almost immediately after the UN departure. The first optimistic post-Cold War PKO proved to be a failure.

Somalia

Chapter VI^{3/4} peacekeeping, however, did not end with the failure of the UN Transition Authority in Cambodia. The next instance of overly optimistic peacekeeping took place in Somalia, another object of superpower interest during the Cold War. Before the demise of the Soviet Union, each of the two superpowers poured funding and arms into the east African nation as its evolving ideological affiliation dictated. This superpower interference fostered a dictatorial form of government that collapsed once the country was left to fend for itself and contributed to a severe weapon saturation, which would

fuel the conflict to come. The country descended into civil war and reverted to an organic tribal structure, which led to humanitarian disaster. Starvation was rampant, and clan rivalries allowed food supply lines to reach only certain sectors.

The United Nations set up a traditional PKO to deal with food distribution issues. When this proved insufficient due to a general lack of cooperation on the part of the rebels, it was decided that a second-generation operation would be necessary and the UN Operation in Somalia (UNOSOM I) was established in 1992. UN Operation in Somalia's goal was humanitarian in nature, namely getting food to the areas in which it was needed, but in this effort, a number of peacekeepers were targeted, shocking the world and leading the United Nations to respond by expanding the operation's mandate to fix the underlying problems in the country. UN Operation in Somalia II was initially led by U.S. forces, but when 18 U.S. soldiers were massacred outside of a hotel in Mogadishu, the United States pulled out, an incident that likely led to future American aversion to peacekeeping and a rather bitter relationship between the United States and the United Nations. Further exacerbating the problem, President Bill Clinton placed the blame for the incident squarely on the United Nations. This deterioration of U.S.-UN relations would have disastrous consequences for future international crises, most notably Rwanda where the UN peacekeeping force lacked sufficient strength to halt a genocide of an estimated 800,000 people.

Bosnia

The Yugoslav case was a particularly difficult one due to the diverse ethnic and religious groups forced together in a new nation in the aftermath of World War I after the collapse of the Austro-Hungarian Empire. Notwithstanding these issues, the country held together during the Cold War under Marshal Tito, but on his death, it began to unravel. Belgrade, the center of the Serbian republic and the traditional capital of Yugoslavia, began to overwhelm the other republics. Lacking the pan-Slavic nationalism that prevailed under Tito, the republics began to break away in 1991, beginning with Slovenia and continuing with Croatia.

In response to Croatia's war of independence, the UN Protection Force (UNPROFOR) was established, consisting of a buffer line meant to keep the

actors separated. Additionally, an arms embargo was established, which had the undesired effect of freezing Belgrade's military advantage in place. In 1992, Bosnia declared its independence, and Belgrade began to bombard the nation's capital, Sarajevo. The United Nations responded to this outbreak with sanctions, recognition of Bosnia as an independent country, and an expansion of UNPROFOR. The first two of these responses prompted Belgrade to leave, but this tactical move caused the conflict to revert back to a civil war and left Bosnia in the hands of the Bosnian Serbs.

The conflict continued, and UNPROFOR was once again expanded. Until then, bitter experiences with nation-building had kept the United States out of Bosnia, but once an agreement was reached by all sides, the United States entered in 1994. Although all sides seemed to be in agreement, Bosnian Serbs severed themselves from Belgrade and continued the war. Peacekeepers were being targeted, and thus, NATO was given authorization to conduct airstrikes in order to stop the war. Bosnian Serbs responded to that with a number of massacres, including the horrific genocide at Srebrenica. This event, however, also represents a turning point in the war, a Bosnian-Croat alliance that was able to push the Serbs far enough out of Croatia and Bosnia for a U.S.-led bombing campaign to take place, bringing an end to the war.

The Bosnian experience left a poor impression of the United Nations and its utility. At the same time, the conflict was poorly handled by a bureaucracy ill-equipped to deal with an operation of the magnitude of UNPROFOR; the United Nations doggedly clung to a settlement where one was impossible, and the organization's forces suffered from a complete lack of respect on the ground. Although a number of U.S. allies including Canada, Great Britain, and France contributed troops to UNPROFOR, no American ground troops served in this operation. Bosnia proved to be the final assault on the post-Cold War optimism that had flooded the halls of the UN headquarters only half a decade earlier, and it would condition the way in which the United States would deal with perceived threats in the future.

Although the Cold War led to collapse of the Soviet Union, old Cold War loyalties proved difficult for both sides to shed. For instance, when Serbia's government engaged in ethnic cleansing in Kosovo in 1999, Russia refused to support a Security Council

resolution authorizing the use of force. Instead, the United States, Great Britain, France, Canada, and other Western nations relied on NATO to wage an air campaign against the Serbian regime of Slobodan Milosevic. China is often reluctant to support resolutions that can result in regime change. For instance, China and Russia have blocked efforts for the United Nations to intervene more forcefully in Syria in 2013.

Future of Peacekeeping

A little more than a decade after the Persian Gulf War—in which the United Nations had proven its instrumentality in building a coalition against Iraq—the United States and the United Nations once again found themselves on the threshold of conflict with Saddam Hussein's regime. This time, however, opposition, especially by France and Germany, on the UN Security Council meant the United States would not fight against Iraq with the blessing of the United Nations. Although the United States created a coalition to launch a successful effort toppling Saddam Hussein's regime, U.S. credibility was diminished. In debates leading up to the Iraq War, the U.S. secretary of state Colin Powell insisted that there was incontrovertible evidence that Iraq had weapons of mass destruction and challenged reports from UN weapons inspectors to the contrary. Despite years of looking for weapons of mass destruction, U.S. forces never found any. Moreover, the U.S. preparations for the occupation of Iraq proved inadequate, and an insurgency quickly emerged. After the fall of Saddam, the United Nations sent a team to aid American efforts to rebuild Iraq, but virtually the entire UN presence was withdrawn after their compound was destroyed by a truck bomb. Among those killed were Sérgio Vieira de Mello, whom many expected to eventually become UN secretary general.

President Barack Obama and his first secretary of state Hillary Clinton embraced a foreign policy rhetorically supporting the efforts of United Nations to promote peace. The United Nations provided official sanction to U.S. and NATO efforts against Libya in 2011. The United States, the United Kingdom, and other allies have sought to bolster international support against the Syrian regime of Bashar Hafez al-Assad. While the heady optimism of the early 1990s regarding the capability of the United Nations in forging a new world order has passed,

this organization continues to play an important role in international affairs and maintains stability in Haiti, Africa, the Middle East, and Asia.

Jonathan O'Neill

See also Bosnia Intervention; International Criminal Court; Koreans War (1950–1953); Kosovo Intervention; Laws of War; Nation-Building; Peacekeeping; Persian Gulf War; Powell, Colin; Rwandan Genocide; Somalia Intervention; War in Afghanistan

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UNITED TECHNOLOGIES CORPORATION

United Technologies Corporation is an international conglomerate that oversees a number of subsidiary companies. It is a major manufacturer of defense technologies, including missile systems and military helicopters. The most famous of the latter is the UN-60 Black Hawk. This entry will provide a brief overview of the corporation's history and present its current role in the American defense industry.

Early Years

The company began in 1925, when Fred Rentschler founded the Pratt & Whitney Aircraft Company. The company served as one of the first to specialize in manufacture of engines specifically designed for aircraft builders. In its early years, the chief customers of Pratt & Whitney were Bill Boeing and Chance Vought. As the decade wore on, Rentschler sought a means to formalize his relationship with the other two aircraft producers.

Rentschler's quest bore fruit in 1929. In that year, the core of what would become United Technologies formed under the name United Aircraft and Transport Corporation. This corporation formed from several constituent elements, including Boeing Airplane Company, Boeing Air Transport, Chance Vought, Hamilton Standard, Pratt & Whitney, and Sikorsky, all major aviation producers in their own right at the time. This conglomerate proved short lived, however, as it was forced to break up due to the Air Mail Act of 1934. Three new corporations subsequently formed out of the elements of the old group. These included Boeing Airplane Company and United Airline Transport. The company's manufacturing interests east of the Mississippi became United Aircraft Corporation.

World War II

The Second World War stimulated production and growth in a number of industries, and United Aircraft was no exception. During the war, the corporation and its various components served as a major contractor to the U.S. government, supplying crucial aerial technology to the Allied war effort. By 1945, roughly half of all U.S. service planes were powered by the company's Pratt & Whitney engines. In actual numbers, this equaled 363,614 engines. Likewise, Sikorsky supplied the U.S. government with 150 helicopters in the later phases of the conflict. Finally, during the period ranging from 1940 to 1945, Hamilton Standard and its subsidiaries produced some 500,000 propellers.

Cold War

With the end of World War II and the emergence of the Cold War, United Aircraft sought to maintain its position as an important government contractor. To this end, the company began to experiment with

jet engines, with Pratt & Whitney producing their first models in 1948. Likewise, the Sikorsky division stood among the first to experiment with the new technology of helicopters. These experiments bore fruit in 1957 with their introduction of the first turbine-powered helicopter. One major obstacle arose for United Aircraft in 1954, when the company had to dissolve its partnership with Chance Vought due to conflicts of interest.

Still, the company maintained a leading role in both military and commercial aviation. United Aircraft and its various subsidiaries began to diversify into consumer appliances and electronics through various acquisitions but never sacrificed its commitment to national defense, especially in the realm of aeronautics. This commitment manifested in 1974 when the company provided the F100 engine for the first generation of F-15 fighters.

United Aircraft sustained its focus on the aerospace industry until 1975. In that year, the company purchased Otis Elevator and changed its name to United Technologies. The acquisition of Otis marked a significant shift in the company's direction, as it began to focus greater attention on the consumer sector. This trend continued in 1983, when United Technologies acquired Carrier Corporation, an air conditioner manufacturer. Still, the military aviation aspects of the company, which had played such an important role in its growth and development, were not neglected. United Technologies supplied the first Black Hawk helicopter to the U.S. Army in 1978.

Post–Cold War

With the collapse of the Soviet Union and its satellites in eastern Europe in the late 1980s and early 1990s, the defense industry underwent significant upheaval. In 1991, several of the companies under the United Technologies umbrella, including Carrier, Otis, and Pratt & Whitney, posted losses. United Technologies successfully adjusted to the new business environment of the post–Cold War economy. Currently, it includes the following corporations under its umbrella: Carrier Heating and Air Conditioning, Hamilton Sundstrand aerospace and industrial system, Otis, Pratt & Whitney, Sikorsky (helicopters), UTC Fire and Security (a fire safety and security products and service corporation), and UTC Power (a supplier of fuel cells and power systems).

United Technologies Corporation and its subsidiary companies have likewise played a significant role in the U.S. defense industry in the post–Cold

War environment. Their Black Hawk helicopters made a significant contribution to the defeat of Iraq in the Persian Gulf War of 1990–1991 and have continued to figure prominently in successive military operations.

The commitment of United Technologies to the defense aviation industry shows little sign of diminishing in the near future. In 2004, for instance, United Technologies Corporation acquired the Schweizer Aircraft Corporation to serve as a wholly owned subsidiary of the Sikorsky Aircraft division. In 2007, the company opened a Rapid Prototyping and Military Derivatives Center near Big Flats, New York.

Conclusion

Since its founding in 1929, United Technologies Corporation in its various manifestations has played an important role in providing aviation defense for the United States. While it has become a significant entity in various consumer industries as well, it retains its commitment to national defense.

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See also Helicopters; Marine One; Persian Gulf War; World War II

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UNMANNED AERIAL VEHICLES

An unmanned aerial vehicle (UAV), commonly known as a “drone,” is an aircraft with no pilot on board, remotely controlled from the ground and/or flying in part autonomously (preprogrammed or navigated by automation systems). Currently, various types of UAVs of different shapes, sizes, characteristics, and capabilities are used by the U.S. military for diverse missions: from intelligence, surveillance, and reconnaissance to attack. Their applications have been largely multiplied by the

technological innovations introduced since the early 1990s. During the recent conflicts in Afghanistan and Iraq, the heavy use of UAVs has been such an exceptional feature that the future of air power is increasingly seen as belonging to the drones.

Historical Background

The modern record of pilotless systems begins with a British project aimed at remotely controlling an aircraft: “aerial target,” developed in 1916 by the “father of radio guidance systems,” Archibald Montgomery Low. During World War II, the Germans, outnumbered by the Allies, sought to develop unmanned weapons, such as Fritz (a bomb with wings and engine, jettisoned from a plane and remotely radio-targeted). However, until the late 1950s, UAVs were not aircraft but merely the prototypes of guided weapons. Only in 1960 did the United States initiate its first truly unmanned reconnaissance project, the “Red Wagon.” Although quickly cancelled, it catalyzed the development of the Fire Fly drone (renamed Lightning Bug in 1963)

deployed during the Vietnam War. At the height of UAVs’ utilization in Indochina, they made up to 40 reconnaissance flights per month (3,435 missions in total). The next attempt to accelerate the unmanned revolution came in 1979, when the army launched its “Aquila” program (canceled in 1987 due to rising costs and technological obstacles).

UAVs were used for the first time on a larger and more systematic scale during the Persian Gulf War (1990–1991). Pioneer, the Israeli-designed unmanned spy plane armed with guns, went through a baptism by fire during the war. The coalition forces used 40 Pioneers, which flew almost 1,700 hours in more than 500 reconnaissance sorties. On one occasion, an Iraqi unit surrendered to the drone—a first, historic event of men giving up to a robot. Although UAVs proved exceptionally useful and continued to work in most U.S. operations, including Somalia, Haiti, Bosnia, and Kosovo, their performance was still limited. To overcome these shortcomings, the United States has made huge R&D investments that have allowed for a massive deployment of drones since 9/11.



German “Fritz X” guided bomb in the World War II Gallery at the National Museum of the U.S. Air Force.

Source: U.S. Air Force.

Prominent Drones in Service

Although there are dozens of types of UAVs in the U.S. inventory, some are emblematic. Predator, the most famous model, was the first high-tech remotely operated U.S. drone to prove its effectiveness in war. It went into service in 1994 and was soon used for reconnaissance in Bosnia during 1996 and 1997 and in Kosovo in 1999. With an endurance of 27 hours, equipped with video cameras for both day and night vision, Predator sends real-time video streaming to ground command centers. It carries synthetic-aperture radar, which enables reception through clouds, smoke, and dust. The first generation of Predator had some limitations resulting from weather conditions (in Kosovo it could be used for only 24 days during the 78-day North Atlantic Treaty Organization campaign). After 9/11, Predator was armed with laser-guided Hellfire missiles and began regular combat missions first in Afghanistan and later Iraq. Global Hawk, introduced as a pilotless replacement of the famous Cold War era U-2 plane, is a high-altitude spying drone.

It also made its debut during the Balkan wars, collecting information on Serb troops, air defense systems, and refugee flows. The special feature of another UAV—the Reaper, in use since 2008—is the “automatic man-made object detection” software that distinguishes between humans and human-made objects. Raven is a small drone used by the U.S. Army and Marine Corps and launched by hand. Its low endurance of 1.5 hours suffices for “around the corner” missions (e.g., sending images from the other side of a hill or building). Because it gives ground units their own life-saving capabilities, demand for the Raven has been expanding dramatically, especially in Iraq between 2003 and 2005 (the number of Ravens in use by the U.S. military grew from 25 to 1,300, with 2,000 more on contract). GT Max is a pilotless helicopter that, being able to learn in-flight, has some rudimentary artificial intelligence capabilities. It can not only fly on its own but also autonomously avoid obstacles. X-45 represents the next generation of self-controlled and automated drone with the human factor reduced



A U.S. Air Force MQ-9 Reaper unmanned aerial vehicle lands at Joint Base Balad, Iraq, November 10, 2008.

Source: U.S. Air Force photo by Technical Sergeant Erik Gudmundson.

Note: This Reaper is assigned to the 46th Expeditionary Reconnaissance and Attack Squadron from Creech Air Force Base, Nevada.

simply to programming the flight track and mission details. Designed for the most dangerous missions, X-45 will be replacing manned bombers and fighters.

Applications

Over the past two decades, the roles played by UAVs have proliferated. Most commonly, they are used for intelligence, surveillance, and reconnaissance missions to gather image and video data transmitted via satellite communications in real-time back to ground sites both in the United States and the area of operation. Next, the operators send the information via e-mail or radio (if required, they can also transmit streaming video) to the commanders, flight coordinators, intelligence units, and troops on the front line. Thus, UAVs conduct terrain reconnaissance, observe enemy forces and follow their movements, monitor hostile infrastructure, identify targets, and carry out battle damage assessments. A long-endurance drone can—similarly to closed-circuit TV cameras—provide an overall picture of how things develop over time. Microdrones, including the ones that can fly into buildings or monitor them from the outside, are perfect for spying, as they are hardly noticeable and can work nonstop for long hours. For these reasons, in the future UAVs may be of special importance in urban warfare. Because drones can fly slower and at lower altitudes than manned aircraft, they provide better reconnaissance, which helps reduce the risk of friendly fire. Moreover, by laser-pointing targets, drones add to the precision of air and ground strikes. In addition, UAVs have found application in homeland security: They conduct surveillance over the U.S.-Mexico border, helping seize illegal immigrants and narcotics.

Equipped with sophisticated ultra-sensitive sensors, unmanned platforms can find hidden enemies by tracking an electromagnetic field or body heat. Furthermore, UAVs are used in search and rescue missions to find survivors both on the battlefield and in the aftermath of natural disasters (e.g., the Silver Fox UAV after Hurricane Katrina). When loaded with special sensors, drones can detect biological, chemical, or radiological weapons and contamination. In addition, UAVs can perform logistic missions delivering cargo, such as medical emergency kits, when sending a manned platform would be impossible or too dangerous.

Arming drones with bombs and missiles has brought about one of their most significant new roles: lethal attack. Unmanned combat aerial vehicles are robots capable of eliminating targets with precision-guided munitions, such as Hellfire missiles. Still, drones can also carry nonlethal weapons designed not for killing but for incapacitating the enemy.

Drones have proven especially effective in the “three D” types of missions (dull, dirty, and dangerous). Unlike humans, drones do not lose effectiveness during long missions (for a manned multiple crew, the maximum mission time is 40 hours); while they must recharge or refuel, they do not have to rest or eat, they do not forget orders, they are not affected by gravitational pressures, and they fly at speeds that would incapacitate men (high-g maneuvers). Finally, they never suffer from combat trauma. The emerging technological breakthroughs will only continue to increase these advantages over inhabited aircraft.

Afghanistan and Iraq: The Springboard for the Robotization of Warfare

Although UAVs have crowded the airspace over Afghanistan and Iraq, both military leaders and in-country military forces have been asking for more drones. In 2001, the U.S. military had fewer than 50 aerial drones at its disposal. Demand increased dramatically, however, since the beginning of the operation in Iraq in 2003; in 2008, the U.S. armada was already composed of 5,331 drones, while in 2011, it exceeded 7,000. To meet the tempo of this expansion, in 2010, for the first time in its history, the Air Force trained more drone than fixed-wing pilots, and in 2011, there were almost 1,200 UAV pilots in service. From 2001 to 2011, the Pentagon's expenditures on drones increased sixfold compared with the previous decade, and since 9/11, with the government's budget on research and development into UAVs growing at about 23% annually, the military robotic industry has blossomed. The Pentagon drew special attention to robotic warfare in its 2012 budget request, as it plans to buy at least 730 new UAV systems by 2021. Four main tendencies have accelerated the robotization of war:

1. Advancements in unmanned technology
2. The expansion of military real-time satellite communications (vital for the control of drones and dissemination of their reconnaissance)

3. The public's low tolerance for American casualties and "force protection" paradigms—preventative efforts to mitigate or forestall hostile military action
4. The asymmetrical warfare full of risks that the U.S. troops have been increasingly confronted with since 9/11

In Afghanistan and Iraq, drones have been used primarily for intelligence, surveillance, and reconnaissance and attack missions. UAVs have tracked and engaged time-sensitive targets with speed and precision, which has not only increased the chances of eliminating them but also reduced the threat to soldiers. In Iraq, Sky Warrior (the army's version of Predator), accompanied by a unit of Apache attack helicopters and a team of 100 intelligence personnel, managed to track and kill more than 2,400 insurgents in just 1 year. Also in Iraq, two landmark events in the history of drones took place: In 2002, Predator engaged in a direct fight with an Iraqi MiG-25 and was destroyed, and in 2003, four Predators flew simultaneously in support of combat operations. Since late 2001, the United States has been sending drones to kill individuals (al Qaeda operatives, etc.) in Afghanistan, Pakistan, Somalia, Yemen, and elsewhere. Armed attacks remain, however, highly controversial due to their often ambiguous legal basis, the unknown number of militants killed, and the lack of a precise count of civilian "collateral" deaths (highly contested figures range from 5% to as much as 30% of the drones' overall casualties).

New Developments and Capabilities

Miniaturization, leading to the production of more mobile and less conspicuous drones, has probably been the most crucial trend in the development of UAVs. Minivehicles (e.g., Extender, Dragon Eye) are already capable of flying at very low altitudes, which provides excellent reconnaissance. The developments in electronics decrease not only size but also price. Some drones may be expensive (Global Hawk costs \$35 million plus \$123 million for each supporting system), while others are cheaper (Predator is \$4.3 million); microdrones are generally less than \$50,000, but robotization turns out to be a cost-effective option (e.g., for the cost of one

F-22 Raptor, the Air Force can procure up to 85 Predators).

The new unmanned capabilities have also become available because of two parallel technological advancements: (1) the production of low power-consuming devices and (2) the extension of battery life. Research is under way into new sources of powering, including nuclear isomers and laser power-beaming. Global Observer is a hydrogen-fuelled propulsion drone with an endurance of up to a week. Boeing is working on the Solar-Eagle UAV, powered by liquid hydrogen and solar energy, which could fly for 10 days. Microdrones have been loaded with electromagnets for recharging their batteries off sources of electricity such as outlets or light bulb sockets. In 2007, the Defense Advanced Research Project Agency announced its project for an ultra-endurance reconnaissance drone that could stay aloft for up to 5 years. All these innovations will enable UAVs, loaded with a greater array of more sophisticated, smaller, and lower power-consuming equipment, to carry out exceptionally long sorties. This will, in turn, bring new military applications; for example, drones carrying extremely lightweight and long-endurance jamming devices may effectively disrupt enemy communications.

New types of drones and applications for drones are now being researched or are under development, including

- drones inspired by biology, in terms of shape, maneuver techniques, and bio-sensors, as well as "insect cyborgs" (the aim of one of the Defense Advanced Research Project Agency's programs is to take control of animals through invasive electronics);
- squadrons of drones operating as a group—a development realized in May 2013 with a U.S. Navy announcement of its first drone squadron—as well as a new type of cooperation between unmanned air, ground, and sea platforms;
- new roles, such as electronic warfare (drones as airborne communications relays), submarine hunting, or air-to-air combat;
- new systems giving robots greater tactical leverage (e.g., hyperspectral imagery, which will be able to determine whether anything is hidden inside an object);

- drones operating with greater autonomy (conducting more operations without any human instruction); and
- developments in artificial intelligence.

UAVs and the Future of Air Power: Prospects and Challenges

In the future, some air force units may be formed by pilotless platforms alone. Drones have already become a regular feature of contemporary American warfare. It is estimated that since 9/11, drones have flown more than 2.3 million hours in combat operations. By 2035, the Pentagon plans to have up to 35% of all air missions conducted by UAVs. The air force wants unmanned systems to constitute at least 45% of its future large bomber fleet, although experts believe that drones will constitute up to 75% of the whole future air force. Launched in 2003, the army's Future Combat Systems assumed that each brigade may have more unmanned than manned vehicles (330:300), and each will have its own fleet of about 100 UAVs controlled at the unit level. According to the Joint Forces Command's vision, by 2025 a new military organization will rest on the "human plus a robot" paradigm as units will be composed of 150 soldiers and 2,000 unmanned platforms.

The unmanned revolution poses some serious challenges, including the following:

- To date, the United States lacks a strategy for waging wars with fleets of drones, and their comprehensive adaptation to military doctrine is badly needed.
- The increase in the autonomy of drones and the future progress in artificial intelligence raise some fundamental ethical and legal dilemmas concerning the laws of robotics, the rules of engagement, and the very rules of war.
- Fighting wars with drones flown by pilots sitting in air-conditioned trailers in the United States adds novel psychosocial dimensions to combat. Because drone operators do not experience real war but a virtual one, psychologists have begun to question the risks for operators who increasingly perceive warfare as a video game. This growing disconnectedness and risk-free combat may more easily draw the United States into conflicts.
- Fighting without leaving home brings an additional, previously unknown form of stress to soldiers who return home after operating drones on killing missions. This "war plus a family" model may generate new psychosocial costs.
- Although the unmanned revolution enables the conduct of a *real stand-off war*, that is, engaging in conflict with no human risk on the part of the UAV operator, it creates the illusion of war as a clean, safe, effective, quick, and cheap enterprise for the drone-operating nation.

Finally, the greatest challenge concerns human agency and the relationship between man and machine, because the robotic technology threatens to dehumanize not only the soldier and the enemy but also warfare itself. These challenges will become more urgent as drone warfare expands as a substantial part of any future U.S. military operation.

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See also Air Force, U.S.; Aircraft, Reconnaissance; Iraq War (2003); Persian Gulf War; War in Afghanistan

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UPTON, EMORY

Emory Upton frequently has been called “The Army’s Alfred Thayer Mahan.” Upton is known for his efforts to document U.S. military history and reform army practices. Born in Batavia, New York, in 1839, Upton attended Oberlin College and the United States Military Academy, graduating from the latter in 1861. He was present at the Civil War’s First Battle of Bull Run, where he served as an aide-de-camp, then later commanded an artillery battery during the Peninsular Campaign and served as the chief of artillery in Major General Henry Warner Slocum’s division during the Antietam Campaign. Shortly after Antietam, the governor of New York appointed Upton to command the 121st New York Volunteers. Under his leadership, the 121st became known as “Upton’s Regulars” and fought with distinction at the Battle of Salem Church in May 1863. In July 1863, Upton took command of the 2nd Brigade, 1st Division, VI Corps of the Army of the Potomac. During Upton’s tenure, the brigade conducted two notably successful frontal assaults, the first at Rappahannock Station in November 1863 and the second against “The Muleshoe” at Spotsylvania in May 1864. After recovering from a severe wound he received in the 1864 Shenandoah Valley Campaign, Upton moved to the Western Theater where he took command of one of the divisions in James Wilson’s cavalry corps. In that capacity, he took part in Wilson’s Raid into Alabama and Georgia in March and April 1865.

After the war, Upton moved between various posts, but his focus was on the reform of the U.S. Army. He first directed his energies toward tactical reform, and the army, in 1867, adopted his proposed revision of the army’s infantry tactics manual. Not satisfied with these changes, Upton continued to ruminate on infantry tactics as well as on those for the cavalry and artillery branches. While commandant of cadets at West Point in the early 1870s, Upton prepared manuals for all three that “assimilated” their tactics and, after much debate, the army adopted them in 1874.

By then, however, Upton had turned his attention to a larger issue: the organizational and administrative problems experienced by the U.S. Army during the Civil War. Encouraged by

his mentor, Commanding General of the Army William T. Sherman, Upton began an analysis of the nation’s military shortcomings. In 1875 and 1876, Upton, accompanied by two fellow officers, spent 18 months on an around-the-world trip to see what lessons the United States might learn from other nations’ armies. Among the nations he visited were Japan, China, India, Italy, Germany, Russia, France, and Britain. Predictably, only 5 years after the Franco-Prussian War, he was quite impressed by the German army. Surprisingly, however, he also found lessons of value for the United States in the experiences of Britain’s colonial army in India. After returning home, he produced his findings in *Armies of Asia and Europe* (1878). Before this book was published, however, he had begun work on what must be seen as the first serious and scholarly, although biased, effort to analyze the history of the U.S. military system. *Military Policy of the United States*, which was incomplete at the time of Upton’s death in 1881, is unstinting in its criticism of presidents and Congress for their conduct of the nation’s military policy. Their failures, he argued, had placed the United States in grave danger ever since the nation’s inception and would continue to do so if the system’s shortcomings were not addressed. His most salient criticisms were regarding the nation’s lack of a true general staff, the weakness of the office of the commanding general, an almost nonexistent army educational system, the lack of federal control over the states’ militias, and the political interference in what Upton judged to be purely military matters.

Armies of Asia and Europe was published while Upton was serving as the superintendent of instruction at the Artillery School at Fortress Monroe, Virginia. In the summer of 1880, Upton was promoted to colonel of artillery and assigned to the command of the 4th Artillery Regiment, then stationed at the Presidio of San Francisco. Before leaving the east coast, Upton sought medical treatment for severe headaches he had been suffering since 1870. These treatments gave him no relief (it seems likely he had a benign tumor growing between his brain and nasal cavity) and, in March 1881, he committed suicide.

Upton’s immediate influence on the U.S. Army was rather small. The so-called Burnside Bill of 1878 embodied many of the reforms Upton had proposed in *Armies of Asia and Europe*, which were to become

part of his critique in *Military Policy of the United States*. The Senate, however, rejected the bill and, for the time being, legislative efforts to reform the army were dead. Upton's ideas remained influential within the army's officer corps, however, as many had read *Armies of Asia and Europe* and, after his death, copies of the unpublished manuscript of *Military Policy* circulated among its officers. In the aftermath of the debacle of the Spanish-American War, several serving officers referred Secretary of War Elihu Root to Upton's works. Root, who had been appointed after the war and who had been given the mission of bringing the army into the 20th century, was so impressed by *Military Policy* that, despite its obvious shortcomings, he had the War Department publish it in 1904. More important, it seems clear that Upton's ideas influenced the adoption of many of the so-called Root reforms.

Upton's ultimate legacy seems open to debate today. Some argue that he began the politicization of the modern officer corps and the "Germanification" of the American military. Others contend that he was simply trying to apply lessons he had learned in the Civil War while taking both German and colonial British ideas and applying them in an American context. Whichever is the case, there can be little doubt about Upton's lasting influence on the U.S. Army.

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See also Army, Department of; Army, U.S.; Civil War, American; Professionalism; Spanish-American War (1898)

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URBAN GUERRILLA MOVEMENTS

Guerrillas, traditionally, are irregular insurgent forces with significant popular support who seek to wage hit-and-run campaigns against superior forces. Guerrilla forces arise for a variety of reasons—to resist foreign occupying troops, as in the Greek and French resistance to fascist and Nazi occupation or the Spanish opposition to Napoleon; to fight against national oppressive forces, such as the FMLN in El Salvador or SWAPO in Namibia; or to seek radical political transformation in a rapid fashion, as in the case of the Maoist forces in Nepal, the mujahideen in Afghanistan, and the Zapatistas in Mexico. Urban guerrillas primarily fall within these streams but, unlike traditional guerrilla movements, urban guerrillas often lack wide public support even if they arise from populist struggles. In Western contexts, they are often elitist, inward looking, and vanguardist.

It is important to distinguish between urban guerrillas and terrorism. Terrorism is a tactic—the use of violence against nonmilitary/nonstate targets to create fear within a population to achieve political ends. Urban guerrillas may adapt terrorism as a tactic, just as they may consider nonviolent forms of resistance.

Urban guerrillas have been active in every continent except Antarctica. Even more than traditional guerrilla forces, they swim among the masses, blending in with the broader communities within which they function. Because they tend to come from middle-class, educated backgrounds, they can more easily hide within the same milieu as those they oppose.

Urban guerrilla struggles peaked during the Vietnam War and the years immediately after it, often arising from the more idealistic factions in movements for peace and social justice. The prototype urban guerrilla forces, however, arose in Ireland, the home of the Irish Republican Army (IRA) and the Ulster Defence League (UDL), and in Palestine, where the Stern Gang and the Irgun used terrorist tactics to push for an independent Jewish state in the Middle East.

The IRA and the UDL were closer to traditional militia forces, with a particular mandate to defend distinct geographical, sectarian communities. They differed from traditional militias in that they were largely covert in nature, had small autonomous groups responsible for actions, used violence against

selected targets to push a political agenda, and often pushed an agenda different from that of larger, above-ground movements. They arose from large-scale movements in Ireland in the period leading up to the Easter Rebellion of 1916 and from the partition of Ireland in 1921. By the 1960s, such forces were primarily dormant. Repression of Catholic civil rights activists in Northern Ireland led to a rebirth of both Protestant (UDL) and Catholic (IRA) paramilitary forces, both of which used violence to further sectarian ends. Overtly political urban guerrilla forces also arose, most notably the Irish National Liberation Army, which had a very specific Marxist agenda that echoed that of South American urban guerrillas. With the signing of the peace accords in 1998, there were major splits in the various sectarian guerrilla forces, with most agreeing to disarm but significant factions remaining active.

Irgun and the Stern Gang were active in Palestine in the late 1930s and early to mid-1940s. Like more contemporary urban guerrillas, they arose as part of a liberation movement. They broke with what were perceived as more moderate forces, using selective terrorist tactics against the British, Palestinians, and more moderate Jewish leaders to further the cause of an independent Jewish homeland. While few in number—some estimates place the Irgun as having no more than 50 active participants—they were able to maintain a sustained, small-scale campaign for years.

After World War II, a number of guerrilla wars were initiated as part of a global anticolonial wave and in pro- or anticommunist campaigns. Most were rural; some had a significant urban component to their struggle. The National Liberation Army of Algeria, for example, did engage in traditional struggles against the French military in rural areas but used terrorist tactics against civilian and military targets in urban areas. Forces opposed to Algerian independence also formed urban guerrilla units, both in Algeria against Algerian targets and within France itself.

In Greece, the Philippines, and Indonesia there were sizable communist uprisings that, although primarily rural, included urban guerrilla tactics. While having liberated territory was important for the insurgent forces, there was a growing realization that the location of the struggle had to change. The increased domination of urban centers resulted in shifting the focus of armed conflict from holding

land to acting in the midst of the networks of communication, finance, and administration.

This lesson was taken up by a new generation by the end of the 1950s. In South Africa, the armed wing of the African National Congress (Umkhonto we Sizwe) engaged in an urban guerrilla struggle of sabotage against both symbolic targets and essential services such as power plants. While the training of the fighters was most often done in rural areas in neighboring states, the actual struggle was primarily an urban one.

In South and Central America, the success of the Cuban revolution encouraged other radical forces to engage in armed struggle. While Fidel Castro and Che Guevara criticized the value of urban guerrilla movements, most of the movements inspired by them were urban. In nature and tactics, the urban guerrillas of the 1960s had more in common with Irgun than with the forces that fought with Castro.

The Tupamaros of Uruguay were one of the higher profile urban guerrilla movements. Their tactics were more diverse than those of many other groups: Robin Hood bank robberies that distributed money directly to the poor of Montevideo; industrial sabotage; publishing the financial records found in raids on corporate offices; extortion, kidnapping, and assassination. For much of their existence, they actually grew in popularity, linking their struggles directly to the practical needs of the people. They never actually attempted to seize power. Their actions prompted counterterrorism initiatives. When they began, Uruguay was a democracy. In 1972, the Tupamaros killed an army officer, which helped prompt a military coup and a right-wing backlash against all progressive forces in Uruguay. In 1985, with the end of the junta and reestablishment of democracy, the Tupamaros reformed as a democratic socialist party.

In Brazil, there was a effort to overthrow a military dictatorship and establish a Marxist-Leninist government by several groups that had broken away from the Brazilian Communist Party, which was perceived as too reformist. The National Liberation Action, October 8 Revolutionary Movement, and the Revolutionary People's Vanguard engaged primarily in robberies, kidnappings, and assassinations to undermine the state as a prelude to revolution. While there was some effort to build rural support and broad coalitions—an appeal to orthodox Marxist revolutionary theory—none of these groups obtained mass support.

The 1960s and early 1970s saw the birth or growth of urban guerrilla forces across the industrialized world, North and South. Some, such as Movimiento de Izquierda Revolucionaria (MIR) in Chile or Revolutionary Armed Forces in Guatemala, were rooted to some extent in a long history of revolutionary struggle even if their particular group had very little popular support.

In Europe and North America during the same time, there was a growth of urban guerrilla movements that arose in societies without such a living history. Some, such as the Front de Libération du Québec in Canada, were influenced by urban guerrilla forces in other countries and saw themselves as part of a global force against colonialism. Others, such as the Weather Underground in the United States, the Angry Brigade in the United Kingdom, and the Red Army Faction in Germany, arose from various movements for radical social change that saw it as part of their responsibility living in the belly of the beast to attack it from within.

And, although not traditionally defined as urban guerrillas, various direct action movements such as Greenpeace, the Plowshares movement, and various animal liberation forces also grew out of this radical milieu in the 1960s, sharing structure, focus, and some tactics with traditional guerrilla forces. Pouring napalm on draft records, ramming whalers, and burning down animal research facilities have much in common with urban guerrilla tactics. Martin Oppenheimer, in the classic work *The Urban Guerrilla*, included the possibility of a non-violent revolution based on nonviolent direct-action tactics.

With the defeat and withdrawal of U.S. forces from Vietnam, there was an optimism that guerrilla tactics could defeat a traditional army. In the Philippines, for example, there was a resurgence both in traditional rural guerrilla and urban guerrilla campaigns. The Moro Liberation Front, a Muslim guerrilla organization, and the New People's Army, a Maoist-inspired communist guerrilla organization, both have significant bases of support in urban areas. The successful nonviolent People's Power overthrow of the Marcos regime in 1986 resulted in an amelioration of some of the conditions that fed the guerrilla movements, but the movements continue to be active in rural and urban areas.

Israel-Palestine has seen the growth of urban guerrilla movements from those seeking an independent

Palestinian homeland. Using tactics similar to those of the Stern Gang and Irgun, groups such as al-Fatah, the Popular Front for the Liberation of Palestine, Black September, and more recently Hamas have been involved in terrorist attacks on Israeli citizens and infrastructure both in the Middle East and elsewhere.

Many nationalist movements have resorted to occasional use of urban guerrilla tactics, but not necessarily in a sustained way. Examples include the 1971 attack on the Yugoslavian Embassy in Stockholm by the right-wing Croatian group Ustaše and the 2003 attack on the National Hotel in Moscow in support of Chechnya. While not always a sustained campaign, the use of violence in urban areas has been a part of almost all modern armed struggles and is seen as essential for achieving victory.

The concluding years of the 20th century and the early years of the 21st century have witnessed a rise in urban guerrilla campaigns in such countries as Iraq, Indonesia, and Afghanistan with links to struggles in other parts of the world. These struggles are not clearly defined to external observers, often seeming to be a combination of anti-imperialism, religious sectarianism, and ethnic divisions. They are also different from many earlier expressions of urban guerrilla warfare in that they are often a part of a truly integrated struggle. Hezbollah, for example, runs hospitals and schools as well as engages in urban guerrilla campaigns. Like early rural guerrillas, these urban guerrillas are able to build up successful alternative infrastructures that Western urban guerrillas have been unable to achieve.

In North America, while attention does seem to be on the specter of Muslim terrorism, there is a growth of urban guerrilla initiatives that seem less threatening, perhaps because they are truly home-grown. The Earth Liberation Front and the Animal Liberation Front are issue-based urban guerrillas. Occupations, sometimes armed, in support of aboriginal land claims are increasing in frequency. There have been a number of attacks on abortion clinics. In nonviolent form, efforts such as Reclaim the Streets and the street resistance to various globalization initiatives continue to push for radical reclaiming of the urban space. While not terrorist, they are urban guerrilla campaigns of informal, hit-and-run actions against superior forces with the aim of social transformation.

In North America as the 21st century progresses, most attention seems to be on the specter of Islamic terrorism and not on indigenous urban guerrilla or similar initiatives. Perhaps this is because movements that engage in such tactics are truly home grown and embody responses to local issues. We have seen the rise of movements such as animal rights, with militant wings like the Animal Liberation Front and Earth Liberation Front, linked to more traditional grassroots activism. There have been a number of attacks on abortion clinics, with those involved in such attacks linked to less militant initiatives. In non-violent forms, the initiatives that have found expression early in the century in Reclaim the Streets and more recently in the Occupy Movement continue to push for radical reclaiming of urban space and the dominant political and economic agendas. While not terrorist, or even violent, these urban guerrilla campaigns include information, hit-and-run actions against superior forces with the aim of temporary disruptions of the status quo, and a desire for active radical social transformation.

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See also Central America; Cuba; Middle East Conflict; South America; Terrorism; United Kingdom; Warfare, Unconventional

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U.S. AFRICA COMMAND

In February 2007, the George W. Bush administration announced changes to the Unified Command Plan that brought about the creation of the U.S. Africa Command. The U.S. Africa Command, or AFRICOM as it is widely known, is one of the newest of the Department of Defense's Unified Combatant Commands (UCC) and is responsible for coordination and execution of all U.S. military activities on the continent of Africa. The creation of AFRICOM acknowledged the strategic significance of the African continent and was the result of nearly a decade of debate within the Department of Defense. The command was created to bolster military partnerships with African states and to serve as the central coordination point for the conduct of missions ranging from theater security cooperation that builds the military capabilities of allied and friendly nations to humanitarian assistance and civil affairs.

Prior to the establishment of AFRICOM, these responsibilities had been shared by three separate UCCs—U.S. Central Command, U.S. Pacific Command, and U.S. European Command. Defense Secretary Robert Gates believed that this practice of sharing responsibilities for the African continent reflected an outdated Cold War defense mentality. The addition of AFRICOM as a separate UCC reflected the administration's stance that the preexisting Unified Command Plan was in need of significant review and change. AFRICOM provided the means to consolidate the Department of Defense's activities on the continent of Africa to make for more effective mission execution.

Deliberations for the creation of AFRICOM began in the fall of 2006 after then defense secretary Donald Rumsfeld directed Admiral Robert Moeller to lead the AFRICOM planning team to determine the feasibility of such a command. Planning began in earnest over a period of 2 months at Bolling Air Force Base in Washington, D.C. Moeller's team was tasked with outlining AFRICOM's command structure and mission, as well as identifying specific

issues that would have to be addressed prior to the creation of a new UCC. The product of this planning team was briefed to the defense secretary and subsequently forwarded to President Bush for his approval in December 2006. On review of the Department of Defense's recommendation, Bush authorized AFRICOM's creation and later directed that the command be established no later than October 1, 2007.

Like other UCCs, AFRICOM serves a specific function in support of national defense and foreign policy. As outlined in the command's mission statement, AFRICOM is responsible for a broad array of tasks on the African continent. The mission statement declares that

U.S. Africa Command protects and defends the national security interests of the United States by strengthening the defense capabilities of African states and regional organizations and, when directed, conducts military operations, in order to deter and defeat transnational threats and to provide a security environment conducive to good governance and development.

Similar to other UCCs such as U.S. Central Command and U.S. Pacific Command, AFRICOM is responsible for a specific geographic area and serves a specific function in national defense as outlined in the Unified Command Plan. The command's geographic area encompasses the whole of the African continent, with the exception of Egypt, which is still in the area of responsibility for U.S. Central Command. However, it is AFRICOM's markedly unfamiliar command structure that separates it from the other combatant commands.

The component commands of AFRICOM include Combined Joint Task Force–Horn of Africa, U.S. Army Africa, U.S. Air Forces Africa, U.S. Marine Corps Forces Africa, and U.S. Naval Forces Africa. One unique feature of AFRICOM, as compared with the other UCCs, is its integration of civilian leadership into the command structure. Although commanded by a four-star general, deputy commanders of AFRICOM are both military and civilian. AFRICOM integrates both military and civilian leadership from the Defense Department and other government agencies, such as the State Department and the U.S. Agency for International Development. The result of this structure is that many of the special staff and key functional areas not found in other combatant commands are headed by civilian

leadership. In practice, the integrated command structure of AFRICOM allows for a more concentrated focus of effort in the execution of the command's assigned tasks. This command structure was adopted to provide more effective operational ability by consolidating both military and diplomatic resources within one command. Such a structure is seen by many as a testament to interagency cooperation but has been the subject of criticism directed at the command.

The location of the headquarters for AFRICOM has been another topic of debate concerning the command. The argument was that since AFRICOM's area of responsibility is the continent of Africa, the headquarters should be located within a host nation on that continent; however, the command's headquarters are currently located at Kelley Barracks in Stuttgart, Germany. Such a practice of having a main headquarters outside the area of responsibility is not new, given that the headquarters for U.S. Central Command and U.S. Southern Command are both located in Florida. Given the compressed timeline with which the command was established, Kelley Barracks was chosen because the facilities provided the infrastructure required to support the command. In addition to the infrastructure requirements, many of the established relationships with African nations had previously fallen to the U.S. European Command. This made for a less complicated transition from one command to another. AFRICOM continues to search for a headquarters location on the African continent that has the required infrastructure established, but no such location has been found thus far.

Having a headquarters located in Europe has not prevented AFRICOM from conducting numerous bilateral and multilateral missions with African partner nations. Within months of reaching its initial operational capability, elements of AFRICOM were conducting training exercises in numerous African states, including Gabon, Burundi, and Djibouti. These exercises were conducted while simultaneously providing substantial material and logistical support to the African Union peacekeeping mission in Somalia. Through these early missions, the command developed relationships with several African nations and developed a reputation for responsiveness on the African continent.

In its short tenure as a UCC, the AFRICOM has established itself within the national defense framework and has proven to be a valuable addition to

national security by developing new relationships and expanding existing partnerships with African states. The command has expanded U.S. military activity on the continent with missions that range in scale from small contingents to large combined joint task forces. The varied nature of these missions and the focus on host nation military development have worked to overcome the perception of several African nations that the command represents a form of American power projection. In doing so, the command has increased the military capabilities of several African states to provide increased stability on the continent of Africa while ensuring that American foreign policy objectives are addressed in a timely manner.

Joseph W. Easterling

See also Africa, Sub-Saharan; Humanitarian Intervention, Foreign; Liberia; Libya; Military Advisors, U.S.; Nation-Building

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U.S. AIR FORCE ACADEMY

The establishment of the independent U.S. Air Force (USAF) on September 18, 1947, and its remarkable growth and transformation during the early years of the Cold War, led to the creation of the Air Force Academy in 1954. The profound challenges generated by the nuclear age propelled the air force onto center stage, and the need for an undergraduate institution to train aviation officers became acute. In

a January 18, 1954, House of Representatives report (No. 1105), the Committee on Armed Services called the bill to establish the United States Air Force Academy “perhaps the most significant item in the present legislative program of the Department of Defense.” The House report argued that the nation was spending billions of dollars to purchase the best aircraft possible. Therefore, it was “no less essential that the officer personnel of the Air Force be of the highest type this country can produce.” On April 1, 1954, President Dwight D. Eisenhower authorized the establishment of the United States Air Force Academy when he signed the bill into law. This ended a 36-year struggle by air power advocates to create an air academy.

Air Power: The Early Years

An examination of the history of air power in America is crucial to understand the importance of the United States Air Force Academy. In 1907, less than 4 years after Orville and Wilbur Wright’s groundbreaking 1903 flight, the War Department created the Aeronautical Division of the Army’s Signal Corps. This small division focused on ballooning and the new air machines. In July 1914, Congress established the Aviation Section—U.S. Signal Corps, now charged with the administration of air military matters related to balloons and airplanes, including the training of officers.

At the start of World War I, both the Allies and the Central Powers used airplanes primarily for aerial observation but also experimented with arming airplanes—eventually capable of carrying small bomb loads. Aviation technology advanced quickly. By 1915, the first fighter aircraft, complete with a machine gun, became an effective offensive weapon, and the fighting quickly expanded into the sky with air-to-air combat and aerial bombing. But intelligence gathering still remained an important role for aviators. The United States entered World War I with a small air force compared with its allies and enemies alike, but the 1917 Aviation Act sought to rapidly expand U.S. air power. In May 1918, President Wilson officially separated the Aviation Section from the Signal Corps, leading to the establishment of the Air Service of the U.S. Army. As the long stalemate in ground fighting persisted, command of the sky became even more imperative, and the importance of airplanes grew.

Debates Over an Aeronautical Academy

At the end of the First World War, military and civilian air power advocates, including outspoken and controversial deputy chief of the Air Service, Brigadier General William “Billy” Mitchell, sought major changes. Stormy arguments ensued between those who wanted to keep air power under U.S. Army control and those who pushed for an independent air force. In addition, air power champions, including Lieutenant Colonel A. J. Hanlon, strongly advocated the creation of an air academy similar to West Point and Annapolis. In 1918, the director of military aeronautics, Major General William L. Kenly, created a Committee on Training to study the need for such an institution. The committee supported the establishment of an “aeronautical academy,” especially needed to replace World War I pilot casualties that they estimated to be about 20% of the American flyers. During 1919, multiple proposals for an academy circulated, and General Mitchell testified in Congress to the vital need for such an institution.

The Air Corps Act of July 2, 1926, continued to keep America’s air service—now renamed the Air Corps—as a combat arm of the army, equal to the infantry, artillery, and cavalry. The act also created the office of the assistant secretary of war for air, established an Air Corps training center, and expanded the number of airplanes, officers, and enlisted men. But economic turmoil during the Great Depression slowed down the modernization of U.S. air power, and the movement to create an air academy stagnated.

Toward an Independent Air Force and an Academy

With the start of World War II in September 1939, the U.S. government rapidly strengthened its air power, including substantial increases in personnel, airplanes, and bases. Between 1939 and 1944, air power supporters continued to push for an academy, and multiple bills came before Congress. But many War Department leaders concluded that the army and navy academies provided enough flight officers from graduates who volunteered to be commissioned in the Air Corps. Without full War Department support, all efforts to establish an air academy failed.

In June 1941, the Air Corps—now with significant independence—became the U.S. Army Air Forces (USAAF). Under the guidance of General Henry “Hap” Arnold, it quickly emerged as the largest air force in the world. The March 1942 War Department reorganization gave the USAAF autonomous command within the army. Once the United States entered the war in Europe, the Army Air Forces conducted “precision” bombing raids in an attempt to destroy the enemy’s war industry, but hitting precise targets was extremely difficult, and bombs more often hit civilian areas. Eventually, the USAAF joined the British Royal Air Force in its strategic bombing efforts that directly targeted German cities. Between 1944 and 1945, the USAAF conducted massive bombing raids on Japanese cities, primarily with the use of incendiary weapons, causing unprecedented death and destruction. On August 6, 1945, the B-29 *Enola Gay* dropped an atomic bomb on Hiroshima. A second nuclear weapon was dropped on Nagasaki on August 9, 1945. In a blinding flash, the nuclear age began.

The Cold War and the Creation of the United States Air Force Academy

American air power underwent an incredible transformation between the purchase of the nation’s first “heavier-than-air flying machine” from the Wright brothers in 1909 and the B-29s that delivered nuclear weapons in 1945. The atomic bomb drastically altered the nature of warfare, and the air force now held a favorable position to the other branches of the U.S. military in terms of funding since it could deliver the nuclear payload. With the conclusion of World War II, the drive for an air academy found new energy when Henry L. Stimson, the secretary of war, reconsidered his position. But delays in establishing an academy occurred with disagreement over various provisions. Also, the push for an independent air force took top priority. Independence came with the 1947 National Security Act that created the Department of Defense with three coequal subdepartments—the Army, the Navy, and the Air Force. Now, attention reverted back to the creation of an air academy, and numerous proposals, bills, and planning board reports quickly followed. Although progress was achieved, the start of the Korean War sidelined the air academy effort.

Shortly after World War II, former allies became fierce enemies as conflicts arose between the United States and the Soviet Union. During the 1950s, the role of the USAF became vital to President Dwight D. Eisenhower's Cold War foreign policy. Eisenhower's "New Look" emphasized the threat of massive retaliation with nuclear weapons to deter Soviet advancement. The USAF, for the Eisenhower administration, represented the first line of defense in an atomic air strike. While the army and the navy saw cutbacks, the air force budget was increased by \$800 million, and massive stockpiling of nuclear weapons and missile development continued as an arms race ensued.

Under these circumstances, college-educated young men were desperately needed to help the USAF succeed in the crucial role during the Cold War. In January 1953, the Department of Defense proposed legislation that would establish an air force academy. Civilian and military air power advocates argued that the aviation cadet program and the Air Force Reserve Officers' Training Corps could not provide enough career officers who had the educational qualifications required by the air force. Procuring graduates from the United States Military Academy and the United States Naval Academy (up to 25% of graduate volunteers could receive commissions in the air force) did not supply enough officers. Furthermore, air power champions argued that specialized training was crucial for the success of future air force officers—especially in the new nuclear world.

The New Air Force Academy

After fighting for an air force academy since 1918, military and civilian air power advocates finally realized their goal. In a January 1954 House Report, the Committee on Armed Services agreed that the creation of an undergraduate institution was necessary. The bill dictated that the air force academy should be comparable to both West Point and Annapolis. In a March 3, 1954, Senate report (Report 1041), the Committee on Armed Services concurred, "in the interest of national defense," and noted that civilian colleges did not represent a "stable source of career Regular officers for the Armed Services." Convinced of the need for an air force academy, President Eisenhower readily signed the bill. Lieutenant General Hubert R. Harmon became the U.S. Air

Force Academy's first superintendent. Harmon had a distinguished military career and was instrumental in the establishment of the academy.

After considering 580 possible sites in 45 states, the Air Force Academy Site Selection Board made their choice of a location in Colorado Springs, 60 miles from Denver, Colorado. Not everyone was content with the decision, nor did everyone appreciate the ultramodern architecture based on the postwar international style. Architect Frank Lloyd Wright even criticized the design at a U.S. House of Representatives subcommittee hearing and urged that work on the building be postponed until new plans could be drawn up. Others applauded the contemporary design and the spectacular setting in the foothills of the Rocky Mountains. The site included 18,500 acres, and the original construction of academy buildings cost approximately \$142 million. Once the academy became a reality, board leaders selected faculty members, created the cadet honor code, agreed on a cadet uniform, and supervised construction. The Class of 1959—the first class—consisted of 306 young men who were sworn in at Lowry Air Force Base in Denver (site of the temporary institution until construction was complete). Demands brought on by the Vietnam War resulted in a great expansion of the academy. The first Black professor joined the faculty in the early 1960s, and the first three African American cadets graduated from the U.S. Air Force Academy in 1963. Legislation signed by President Gerald R. Ford in 1975 opened up the academy to women, and the following year, 157 women became air cadets as members of the Class of 1980.

Today's Academy

Today, the United States Air Force Academy is considered one of the leading 4-year undergraduate institutions in the country with a nationally recognized faculty. Some 4,400 cadets receive training and education at the academy in a community with more than 25,000 military and civilian personnel. About 75% of the 560 faculty members are air force officers, and close to 57% of the faculty hold doctorates or terminal degrees. Admission is very selective, and students are accepted based on academic achievement, test scores, leadership skills, and physical fitness. All candidates must be nominated (usually by a member of Congress).

The academy offers more than 500 courses in 32 majors (along with two minors) designed to educate, train, and inspire air and space leaders. The curriculum focuses on engineering, basic sciences, humanities, and social sciences and on military studies, extensive physical training and athletics, and leadership development. Flight training, astronomy, navigation, parachuting, and other aviation courses are included in the cadets' studies. Combat survival training is mandatory. Students are required to take part in either intercollegiate or intramural athletics and must pass a yearly fitness test. Sports include 17 men's and 10 women's National Collegiate Athletic Association-sanctioned teams.

The demographics profile for the Class of 2013 indicates that there are 1,368 cadets enrolled, with 277 (20.3%) of the class being female and 312 (23%) being minorities. The Class of 2013 includes 11 international students. Fifty-three percent of the Class of 2013 ranked in the top 10% of their high school class and were very active in student government, debate teams, school newspapers, scouting, athletics, and many other extracurricular activities. More than 80% of cadets received athletic letter awards while in high school.

The U.S. government covers the cost of tuition along with room and board, and officer candidates receive a monthly stipend. Successful graduates become commissioned as second lieutenants in the USAF. Over the past decade, there have been allegations of widespread academic cheating, sexual harassment and assault, and religious proselytizing. The academy quickly responded by adopting policies concerning religious freedom, sexual harassment, and gender discrimination. In 2010, the academy hired a chief diversity officer.

Conclusions

Graduates of the U.S. Air Force Academy played an important role in the nation's conflicts starting in the second half of the 20th century, including in the recent wars in Iraq and Afghanistan. In addition to commissions in the USAF, some graduates are active as astronauts, engineers, and mission support specialists in the U.S. space program. Now, flying incredible air machines that Orville and Wilbur Wright could only imagine, male and female graduates of the Air Force Academy are soaring into the future.

Nancy Gentile Ford

See also Air Force, U.S.; ROTC; Training, Air Force Pilots; U.S. Coast Guard Academy; U.S. Military Academy; U.S. Naval Academy

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U.S. CENTRAL COMMAND

U.S. Central Command (USCENTCOM) is the geographic combatant command responsible for the Middle East and Southwest Asia. It was established on January 1, 1983. Its headquarters are at MacDill Air Force Base, Florida. USCENTCOM has undergone a number of boundary changes since it was created, and as of January 1, 2011, its responsibility covers Egypt, the Levant (Jordan, Syria, and Lebanon but not Israel, which is in U.S. European Command), the Arabian Peninsula (Saudi Arabia, Yemen, Oman, the United Arab Emirates, Qatar, Bahrain, Kuwait, and Iraq), Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan), and South Asia (Iran, Afghanistan, and Pakistan). USCENTCOM was responsible for military operations in the Persian Gulf War, the Somalia Intervention, the Afghanistan War, the Iraq War, and a number of other military operations.

Subordinate Commands

USCENTCOM has five subordinate component commands: Army Forces Central (ARCENT),

Navy Forces Central (NAVCENT), Air Forces Central (AFCENT), Marine Forces Central (MARCENT), and Special Operations Command Central (SOCCENT). The Commanding General of the Third Army serves as ARCENT commander; Commander of the Fifth Fleet serves as NAVCENT commander. The Commander of the Ninth Air Force served as AFCENT commander until 2009, when the commands were split and AFCENT was established as a separate command. ARCENT, NAVCENT, AFCENT, and SOCCENT also serve as functional component commands: Coalition Forces Land Component (CFLCC), Maritime Component (CFMCC), Air Component (CFACC), and Special Operations Component (CFSOCC), respectively.

USCENTCOM has also relied on a number of subordinate Joint Task Forces (JTFs) to conduct operations. The most notable have been JTF Southern Watch (1994–2003), Combined Joint Task Force–Horn of Africa (CJTF-HOA; 2002, passed to U.S. Africa Command in 2008), Combined Joint Task Force 7 (CJTF-7; Iraq, 2003–2004), Combined Forces Command–Afghanistan (2003–2007), Multi-National Forces Iraq (MNF-I; 2004–2010), U.S. Forces Afghanistan (USFOR-A; 2008 to the present), and U.S. Forces Iraq (USF-I; 2010–2011).

Origins of USCENTCOM

After World War II, the United States and Britain agreed that the British would be primarily responsible for security in the Middle East. When the British announced in 1967 that they would withdraw from “East of Aden,” the United States faced a potential security vacuum in the region. Following a policy of reliance on regional partners epitomized by “Vietnamization,” the U.S. government began to provide extensive security assistance to Saudi Arabia and Iran as a way to protect U.S. interests and counter Soviet influence in the region.

In 1977, President Jimmy Carter asked the Joint Chiefs of Staff to look into the feasibility of creating a multidivision rapid deployment force for the Middle East. This suggestion lay dormant until January 1979, when the Iranian Revolution toppled the Shah and with him the main pillar of the American security position in the region. On October 22, 1979, the secretary of defense directed the Joint Chiefs of Staff to look into creating a multidivision force earmarked for rapid deployment to the Middle East.

This mission took on a new urgency when students seized the U.S. Embassy in Tehran on November 4, and it became even more pressing when the Soviet Union moved into Afghanistan on Christmas Eve.

The Rapid Deployment Joint Task Force (RDJTF) was officially established in March 1980. Subordinate to U.S. Readiness Command, it was colocated with the headquarters at MacDill Air Force Base, Florida. On October 1, 1981, the RDJTF was given responsibility for the Middle East and began reporting directly to the Joint Chiefs of Staff. USCENTCOM was activated on January 1, 1983.

The boundaries of USCENTCOM were determined by its Cold War mission to maintain control of the vital sea lanes through the Red Sea and Arabian Gulf. It included Egypt, Sudan, Ethiopia, Djibouti, and Somalia in the Horn of Africa; Jordan, Saudi Arabia, the Yemen Arab Republic, the People’s Democratic Republic of Yemen, Oman, the United Arab Emirates, Qatar, Bahrain, Kuwait, and Iraq in the Arabian Peninsula, as well as Iran, Afghanistan, and Pakistan. The “frontline states” of Israel, Lebanon, and Syria were excluded from the area of responsibility.

Early Operations

When USCENTCOM was established, Pakistan was an important conduit for support to the mujahideen fighting against the Soviets in Afghanistan. The Iran-Iraq War (1980–1988) was also under way, and Iran laid mines in the Arabian Gulf to block oil shipments. On May 17, 1987, an Iraqi aircraft fired two Exocet missiles that hit the USS *Stark* (FFG 31), killing 37 members of her crew. In July 1987, Iranian mining operations in the Persian Gulf led the United States to reflag and escort Kuwaiti oil tankers in Operation Earnest Will. On April 14, 1988, the USS *Samuel B. Roberts* (FFG 58), while participating in Operation Earnest Will, struck an Iranian mine. In response, USCENTCOM began Operation Praying Mantis on April 18, 1988. This was the largest surface engagement by the U.S. Navy since World War II and resulted in the sinking of an Iranian frigate and gunboat along with a number of smaller craft.

Persian Gulf War

After Iraq invaded Kuwait in August 1990, USCENTCOM conducted Operation Desert Shield to defend Saudi Arabia. The USCENTCOM

commander, General H. Norman Schwarzkopf, moved his headquarters to Saudi Arabia and assumed command of a coalition force. Operation Desert Storm, the liberation of Kuwait, began with an air campaign on January 17, 1991, with the ground attack commencing on February 24, 1991. Operations ended on February 28.

Somalia Intervention

While USCENTCOM was making its final preparations for Desert Storm, civil war in Somalia reached the capital of Mogadishu. Between January 5 and 6, 1992, USCENTCOM conducted Operation Eastern Exit to evacuate the U.S. Embassy.

After the government of Somalia collapsed, the country fell into anarchy, resulting in a devastating famine. On August 16, 1992, USCENTCOM began Operation Provide Relief using aircraft based in Mombasa, Kenya, to fly relief supplies into Somalia. This operation also provided the first test for the USCENTCOM forward command structure when Brigadier General Frank Libutti, United States Marine Corps, Commander Forward Headquarters Element/Inspector General of the USCENTCOM, assumed command of Joint Task Force Provide Relief. Warlords continued to interfere with international relief efforts, however, and on December 9, 1992, USCENTCOM launched Operation Restore Hope to create a secure environment for the delivery of humanitarian aid and established Unified Task Force Somalia (UNITAF) to conduct this operation. UNITAF turned over responsibility to United Nations Organization Somalia II (UNOSOM II) on May 4, 1993. USCENTCOM retained responsibility for a battalion task force left under American command to act as a quick reaction force and also for the Special Operations Forces. A raid conducted on October 3, 1993, resulted in a major battle in which 18 Americans were killed. On October 7, 1993, President Bill Clinton announced that American forces would no longer participate in combat operations and would withdraw by March 31, 1995. In 1995, USCENTCOM conducted Operation United Shield to cover the withdrawal of UNOSOM II.

Continuing Operations against Iraq

When Desert Storm ended, USCENTCOM enforced a “no-fly” zone over southern Iraq and conducted

maritime interdiction operations to ensure Iraqi compliance with UN Security Council Resolutions. By the summer of 1992, it was clear that Iraq was not going to comply, and in August, USCENTCOM established Joint Task Force Southern Watch. Over the next decade, USCENTCOM conducted numerous operations to deal with Iraqi provocations, including Operations Vigilant Warrior (1994, defense of Arabian Peninsula), Vigilant Sentinel (1995, defense of Arabian Peninsula), Desert Strike (response to Iraqi aggression against Kurds), Desert Thunder I, Desert Thunder II, and Desert Fox (all in 1998 to force compliance with UN inspections).

Operation Southern Watch required USCENTCOM to maintain significant numbers of American and coalition troops in Saudi Arabia. Extremist elements were incensed by the American presence in “the Land of the Two Holy Mosques,” and in 1996, al Qaeda bombed a U.S. military barrack at Khobar Towers, killing 19 airmen. In 1998, al Qaeda bombed the U.S. Embassies in Tanzania and Kenya. In 2000, al Qaeda conducted a suicide attack against the USS *Cole* (DDG 67) while it was in Aden, Yemen, killing 17 sailors.

Operation Enduring Freedom

Following the September 11, 2001, terrorist attacks, USCENTCOM launched Operation Enduring Freedom on October 7, 2001. The initial campaign relied on small detachments of special operations troops embedded with the Northern Alliance, the Afghan forces opposed to the Taliban. Kabul was liberated on November 13, 2001, and the Taliban abandoned Kandahar, their main base, on December 7, 2001.

On May 31, 2002, USCENTCOM established CJTF-180 to serve as the JTF responsible for Afghanistan. In November 2003, USCENTCOM established a new headquarters, Combined Forces Command–Afghanistan (CFC-A), with CJTF-180 remaining as a subordinate headquarters.

Combined Joint Task Force–Horn of Africa

In 2001, Somalia remained as lawless as it had been when the American forces left in 1995. Concerned about the potential for al Qaeda and other terrorist organizations to establish bases in this ungoverned area, in 2002, USCENTCOM established CJTF-HOA to conduct counterterrorism operations in the region. Based at Camp Lemonier, Djibouti,

CJTF-HOA soon realized that the best way to counter terrorist activities was to prevent these organizations from establishing a foothold, and the best way to accomplish this was to assist the regional countries in developing good governance and effective security forces. CJTF-HOA quickly established civic action and training programs in Djibouti, Ethiopia, and Kenya, along with Yemen in the Arabian Peninsula, and later expanded its activities into Uganda and Tanzania, which were in European Command's area of responsibility. On October 1, 2008, responsibility for the HOA (except for Egypt) and therefore CJTF-HOA was transferred to U.S. Africa Command. The Red Sea, Gulf of Oman, and waters off Somalia remained in the USCENTCOM's area of responsibility.

Iraq War

Operation Iraqi Freedom commenced on March 17, 2003 (this also marked the end of Operation Southern Watch, which had continued uninterrupted since 1994). Baghdad fell on April 9, 2003. On June 15, 2003, USCENTCOM established CJTF-7, commanded by Lieutenant General Ricardo Sanchez, to serve as the military headquarters for Iraq. CJTF-7 worked with the Coalition Provisional Authority (CPA), although the division of responsibility between the two organizations was never clarified. More than 25 coalition partners joined this phase of Operation Iraqi Freedom, with the United Kingdom, Poland, and the Republic of Korea assuming command of multinational divisions.

One of the first acts of the CPA was disbanding the Iraqi army. CPA started to create a new force, called the "New Iraqi Army" (NIA) to disassociate it from the abuses of the Saddam regime. This force was to be focused solely on external threats and to have no internal security role. By autumn 2003, however, it was clear that a major insurgency was under way. The creation of the New Iraqi Army was accelerated, and local forces of part-time soldiers, the Iraqi Civil Defense Corps, were raised. Coalition forces also began to train Iraqi police forces.

As the insurgency progressed, it became clear that a single, corps-level headquarters was not adequate, and preparations were made to split CJTF-7 to establish two new headquarters. On April 15, 2003, Multi-National Corps Iraq (MNC-I), with Lieutenant General Thomas F. Metz, in command,

was established as an operational headquarters subordinate to CJTF-7. On May 15, 2004, CJTF-7 was redesignated Multi-National Force Iraq (MNF-I). The same day, Multi-National Security Transition Command Iraq (MNSTC-I) was established as a subordinate command, with Lieutenant General David H. Petraeus, in command. This relieved the USCENTCOM commander of the burden of day-to-day operations in Iraq, allowing him to refocus on the theater as a whole. MNF-I focused on the overall strategic situation, including the development of the Iraqi Government and institutions, while MNC-I concentrated on operations. MNSTC-I refocused the development of the Iraqi Armed Forces. The term *New Iraqi Army* was dropped, the Iraqi Civil Defense Corps was reorganized first as the Iraqi National Guard and then integrated into the regular army, and the army was expanded to become a multidivision counterinsurgency force. On July 1, General George W. Casey Jr. assumed command of MNF-I, establishing it as a four-star headquarters.

The bombing of the Golden Mosque in Samarra on February 22, 2006, marked a turning point in the insurgency, as full-blown ethnic violence erupted. By late 2006, however, many Sunni leaders who had initially supported al Qaeda turned against the terrorists and opened negotiations with the American military commanders in a process dubbed the "Anbar Awakening." Local American commanders began to support Sunni tribal militias, which were renamed the "Sons of Iraq" and eventually given a formal status.

In January 2007, President George W. Bush decided to increase the number of American combat units from 15 to 20 combat brigades and to increase overall troop strength from 150,000 to 170,000. This increase was planned to last for a year and was known as "The Surge." In conjunction with "The Surge," the new commander of MNF-I, General David H. Petraeus, implemented a new counterinsurgency strategy, moving troops from large forward operating bases (FOBs) into small combat outposts (COPs) to live with Iraqi soldiers and police and provide 24-hour security to neighborhoods. While casualties initially increased significantly, the combination of increased forces, new tactics, and Sunni cooperation broke the back of al Qaeda and the insurgency. Coalition and civilian casualties fell precipitously in the fall of 2007, and by the end of 2008, they had fallen below 2004 levels.

Through 2009, the last coalition partners withdrew their forces, and MNF-I began reducing American combat strength. The last combat brigade departed on August 19, 2010. On August 31, 2010, Operation Iraqi Freedom officially ended, and on September 1, 2010, Operation New Dawn began. MNF-I was officially redesignated as U.S. Forces Iraq (USF-I), with MNC-I becoming U.S. Corps Iraq. By December 31, 2010, American forces had drawn down to 50,000 personnel in Iraq.

Afghanistan War

In Afghanistan, during 2004 and 2005 the Taliban began to recover from its initial defeat and a significant insurgency began to develop, mainly among the Pashtun tribes in the east and south. These tribes straddled the border between Afghanistan and Pakistan, and the Taliban used the Pashtun areas of Pakistan as a safe haven to organize and regroup. In January 2004, International Security Assistance Force (ISAF) was established under the authority of UN Security Council Resolution 1386 to provide security in Kabul. On August 11, 2003, the North Atlantic Treaty Organization assumed responsibility for command and control of ISAF, and in December 2004, NATO announced that it would expand ISAF's responsibility beyond Kabul. Throughout 2005 and 2006, CFC-A gradually turned over responsibility to ISAF, with ISAF taking control of the last sector, Regional Command East (RC-East), on October 5, 2006. In January 2007, CFC-A was formally disestablished. The two main American headquarters, CJTF-76 (formerly CJTF-180) and RC-East, and Combined Security Transition Command Afghanistan (CSTC-A) now had a dual chain of command, reporting directly to USCENTCOM as their senior American commander and also to the senior NATO officer, Supreme Allied Commander Europe, through Commander ISAF, for most operational matters.

By the end of 2007, it became clear that this arrangement was unwieldy, and in October 2008, USCENTCOM established U.S. Forces Afghanistan (USFOR-A). The Commander ISAF, an American officer, was also designated Commander USFOR-A, establishing unity of command.

The situation in Afghanistan continued to deteriorate after the transition to ISAF in 2006. In March 2009, President Barack Obama approved increases

totaling 34,000 new troops, doubling the American commitment to Afghanistan. This increase led to a major strategy review by the administration. On December 1, 2009, Obama announced that he was sending an additional 30,000 troops to Afghanistan by August 2010, bringing the total to 99,000 American troops. This reinforcement would last for a year, at which point the United States would begin to reduce its forces.

Piracy

The anarchic conditions in Somalia made it easy for criminal activity to flourish, and by 2005, piracy had become a significant issue off the coast. NAVCENT, which also served as CFMCC and Commander, Coalition Maritime Forces (CMF), already had a coalition task force in waters off Somalia, CTF-150, which was supporting Operation Enduring Freedom. On January 2009, NAVCENT established CTF-151 specifically for the counterpiracy mission. NATO and the European Union also established antipiracy task forces, and a number of countries dispatched warships on independent missions. The NAVCENT commander, in his capacity as Commander CMF, worked to coordinate the activities of all these ships.

David A. Dawson

Author's Note: The material in this encyclopedia is for educational and informational purposes only and does not represent the official views of the U.S. Department of Defense or any other U.S. governmental agency.

See also Coalition Provisional Authority; Iraq War (2003); Persian Gulf War; Petraeus, David; Somalia Intervention; Surge, Iraq War; War in Afghanistan

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U.S. COAST GUARD ACADEMY

The U.S. Coast Guard Academy is an institution of higher education designed to produce trained officers for the Coast Guard. Modeled after the military academies, the Coast Guard Academy has an enrollment of 1,000 cadets, graduating 200 cadets a year with bachelor of science degrees. Tuition is free—cadets are paid a salary—and there are no graduate programs. All alumni enter the Coast Guard for at least 5 years. About 80% undertake postgraduate education at service schools and other institutions of higher learning with financial support from the Coast Guard, and 85% continue as Coast Guard officers after their required tour.

The Treasury Department's Revenue Cutter Service, a precursor to the Coast Guard, recognized it needed better trained officers and set up a school of instruction in 1876. Using a sailing vessel known as a revenue cutter for a campus, the school provided a free 2-year apprenticeship for 5 to 10 cadets per class, with academic lectures by one professor. A third year of instruction was added in 1903. The school's base in 1910 became Fort Trumbull, near

New London, Connecticut, where facilities from an old army fort supplemented the cutter. With the 1915 merger of the Revenue Cutter Service and the Life Saving Service into the Coast Guard, it became the Coast Guard Academy.

The academy moved to its present location in New London in 1932, with the opening of Hamilton Hall for administration and classes and with Chase Hall replacing the cutter as a dormitory. By 1941, the academy provided an accredited 4-year engineering bachelor's degree, taught largely by Coast Guard officers on temporary assignment. During World War II, the Candidate for Reserve Commission program trained 200 officers a month.

The academy faced a major crisis in the 1950s, with its very existence in question, as senior Coast Guard officials were dismayed that so many cadets were primarily interested in an accredited engineering degree, which they could quickly parlay into high-paying civilian jobs. Indeed, only 30% of entering students graduated. The solution was to restructure the cadet experience in close accord with West Point and the other military academies, bringing in younger Coast Guard officers to provide role models and closely controlled training. The Cadet Corps was doubled in size to 1,000 students and reorganized in terms of companies. Cadets stay in the same company from their days as swabs (new freshman) until their first-year experience, when they have significant leadership responsibilities. The result was 4 years of highly regimented and tightly scheduled daily routines starting at reveille at 6 a.m., with strict enforcement of numerous regulations and restriction to campus during the week. Cut off from old habits and surroundings, and under intense psychological pressure from upper-classmen, many swabs dropped out. The majority accepted the harassment to prove their manhood. The announced goal was to develop leaders, while the implicit goal was to internalize acceptance of a rigid hierarchical command structure, which was considered essential in dealing with emergency situations such as rescues at sea.

At the same time, academics were restructured to bring in a strong academic dean and to create the opportunity to major in a field. Of the 66 faculty in 1961, only 4 had doctorates, so the reforms called for sharply upgrading faculty credentials. More civilians were hired, and less use was made of temporary Coast Guard officers as teachers.

Professional courses, such as training for navigation, rescue operations, gunnery, and seamanship, were increasingly taken out of the academic curriculum and put into summer programs. Facilities were expanded in the 1960s and 1970s. Specialized facilities include competitive sailing and rowing facilities, and most famously, the tall ship *Eagle*, which is used for numerous training exercises in seamanship.

Unlike the military academies, where members of Congress nominate recruits, the academy reached out to a national audience with admission based on high school performance and tests. As college tuition had soared around the country, the attractiveness of the free tuition—as well as guaranteed good jobs for graduates—made admission more and more competitive, especially to prospective students along the East Coast. Ninety percent of those admitted rank in the top 10% of their high school class. Surveys of cadets showed that they had a very negative opinion of the dormitory facilities, the mess halls, the library, and the city of New London. Like cadets at the other military academies, the students are conservative politically, study intensively, seldom use drugs, interact often with their professors, and score at the bottom of American colleges in reporting a “happy” undergraduate experience. They undergo a rigorous core curriculum for the first 2 years, emphasizing engineering, mathematics, and science. A few electives are allowed to upperclassmen, whose preferred majors include business management, civil engineering, and government.

During World War II, the academy had an 8-week training program for officers of the women’s auxiliary, the SPARS (whose name is an acronym for the Coast Guard motto *Semper Paratus* and its English translation, Always Ready). Women were first admitted as cadets in 1975 and have experienced more acceptance than have women at the traditional military academies. Women now constitute 27% of the academy’s cadets. Racial integration was imposed by Washington in the 1970s and has proceeded relatively smoothly compared with other services and the other academies. Sports are heavily emphasized, with all cadets required to participate in intramural or intercollegiate teams.

The Coast Guard ethos is not primarily a militaristic, combat-oriented ethos as typified by West Point. Since the Coast Guard is part of the Navy in wartime, it does have a military history, but a more typical hero is Lieutenant D. H. Jarvis who

led a 1,500-mile expedition across the frozen Arctic Ocean in 1897–1898 to rescue marooned whalers. Many, if not most, of the cadets are attracted by the humanitarian dimension of lifesaving, as well as the promise of frequent action in extreme circumstances. Since the Coast Guard was moved from the Department of Transportation to the Department of Homeland Security after 9/11, the defense of the coastline against terrorists and drug smugglers has become a much higher priority. The rescue mission remains important, and recently the environmental protection mission has soared in importance, as typified by the Coast Guard taking charge of the federal response to the Gulf oil spill of 2010. Environmental and humanitarian dimensions attract different types of cadets, especially women.

Until 2005, all new graduates went to sea, serving on the cutters that provided the main mission for the Coast Guard. Recently, however, some graduates are never sent to sea and are assigned instead to aviation or ground-based units. The crowded 120-acre campus on the Thames River is shared with the Coast Guard’s Officer Candidate School and Leadership Development Center, which provides on-campus and online training to permanent Coast Guard personnel.

D’Ann Campbell

See also Coast Guard, U.S.; Training, Coast Guard Officers; U.S. Naval Academy

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U.S. EUROPEAN COMMAND

See North Atlantic Treaty Organization

U.S. MILITARY ACADEMY

The United States Military Academy (USMA), alternately known as “West Point,” is the oldest federal military academy in the United States, founded in 1802 during the first administration of President Thomas Jefferson. The military post here, located on the “West Point” of the Hudson River in the Hudson Highlands of New York, is the longest active-serving cantonment in the U.S. Army, having been continuously garrisoned since the War for Independence. West Point trains only approximately 20% of the junior officers commissioned annually, but the academy plays a disproportionate role in training future officers who emerge as the nation’s senior military officers. West Point enrolls about 4,400 cadets drawn from all 50 states and a number of foreign countries. Although historically a rigid color bar limited the number of African American and other minority candidates, the academy has made a concerted effort to recruit minorities to the institution and 15% to 20% of the Corps of Cadets are made up of minority groups. Women first entered the Academy in 1976 and they made up 17% of the Class of 2011. There has been considerable resistance to the presence of women at the Academy, and the institution has struggled with issues of sexual harassment and violence directed at women cadets.

West Point has traditionally emphasized a core curriculum that emphasizes training in engineering and military science. This focus remains, but in recent years the academy has expanded the core curriculum to include coursework in the humanities and social sciences. The academy offers majors in 42 fields of study and is accredited by the Mid-Atlantic Association of Colleges and Schools. Faculty-student ratio is 1:8, with faculty consisting of both commissioned military officers and civilian professors. Class sizes are typically small, usually 12 to 18 students.

Although cadets pay no tuition, they are obligated to serve in the military after graduation. Physical and military training is an integral part of the educational experiences with much of this taking place over the summer months. For instance, all male cadets take boxing or wrestling as plebes (the first year at the academy), and women must take a self-defense course.

Founding and Early Years

During the Revolutionary War, Congress appointed a committee to establish a military academy to provide trained, professional officers to the Continental Army, but there is no record that this plan was ever submitted or acted on. In the two decades following the Revolution, West Point served as a training ground for artilleryists and engineers in the fledgling U.S. Army. Captain Henry Burbeck pushed General Henry Knox to create a military academy as early as 1782, and by 1801, the then colonel Burbeck had convinced Secretary of War Henry Dearborn to transfer cadets who had been training at other military posts to West Point, where artillery and engineer cadets were already being schooled in their profession. He also persuaded President Thomas Jefferson—who saw the establishment of such a school as an opportunity to break the stronghold on the officer corps then held by the Federalist Party—to officially create a formal academy for officers. On March 16, 1802, Jefferson signed the Act of Congress that founded the USMA and created the U.S. Army Corps of Engineers.

The academy’s seminal superintendent was Major Jonathan Williams, who also served as the Army’s Chief of Engineers as well as Inspector of Fortifications. Although some historians allege that the academy was established merely to train and educate engineer cadets, from its very inception cadets from the other army branches were schooled there. However, a strong engineering curriculum was, and still is, a West Point hallmark. Williams grew disgusted with the lack of support from the government and resigned in 1803, but Jefferson convinced him to return to his post in 1805. In the interim, the academy was run by an acting superintendent, Decius Wadsworth. In 1812, Colonel Joseph Swift, West Point’s first graduate, took over as superintendent. Since the law that created the academy also specified that the superintendent would concurrently serve as the Chief of Engineers, Swift was away from West Point a great deal of time, leaving an 1806 graduate, Captain Alden Partridge, to run the daily activities of the academy in his stead. Partridge caused nothing but problems for Colonel Swift, and in 1817, the captain was court-martialed for, and convicted of, disobedience. Partridge subsequently resigned from the army and went on to establish the oldest private

military college in the United States, now known as Norwich University. Swift himself resigned the next year, to be replaced by Sylvanus Thayer, an 1808 graduate, the man who one day would be called the “Father of the Military Academy.”

Sylvanus Thayer: Father of West Point

Swift had made some positive changes during his tenure, despite his problems with Partridge: a 4-year curriculum had been instituted, a “Board of Visitors” had been created (distinguished citizens who came to West Point yearly to inspect and report), and twice-a-year examinations were held. It was Thayer, however, who would make even more long-lasting changes to the academy. Thayer had visited France’s *L’Ecole Polytechnique* and brought back ideas that he would integrate into the curriculum and administration at West Point. Unlike his predecessors, Thayer was not encumbered by also having to wear the hat of chief of engineers and, thus, could devote all of his energy to improving the school. One of Thayer’s important reforms was the creation of an academic board comprising the superintendent, the commandant of cadets, and the heads of the academic departments. Its responsibilities included all matters relating to curriculum, the conduct of examinations, the ranking of cadets by class standing, and recommending the branch of the army in which they should be commissioned on graduation. Another Thayer reform dealt with matters of cadet discipline: Cadets receiving more than 200 demerits per year could be discharged from the academy. A significant change, though not Thayer’s idea but originating from the War Department, was the practice of allocating one cadet appointment per congressional district, an additional two appointments for each state “at large,” and another dozen or more to the president or his cabinet to nominate. This practice began under Thayer’s charge but did not become law until 1843.

From 1833 to the Civil War

After Thayer’s retirement in 1833, a string of superintendents succeeded him until the Civil War: Major Rene De Russey, Major Richard Delafield, Captain Henry Brewerton, Brevet Colonel Robert E. Lee, Captain John G. Barnard, and Brevet Major P. G. T. Beauregard. Of these, Delafield served

thrice—from 1838 to 1845, 1856 to 1861, and then again for a short stint from January 1861 to March 1861, when Beauregard was relieved after only days in office for fear of his disloyalty to the Union. During this period, the faculty was dominated by internationally recognized scholars in their respective fields of endeavor, among them William H. C. Bartlett (Class of 1826), professor of natural and experimental philosophy; Jacob W. Bailey (Class of 1832), professor of chemistry, mineralogy, and geology; Albert E. Church (Class of 1828), professor of mathematics; and especially Dennis Hart Mahan (Class of 1824), professor of civil and military engineering and the art of war (and father of the naval strategist Alfred Thayer Mahan). All graduated from the academy during Thayer’s reign as superintendent (although they were civilians by the time they had become senior members of the faculty), and all would influence a generation of graduates who, as relatively junior officers, would serve their nation with distinction during the Mexican-American War and later rise to be high-ranking officers on the contending sides during the Civil War.

During the Mexican-American War, 543 graduates fought in the conflict, of whom 49 were killed and 90 wounded. Four-hundred and forty-seven were promoted or brevetted for gallantry in action, including Robert E. Lee (Class of 1829), George McClellan (Class of 1846), William B. Franklin (Class of 1843), George G. Meade (Class of 1835), Ulysses Grant (Class of 1843), William T. Sherman (Class of 1840), and Thomas J. Jackson (Class of 1846). One of the two principal commanders during the war, Major General Winfield Scott, though not a West Point graduate himself, later heaped praise on the academy graduates who had fought in the conflict.

The Civil War and Post-Civil War Years

Robert E. Lee returned to the academy in the late summer of 1852 to become the ninth superintendent. His commandant of cadets was Major Robert S. Garnett. Both were Virginians and destined to become Confederate generals, with Garnett becoming the first general officer to be killed in action during the war, at Corrick’s Ford, (West) Virginia, on July 13, 1861. Members of the staff and faculty serving under Lee at West Point included another

Virginian, George Thomas (who remained loyal to the Union and in September 1863 earned the moniker, “The Rock of Chickamauga”), and Fitz John Porter, who as commander of the Army of the Potomac’s Fifth Corps would fight against Lee in 1862. In addition, many of the cadets then in attendance would become deadly enemies just a few years later. During Lee’s tenure, the most significant modification to the curriculum was the addition of another year of study, beginning in 1854, bringing the required number of years for graduation to five. This change, however, was short lived. When the Civil War began in 1861, West Point graduated two classes one month apart, the first in May and the other in June, and suspended the 5-year curriculum. While Lee was superintendent, a huge indoor riding hall was constructed, at the whopping price of \$22,000 (more than half a million dollars today). Finally, the West Point Museum was established under Lee’s supervision in 1854 to support the curriculum and remains today the oldest continuous museum in the U.S. Army.

During the nation’s fratricidal conflict from 1861 to 1865, West Point graduates were at the forefront of their respective armies, and one graduate, Jefferson Davis (Class of 1828), was the president of the Confederate States of America. Of the 936 graduates from the classes between 1830 and 1860 who fought in the war, 275 served the Confederacy, while 661 wore the Union blue. From the classes that graduated from 1861 to 1864, only 88 fought for the South (all from the classes of May and June, 1861), while 221 served in the Union Army. Ninety-five graduates were killed in action and another 141 were wounded. Northern politicians, who had been opposed to a military academy all along, seized on the defection to the Confederacy of southern graduates and cadets (and some northern-born graduates, too) to renew their assault on West Point. In addition, the historian James Morrison has pointed out that Radical Republicans attacked the academy on grounds that West Point had a monopoly on high military positions and that graduates discriminated against militiamen and volunteers. Nonetheless, the politicians who were advocates of the academy—and the successful campaigns of its loyal graduates, such as Grant, Sherman, Meade, and Thomas—had put those who had been in opposition to West Point on the defensive, and the academy survived its congressional witch hunts. When the war came

to an end, the principal field armies surrendered at Appomattox Court House, Virginia, and Durham Station, North Carolina. At the former, Robert E. Lee (Class of 1829) surrendered to U.S. Grant (Class of 1843), while at the latter, Joseph E. Johnston (Class of 1829) capitulated to William Tecumseh Sherman (Class of 1840).

In the half century between the end of the Civil War and the start of the Great War in 1914, little had changed in the administration of West Point and the education of its cadets. The feeling among the members of the Academic Board and many of the graduates was that the academy had produced most of the great captains of the Civil War, so it seemed futile to change something that had a proven record of success. The practice of hazing (the harassment and humiliation of plebes) became more severe in those decades, and West Point also began participating in intercollegiate athletics. Eleven of its graduates died in the Plains Indian Wars, five alone at Little Big Horn on June 25, 1876.

As the ex-Confederate states were readmitted to the Union, their citizens were admitted to West Point. In the Class of 1869, there was a cadet from Tennessee whose brother had been a colonel in the Confederate army. That cadet, Samuel E. Tillman, not only graduated but one day would become the academy superintendent. Four graduates (Tom Rosser, Joe Wheeler, Fitzhugh Lee, and Matthew C. Butler) who had served the Confederacy as general officers were reinstated in the U.S. Army as generals—in the spirit of national reconciliation—to lead American troops in the war with Spain in 1898. The first African American cadets likewise were admitted soon after the Civil War, but all were ostracized by the White cadets and few graduated. The first Black cadet to graduate and gain a commission was Henry O. Flipper in 1877. Thirteen African Americans were admitted to the academy between 1865 and 1915, but only three graduated. (During the same period, however, no African Americans were admitted to the United States Naval Academy.) The most notable Black graduate during this era was Colonel Charles D. Young (Class of 1889), although he finished at the bottom of his class. Nonetheless, he served a full career in the army with the so-called Buffalo Soldier regiments and retired during the First World War.

Also to serve with the Buffalo Soldiers was Missourian John J. Pershing (Class of 1886), a

White officer, who during his senior year at West Point had been appointed “Cadet First Captain” (the highest-ranking cadet in the corps). Pershing had distinguished himself as a first lieutenant serving in Cuba with the 10th U.S. Cavalry Regiment, a Black unit, during the Spanish-American War in 1898. As a tactical officer at the academy before that conflict, he was so despised by the Corps of Cadets for his relentless inculcation of discipline that he was given the unflattering nickname of “Nigger Jack”—in reference to his prior service in the 10th Cavalry—which later was softened to “Black Jack” Pershing. It was during the campaign to capture Santiago, Cuba, that the man who organized and coached the first army football team and arranged for the first army-navy football game, Dennis Mahan Michie (Class of 1892), was killed on July 1, 1898, the same day that Teddy Roosevelt and his Roughriders—and Pershing and his Buffalo Soldiers—assaulted San Juan Hill and Kettle Hill. (Today, the USMA football stadium bears Michie’s name.) Although the war with Spain was short and decisive, the conflict to pacify the Filipinos—a result of the acquisition of the Philippine Islands from Spain—was longer and more arduous, not coming to an end until 1902. Nonetheless, many West Point graduates who became generals during World War I gained valuable combat leadership experience against the wily Filipino fighters. The war with Spain, for as short as it was, cost 16 West Point graduates their lives; the Philippine-American conflict saw 22 alumni lay down their lives.

The Early 20th Century

In the years between the Spanish-American War and the U.S. entry into the First World War, many young men who would rise to prominence during the Second World War graduated from the academy, including Douglas MacArthur (Class of 1903), Henry H. “Hap” Arnold (Class of 1907), Simon Bolivar Buckner Jr. (Class of 1908), Jacob L. Devers (Class of 1909), George S. Patton (Class of 1909), Robert Eichelberger (Class of 1909), and Carl Spaatz (Class of 1914). The Class of 1915 has been called “the Class the stars fell on” because 36% of the graduating class became generals, including two who attained five-star rank, Dwight D. Eisenhower and Omar Bradley. When the United States declared war on Imperial Germany on April 6,

1917, the Class of 1917 was graduated in April, a month ahead of schedule, and the Class of 1918 graduated in August 1917. Two classes were graduated early in 1918, although both of those classes returned to West Point to finish their academic training, albeit as student officers instead of as cadets.

The American Expeditionary Forces were under the command of General John J. Pershing, who only recently had led a punitive expedition into Mexico in a futile attempt to capture or kill the cunning Pancho Villa. Pershing now would command the largest American army ever assembled up to that time, and most of its army, corps, and division commanders were USMA graduates: Hunter Liggett (Class of 1879), Charles P. Summerall (Class of 1892), Robert Lee Bullard (Class of 1895), and John L. Hines (Class of 1891), to name only a few. In addition, the U.S. Army Chief of Staff during the war was Peyton C. March (Class of 1888). One of the younger brigade commanders was Brigadier General Douglas MacArthur of the 42nd Division, which itself was commanded by Major General Charles T. Menoher (Class of 1886). At 38, MacArthur was the youngest brigadier general in the army, and his courage under fire earned him two Distinguished Service Crosses and seven Silver Stars. By war’s end, MacArthur himself would command the 42nd Division. During the epic Meuse-Argonne Offensive at the end of the war, Lieutenant Colonel George Patton was wounded on the first day of the campaign, leading his tank battalion on foot after his own tank broke down. Back in the United States, on another battlefield from a different war, Lieutenant Colonel Dwight Eisenhower was relegated to commanding the first training camp for the Tank Corps at Gettysburg, Pennsylvania. Although the American Expeditionary Forces saw only 4.5 months of active, sustained combat, more than 116,000 Americans died, including 24 West Point graduates, all below the rank of lieutenant colonel.

Interwar Years and World War II

West Point underwent a drastic change when Douglas MacArthur became the superintendent in 1919. MacArthur was a reformer. He reinstated the 4-year curriculum that had been suspended due to the early graduations during the war; gave cadets more responsibility and more freedom as well; added

Regular Army officers to the staff and faculty who were not West Point graduates; introduced summer training for cadets at Camp Dix, New Jersey; expanded the athletic program; instituted the Honor Committee; and formally established the Honor Code. None of these changes were welcomed by the Academic Board, and when MacArthur was reassigned to the Philippines in 1922, his successor, Major General Fred Sladen, abolished many of MacArthur's reforms. According to the historian Stephen Ambrose, however, MacArthur had brought a new spirit to the academy and a number of ideas that would eventually become central to the institution. Sladen's successors realized that MacArthur's changes had been necessary and long in coming, and they slowly began to reimplement his reforms. In 1929, the year of the great stock market crash, Washington Hall was completed, the 2,500-seat dining facility where the entire Corps of Cadets simultaneously took their meals. Even as the United States grappled with isolationism while the rest of the world moved toward war, the size of the cadet corps was expanded in 1935 to 1,960 men. One of the graduates of the Class of 1936 was Benjamin O. Davis Jr., an African American who was commissioned as an infantry officer in the still segregated U.S. Army. In 1942, he attended flight training and was transferred to the U.S. Army Air Forces, where he would go on to command the famous Tuskegee Airmen during the war and would retire in 1970 as a lieutenant general in the U.S. Air Force, having become the first Black general in that branch of the service. In 1998, many years after Davis's retirement, President Bill Clinton advanced him in rank to full general.

By 1940, most Americans realized that, sooner or later, the United States would be sucked into another global conflict. That year Major General Robert Eichelberger (Class of 1909) became the academy superintendent and started his own program of reform. He expanded the acreage of West Point to provide the cadets with extensive military training facilities; he de-emphasized horsemanship; he acquired Stewart Airfield in nearby Newburgh, New York, and established an Air Cadet program; and most important, he emphasized military and physical training, and even staged tactical exercises and maneuvers between opposing cadet "Red" and "Blue" forces during summer training. Eichelberger even hired the legendary coach Red Blaik (Class

of 1920) to lead the army football team. When the United States went to war in December 1941, Eichelberger's tenure at West Point quickly came to an end when he was summoned to the Pacific Theater of Operations by Douglas MacArthur, where the former would rise to corps command and four-star rank by the war's end.

During World War II, the academy temporarily adopted a 3-year course of study, with the 4-year curriculum resuming in September 1945. Congress also authorized an expansion of the Corps of Cadets in 1942 from 1,960 to 2,496 cadets, thus filling the dining facility in Washington Hall—still undergoing renovations—to capacity. With wartime expansion, more faculty were required—mostly civilians, retired officers, and even First Classmen (seniors)—as the Regular Army officer faculty were transferred to line units in active theaters of war. Plebes underwent the same style of basic training that army recruits underwent, and cadets in their third year of training spent their summers at active training installations, such as Fort Benning and Fort Knox. The Class of 1944 graduated on June 6—D-Day—with the most visible member being Cadet John S. D. Eisenhower, son of the commander of the Supreme Headquarters, Allied Expeditionary Forces. The war years also saw the ascendancy of army football under Coach Blaik, culminating with three national championships from 1944 through 1946 and back-to-back Heisman Trophy winners, Felix "Doc" Blanchard in 1945 and Glenn Davis in 1946. During the global conflict, West Point lost 487 of its graduates in the European Theater of Operations and an additional 175 in the Pacific, including those who died in Japanese prisoner-of-war facilities. World War II came to a close after two atomic bombs were dropped on Japan; the Manhattan Project responsible for the development of those weapons was directed by Major General Leslie R. Groves, a graduate of the Class of November, 1918. Throughout the war, the names of West Point graduates became household names: MacArthur, Eisenhower, Bradley, Buckner, Arnold, and Patton, to name only a few.

The Cold War

In 1946, Major General Maxwell Taylor (Class of 1922), who had commanded the 101st Airborne Division during the Normandy Invasion as well

as the parachute drop into Holland a few months later, took over as the 40th superintendent of West Point. He quickly reinstated the 4-year curriculum and appointed an academic dean whose position had been authorized by the War Department. In addition, he was able to gain permission to appoint “permanent professor” positions—a senior army officer—for each academic department. These were terminal positions, meaning that the officers would not be transferred to another assignment and could remain at the academy until their retirement, thus bringing stability to their respective departments. Taylor also implemented an enhanced liberal arts curriculum and, at the suggestion of General of the Army Dwight Eisenhower, introduced a course in basic psychology. His tenure would come to an end in 1949, but his skill and deftness in reinstating the 4-year curriculum while introducing needed academic changes at the same time ensured that those changes would not be overturned by the next superintendent. More than a decade later, Taylor finished his military career as the U.S. Army Chief of Staff.

During the Korean War, 157 graduates, mostly young lieutenants, were killed in action or died of wounds. It was the first “hot” conflict of the Cold War, one of several in which the academy graduates were called to serve. Before the official termination of hostilities with the signing of an armistice in 1953, another West Point graduate was elected president of the United States and took the oath of office earlier that year. Dwight David Eisenhower, like Ulysses Grant some 85 years earlier, also was a member of the Republican Party, but the latter’s administration would not be tainted with scandal like the former’s two terms in office. “Ike” Eisenhower’s strategy for the Cold War was called “mutually assured destruction,” employing nuclear weapons against communist aggression (thus diminishing the importance of conventional ground forces) and giving the U.S. Air Force—which became a separate service in 1947—a dominant role in the nation’s defense. On April 1, 1954, the 34th president signed legislation that created the United States Air Force Academy, thus relieving West Point of the obligation of commissioning officers for the newest branch of the U.S. defense establishment. By the end of the decade, the U.S. Army had been reduced to 860,000 soldiers, with the air defense artillery corps being the largest branch of

the service. General Maxwell Taylor, the former superintendant, cautioned the American people and its leaders that the United States was discounting its other potential enemies by overreliance on nuclear “massive retaliation.” A new defense strategy implemented by the next president would not only bring the army back to parity with the air force and the navy, it would reinvigorate the USMA.

In 1960—a presidential election year—Major General William C. Westmoreland, the First Captain of the Class of 1936—became the 45th superintendent. His new commander in chief, President John F. Kennedy was, like Westmoreland, a combat veteran of the Second World War, having commanded a PT boat in the Pacific Theater. Kennedy’s answer to the Cold War was called “Flexible Response,” a strategy that called for a potent nuclear arsenal, a strong conventional force, and special operations forces that could battle communist insurgencies around the globe—in other words, a defense force capable of fighting across a wide spectrum of warfare. The USMA thus would have to adjust its training to prepare its graduates to fight these types of conflicts—something that the young president had challenged its leaders to do when he gave the commencement address for the Class of 1962. Although there would be little change in the curriculum (the previous superintendant at least had convinced the Academic Board to allow the cadets to take two elective courses), the military training was modernized to reflect the army’s new mission of counterinsurgency warfare against communist guerrillas, especially those then operating in South Vietnam. Maxwell Taylor was appointed ambassador to that country in 1963, and in 1964 William Westmoreland became the commanding general of MACV—Military Assistance Command, Vietnam—and remained in that position until 1968 when he became the U.S. Army Chief of Staff. Ultimately, the United States fought a losing battle in Southeast Asia, and the U.S. military—and West Point—would lose some of its luster as a result.

During America’s longest war—to that time—some 273 USMA graduates were killed in action, died of wounds, or were missing in action and declared dead. Nonetheless, West Point’s prestige had been sullied by the fact that the United States, for the first time, had lost a war. To make matters worse, a new crop of West Point critics surfaced, the most influential of which was Lieutenant Colonel

Anthony Herbert, a non-West Pointer who wrote a scathing indictment of the academy and its graduates in a book titled *Soldier* based on his experiences with West Point graduates—what he called the WPPA, or “West Point Protection Association”—with whom he had served in South Vietnam. Other critics made similar complaints, arguing that “careerism” among West Point graduates contributed to the American defeat in Southeast Asia. To make matters worse, General Samuel Koster, the academy superintendent from 1969 to 1970, was forced to resign after it was determined that he had been involved in the 1968 My Lai massacre and attempted cover-up. Despite these problems, it should be noted that during the Vietnam War, five West Point graduates earned the Medal of Honor.

The year 1976 marked both a time of momentous shame and revolutionary change. That year—the nation’s bicentennial—a cheating scandal on an electrical engineering test (known as a “written partial review” or “WPR” in West Point vernacular), rocked the academy. It also was the year that West Point admitted females for the first time in its history. Of the 192 women who took the oath of allegiance in July 1976, 62 graduated in May 1980. The Class of 1980 also included Cadet Vincent Brooks, the first African American to be appointed First Captain of the Corps of Cadets, and who, many years later, would rise to general officer rank. Two years later, West Point underwent another drastic alteration when the curriculum was changed to allow cadets to choose academic majors in the heretofore engineering- and mathematics-based program of study.

In contrast to the struggle of integrating women at Virginia Military Institute and the Citadel, West Point officially embraced women with less turmoil. Moreover, the admittance of women in the ranks also saw the appointment of women faculty members for the first time. At the same time, women cadets faced significant barriers. Although women in most elite private universities and college make up more than 50% of the student body, they remain a distinct minority at West Point with their numbers reaching 20% of the Corps of Cadets. Student culture at the academy witnessed frequent incidents of harassment of women cadets based on their gender, as well as high rates of sexual violence that often went unreported to authorities. Despite these

obstacles, women cadets have distinguished themselves in the classroom and athletic fields, going on to serve with distinction in the conflicts in Iraq and Afghanistan.

More change followed during the reign of Lieutenant General Dave Palmer’s tour of duty as superintendent. A 1956 West Point graduate, Vietnam veteran, and former instructor in the USMA History Department, Palmer brought both a sense of transformation and “historical mindedness” to the academy. He overhauled the “Fourth-Class System” to make it more like the training and discipline that recruits undergo in the Regular Army, while still emphasizing the heritage of the academy and West Point proper. Under Palmer’s leadership, the Corps of Cadets also saw its first female become first captain when Kristin Baker (Class of 1991) assumed that position in 1990. During the 1980s and early 1990s, the army football team also experienced resurgence, garnering three bowl appearances under the leadership of coaches Jim Young and Bob Sutton.

West Point in the Wars in Iraq and Afghanistan

When Saddam Hussein invaded Kuwait in 1990, the U.S. Army got the first real test of its capabilities since the Vietnam War. As the buildup of allied military forces in Saudi Arabia continued into January 1991, some members of the staff and faculty at West Point were transferred to fill slots in units that had deployed to the war zone, and recent graduates led their platoons and companies in anticipation of what every pundit believed would be a bloody war. What followed was a short, overwhelming allied victory led by the coalition commander, General Norman Schwarzkopf (Class of 1956). One West Point graduate perished in what has come to be called the Persian Gulf War but at the time was known as Operation Desert Storm.

With the disintegration of the Soviet Union and the end of the Cold War, the U.S. military was downsized in a drastic fashion, and many officers from the graduating classes of the late 1980s and 1990s served their 5-year obligation and sought opportunities in the business world. Then came September 11, 2001, followed by the Iraq War. Graduates of West Point were again called up for combat leadership

roles, and many already have made the ultimate sacrifice, including two women graduates, 1st Lieutenant Laura Walker (Class of 2003) and 2nd Lieutenant Emily J. T. Perez (Class of 2005).

West Point graduates have not only served their country in times of war but also provided valuable service in the civilian sector. "The Long Gray Line" includes two U.S. presidents (Grant and Eisenhower); the man credited with building the Panama Canal (George W. Goethals, Class of 1880); the first man to walk in space (Edward H. White, Class of 1952) and 17 other astronauts; one of the great college basketball coaches of all time (Mike Krzyzewski, Class of 1969); the president of the 7-Eleven convenience store chain (Joe DePinto, Class of 1986); numerous U.S. senators, congressmen, ambassadors, and cabinet officials; and even nongraduates Edgar Allan Poe and James Whistler.

Mark A. Snell

See also African Americans; Army-Navy Game; Commissioned Officers; Diversity; Physical Fitness; Sports; Training; Army Officers; U.S. Air Force Academy; U.S. Coast Guard Academy; U.S. Naval Academy; Women

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U.S. NAVAL ACADEMY

The United States Naval Academy (USNA) is a 4-year institution of higher learning that serves to prepare officers for the U.S. Navy and the U.S. Marine Corps. The academy has as its mission

to develop Midshipmen [USNA's students] morally, mentally, and physically, and to imbue them with the highest ideals of duty, honor, and loyalty in order to graduate leaders who are dedicated to a career of naval service and have potential for future development in mind and character to assume the highest responsibilities of command, citizenship, and government.

Located along several tributaries of the Chesapeake Bay in Annapolis, Maryland, USNA's physical plant supports the academy's mission and includes academic departments; physical training, religious, administrative, and medical facilities; a football stadium and other athletic facilities; numerous military support buildings; and a massive dormitory, Bancroft Hall, that houses and feeds the entire student body of 4,600. USNA had an operating budget of \$130 million in 2010.

Born of a desire to improve on the Navy's education of its personnel, USNA's roots lie with William Chauvenet, a teacher at one of the Navy's several short-term training schools. In 1843, Chauvenet devised a plan for one, formal, centralized educational institution. Two years later, Secretary of the Navy George Bancroft, interested in Chauvenet's idea, worked with him and Navy leader Franklin Buchanan to devise such an institution, the Naval School, which Bancroft located at the Army's Fort Severn at the entrance to the Annapolis harbor. Wishing to improve on their design, the men reorganized the Naval School, with academic departments and focused military and seamanship education,



United States Naval Academy's Bancroft Hall, ca. 1920.

Source: Photo by Theodor Horydczak, courtesy of the Library of Congress.

and on July 1, 1850, renamed it the United States Naval Academy. By 1870, athletics, formal graduation ceremonies, and attention to issues of personal honor became permanent fixtures of USNA. It was the 1890 publication of *The Influence of Sea Power Upon History*, by the USNA alumnus Alfred Thayer Mahan (Class of 1859), that brought unprecedented congressional funding for the U.S. Navy and led to the modernization of the academy's campus. The architect Ernest Flagg redesigned USNA in 1897 with a dormitory named for Bancroft, a large chapel housing the crypt of the Revolutionary War naval leader John Paul Jones, and academic buildings, all in the Beaux Arts style and all built around a green campus and a boat basin. Most of the subsequent buildings added to USNA have followed Flagg's vision. USNA has remained in Annapolis with the

exception of the Civil War period, when it operated in Newport, Rhode Island. USNA's presence in Newport, however, has endured in the form of the USNA Preparatory School, which serves to bring candidates up to the academy's entrance standards.

Midshipmen hail from all U.S. states and territories, and they apply to USNA through a system of application common to other federal service academies, including interviews and politicians' nominations. USNA's admission board studies candidates thoroughly and strives to create an entering class that simultaneously meets the manpower needs of the Navy and the Marine Corps; represents a variety of educational accomplishments, extra-curricular activities, and leadership experiences; and mirrors the ethnic and racial background of

the U.S. citizenry at large. The federal government authorized women's attendance at service academies in 1975, and since the first women graduated in the Class of 1980, their numbers have increased steadily. Since 2007, women have constituted more than 20% of the brigade of midshipmen, or student body. Similarly, the percentage of students USNA identifies as minorities has increased dramatically from 18% of the brigade in 2000 to more than 30%, the highest level in academy history, in 2010.

Midshipmen begin their experience at USNA as plebes, or freshmen, during the plebe summer, an intense period of physical activities and military indoctrination that precedes their initial fall semester. Plebes study a handbook, titled *Reef Points*, that covers the Naval Academy's history, organization, culture, traditions, and honor concept. The honor concept is a moral guide that Midshipman William Lawrence (Class of 1951), as the brigade commander, or highest class leader, helped formulate. The honor concept includes a flexible counseling option to help midshipmen learn from their mistakes. During the course of their 4 years, midshipmen take courses in a core curriculum that focuses on engineering and science, and they choose a major from among 21 disciplines within the academic divisions of engineering and weapons, humanities and social sciences, and mathematics and science. They also receive formal training in officer development and professional development, emphasizing leadership and ethics, as part of their moral education. The USNA Center for Academic Excellence, founded in 1989, provides midshipmen with academic counseling and tutorial services. USNA's faculty consists of professional civilian academics, almost all of whom have PhDs and tenure, and military faculty, who serve 2- to 3-year tours teaching at USNA. In 2010, USNA had a total of 525 faculty members, of whom 306 were civilians and 219 were military personnel. Assisting the faculty and midshipmen with their academic pursuits is a modern library staffed with trained research librarians.

Another major focus of USNA's preparation of midshipmen is on athletic, physical, and military training. The Naval Academy is a member of the National Collegiate Athletic Association, Division 1, and fields varsity teams in 17 men's sports, 9 women's sports, and 4 coed sports, and club teams in 4 men's sports, 2 women's sports, and 6 coed sports. More than 100 coaches, trainers, and athletic specialists

assist midshipmen in their athletic and physical training pursuits. Perhaps the most notable event each school year is the army/navy football game, usually in early December, with activities focused on the friendly rivalry with the United States Military Academy. Midshipmen also practice military bearing and marching and train with different navy and marine units during the summers between academic years to determine which service communities they will enter for their military careers on graduation. Generally one sixth of each graduating class may enter the Marine Corps as 2nd lieutenants, with the majority of the remainder of the graduates becoming ensigns in the navy. Between 1949 and 1963, many midshipmen chose commissions in the U.S. Air Force, but at present, only a few graduates choose commissions in the air force or the army each year. All midshipmen graduate with a bachelor of science degree, and nearly all graduates enter post-USNA training focused on the military career path they have chosen.

Tempering the intensity of their academic and physical activities, midshipmen can choose from among 85 extracurricular activities. Participation is widespread in these organizations, which USNA categorizes as musical/theatrical, spirit, religious, competitive, recreational, professional, community service, publications, heritage, and academic. Among the longest lived of these is *The LOG* magazine, which for much of the century of its history has reported on athletics, news, and satire, most vividly in the "Salty Sam" column in which a fictionalized character recounts humorous stories about midshipman life. Religion is significant for many midshipmen, and a small group of military chaplains supervises religious activities at USNA's prayer spaces at the Naval Academy Chapel, the Uriah P. Levy Center and Jewish Chapel, and the Chaplain's Center. Many midshipmen, particularly those in underrepresented groups like women and African Americans, find community and an opportunity to discuss common challenges in organizations such as the Joy Bright Hancock Group for women, the Midshipmen Black Studies Group, and six other ethnic group-based clubs. Midshipmen also receive support from Sponsor Parents, a network of families in the Annapolis area who welcome USNA students informally into their homes, and from the extensive staff of food and housekeeping workers, medical personnel, and other

USNA staff who offer assistance to members of the brigade.

Naval Academy alumni have participated in every American military conflict since the first midshipmen graduated in 1854. Many of those graduates' accomplishments are memorialized throughout the USNA campus, including in street names, on plaques describing the courage of the 73 USNA alumni who were Medal of Honor recipients, and with monuments and statues such as the one honoring James Stockdale, a 1947 graduate who was a prisoner of war in Vietnam and later became a Navy vice admiral. The names of notable USNA alumni adorn the campus's buildings, including Michelson Hall, honoring the famed physicist Albert Michelson (Class of 1873) who did his initial studies on the speed of light while an instructor at USNA in 1877; Rickover Hall, honoring the nuclear Navy proponent Hyman Rickover (Class of 1921); and the Wesley Brown Field House, honoring the first African American graduate of USNA (Class of 1949). The Navy's major role in World War II, particularly in the Pacific Theater, led to the inscription of names, on USNA buildings and monuments, of alumni who played significant roles in the conflict, including William Halsey Jr. (Class of 1904), Ernest King (Class of 1901), Marc Mitscher (Class of 1910), and Chester Nimitz (Class of 1905). The Navy-Marine Corps Memorial Stadium bears the names of major 20th-century battles in which USNA alumni have fought. In 2010, approximately 14,000 of USNA's 77,000 living alumni were serving in Iraq, Afghanistan, and at other duty stations around the world and in the United States. Many USNA alumni have also had significant national political careers, including President Jimmy Carter (Class of 1947) and the Arizona senator John McCain (Class of 1958).

At the helm of USNA are two high-ranking officers, the superintendent, who serves as the equivalent of a university president, and the commandant, who serves as the equivalent of a university's provost and dean of students. These military officers have brought to USNA many different styles of leadership of the institution and the brigade and have focused on such issues as academics, honor, ethics, respect, and accountability during their terms, oftentimes in response to challenges that have arisen at USNA or that American society has presented. Although all USNA superintendents have been White, male, and

navy officers, there has been greater diversity among the academy's commandants. They have included John Allen (Class of 1976), 2002–2003, the first marine to serve as commandant; Bruce Grooms (Class of 1980), 2005–2006, the first African American to serve as commandant; and Margaret Klein (Class of 1981), 2006–2008, the first woman to serve as commandant.

The National Park Service recognized USNA as a national historic landmark in 1961 for its architecture and for the academy's long role in preparing leaders for the nation. Because the campus is physically entwined with the historic district and sailing center of the city of Annapolis, midshipmen have the opportunity to interact with the community and its tourists and have access to the cultural and recreational opportunities of the nearby Baltimore/Washington, D.C., area. USNA itself is a major tourist destination, and its visitor center offers daily tours of the academy. In addition to the many monuments and memorials around the campus, areas of interest include the U.S. Naval Academy Museum and the public areas of Bancroft Hall, which feature objects related to navy and Marine Corps history, and the cemetery and columbarium, which include 6.7 acres of graves of men and women who were on active duty at USNA, Medal of Honor recipients, employees, faculty, and alumni of USNA, and midshipmen who died before graduating from the Naval Academy.

H. Michael Gelfand

See also Training, Naval Officers; U.S. Air Force Academy; U.S. Coast Guard Academy; U.S. Military Academy

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U.S. NAVAL INSTITUTE

Based at the United States Naval Academy in Annapolis, Maryland, since its 1873 founding, the U.S. Naval Institute (USNI) is a nonprofit, professional military association whose mission, according to its website, is “to provide an independent forum for those who dare to read, think, speak, and write in order to advance the professional, literary, and scientific understanding of sea power and other issues critical to national defense.” It supports the professional development of naval officers through its journal *Proceedings*, book publishing, and sponsoring lectures, seminars, and conferences. Unlike many similar organizations, which are sponsored by national governments or particular branches of the military, the USNI is a private organization, and this has allowed its members more freedom to challenge established policy. It became a central forum for discussions of naval matters and attracted members from around the world in addition to its core constituency of U.S. naval officers. This entry discusses the creation and mission of the USNI and examines its most well-known publication, the journal *Proceedings*.

On October 9, 1873, a dozen naval officers and several civilian Naval Academy professors founded the USNI to provide a forum for discussions of naval history, strategy, policy, and maritime issues to further the “professional, literary, and scientific knowledge in the Navy.” They were inspired by similar organizations in Europe, particularly Britain’s Royal United Service Institute, and the Navy Lyceum, which had sponsored lectures and discussions of naval issues before the Civil War. Frustrated by the growing technological and material gaps between the U.S. Navy and foreign navies, the USNI’s founders hoped to inspire and lead the modernization of the fleet and reform its administration. The USNI’s creation reflected officers’ changing views of themselves, their profession, the navy, and the place of the United States in the world.

Spurred by Commanders Alfred Thayer Mahan and William T. Sampson, the USNI launched its journal, *Proceedings*, in 1874. It became a forum for discussion and often fierce debates on tactics, strategy, naval administration, fleet composition, and the navy’s mission. It attracted essays from the navy’s senior officers and many of its most promising young officers and leading intellectuals. Common themes included the benefits of maritime supremacy (and how to achieve it), the advantages of a canal through the Isthmus of Panama, new technology (and its naval applications), and pleas to revive the American merchant marine. *Proceedings*’s essays discussed the construction and tactical use of torpedoes and torpedo boats, submarines, battleships, and later aircraft. Along with these, it published a host of articles on practical subjects, such as engines and navigation, and discussions of famous naval campaigns and battles and other topics of historical interest. In 1879, the *Proceedings* launched an annual prize essay to further stimulate professional thought, and USNI leaders chose topics of immediate interest to naval modernization as part of a determined effort to transform the navy.

Essays in the *Proceedings* sparked the creation of many of the key institutions of the new, turn-of-the-century navy, which USNI members staffed in disproportionate numbers. In 1883, for example, founding member Stephen B. Luce published an essay advocating the higher education of naval officers, which in turn sparked the creation of the Naval War College, most of whose early faculty members were also prominent members of the USNI, who had themselves published essays in the *Proceedings*. USNI members also occupied key roles in the new Office of Naval Intelligence and the naval advisory boards and other special commissions that guided the navy’s development in the late 19th and early 20th centuries. Articles proposing a naval reserve, for example, led first to federal recognition of state naval militias in 1891 and then the Naval Reserve Acts of 1915 and 1916.

Many *Proceedings* articles in the 1920s and 1930s anticipated developments in World War II, and discussions of aviation won the prize essay contest in 1925, 1931, 1940, and 1943. Many of the navy’s senior World War II leadership had published essays in the *Proceedings*; among them was Ernest J. King, who won the 1909 prize essay for a discussion of shipboard organization. After the war, topics

expanded to include nuclear weapons, limited war, and containment. Later articles explored the navy's role after the Cold War.

The USNI began publishing books in 1899, focusing on practical and technical subjects, such as navigation, seamanship, international and maritime law, and guidebooks for officers and sailors, such as the *Bluejacket's Manual* (1902). It published many textbooks required by the Naval Academy and added a growing number of historical titles over time. After World War II, it published a growing number of books aimed at a popular audience, including Tom Clancy's best-selling *Hunt for Red October* and other novels. In 1987, it launched *Naval History*, a popular magazine aimed at the general public.

The *Proceedings* launched a photography contest in the 1920s, and the USNI developed an extensive collection of more than 400,000 historic photographs. Essay contests for the enlisted ranks (1948) and naval academy midshipmen (1954) joined the annual prize essay, which continued to showcase the navy's best minds. In 1969, it assumed the oral history program begun by the noted historian Allan Nevins and has since amassed several hundred interviews of senior officers, including Admirals Arleigh Burke and Chester Nimitz.

In recent years, secretaries of the navy and senior admirals have often used the *Proceedings* as a forum to present their views, particularly Secretary of the Navy John Lehman, who trumpeted the need for a 600-ship navy in the 1980s, and Admiral Arthur Cebrowski, who articulated the concept of network-centric warfare in 2001. Nonetheless, the *Proceedings* remains intellectually vibrant and a central forum of professional thought. The USNI has grown to 65,000 members, many of them current or former members of the U.S. Navy, Marine Corps, and Coast Guard, and it continues to expand its book publishing and oral history collection.

Stephen K. Stein

See also Mahan, Alfred Thayer; Naval War College; Navy, U.S.; Professionalism; Strategy, Naval

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U.S. NORTHERN COMMAND

In the wake of the terror attacks of September 11, 2001, the national government of the United States advanced the idea of reorganizing the Department of Defense's Unified Command Plan to include a new joint command with the responsibility for providing defense of the homeland against terrorism and transnational criminal activities. This new command—Northern Command (NORTHCOM)—was established in April 2002 and became operational on October 1, 2002, with headquarters at Peterson Air Force Base, Colorado. The commander of the new organization would also have command responsibilities for the North American Aerospace Defense Command, a long established binational command operated in conjunction with Canadian Defense Forces, with air defense responsibilities for North America.

The command takes guidance from the National Response Framework and Joint Publications 3-26 (Counterterrorism) and 3-28 (Civilian Support). The joint publications establish doctrine by which the command operates.

The mission of NORTHCOM is to conduct homeland defense, civil support, and security cooperation to defend and secure the United States and its interests. Its area of operation includes the continental United States, Alaska, Canada, Mexico, and the surrounding waters out to 500 miles off shore. This area of operation also includes the Gulf of Mexico, the Straits of Florida portions of the Caribbean region to include the Bahamas, Puerto Rico, and the U.S. Virgin Islands.

Though the mission of NORTHCOM is wide ranging, the command has relatively few organic forces. Its component commands provide forces as they are needed. This arrangement proved problematic in the first decade of Northern Command's existence due to the high operational tempo of forces

engaged in wars in Afghanistan and Iraq. Similarly, as the National Guard is the major federal force provider, conflicts often arise concerning authority over these forces when civil support is needed. Governors command National Guard forces under Title 32 when forces are deployed to support state operations. Under federal activation (Title 10), the Commander of NORTHCOM would retain command authority. This tension has not been fully mediated and has often led to difficulties, particularly when forces are being deployed to support disaster relief.

The command is currently organized around the joint task force model. At present, there are four joint task forces, along with component commands, found on the NORTHCOM's organizational chart. Joint Task Force-National Capital Region (JTF-NCR) is headquartered at Fort McNair in the Washington, D.C., area. Because of the critical nature of the National Capital Region, this command element is in place to provide homeland defense and support to civilian authorities in the area. An important function of this task force is its role in events of national significance. With proximity to the national command authority, the NORTHCOM elements can coordinate activities for all military elements supporting civilian response and recovery actions.

The second JTF is assigned responsibilities for Alaska—JTF-AK. This headquarters has the responsibility of coordinating all military support to civilian authority to protect national interests in Alaska.

The JTF with perhaps the most difficult mission in NORTHCOM is the one with civil support (JTF-CS) responsibilities. The JTF-CS, headquartered at Fort Monroe in Virginia, has the primary role of providing capabilities for detecting and combating chemical, biological, radiological, nuclear, and high-yield explosive consequence management operations. There are 55 civilian support teams organized across the country to provide immediate response when chemical, biological, radiological, nuclear, and high-yield explosive weaponry is thought to be in play. As nearly all mitigation capability is found in the military, this task force performs a critical mission in the defense of the nation against weapons of mass destruction.

The fourth element is JTF-North (JTF-N). This is the oldest legacy organization, with responsibilities that extend across our southern border. Its mission is to support federal law enforcement agencies against

transnational threats. Headquartered at Fort Bliss, Texas, the task force plays a critical role in the War on Drugs and in supporting counter- and antiterror activities in the border region.

The command has a difficult situation with which it must deal. There have long been tensions between civilian and military authorities, particularly when the doctrine of *Posse Comitatus* has come into question. The military is prohibited by federal statute from taking part in civilian law enforcement activities. Though the doctrine has been waived numerous times during our history, it remains a major inhibitor in times of crisis.

Perhaps the most difficult task in fulfilling its mission is the ambiguity that exists concerning what civilian authorities might need from the military establishment. Though NORTHCOM can provide nearly anything within the control of the military, without knowing what might be needed makes coordination and support problematic. Furthermore, determining when NORTHCOM forces are needed in times of crisis has been difficult as well. Add to this situation the paucity of forces available with two wars ongoing, and NORTHCOM is often stretched very thin.

A recent Government Accountability Office report highlighted challenges for NORTHCOM that must be overcome if the command is to fulfill its mission responsibilities. First, the command has not been successful in gaining support information from the Department of Homeland Security. As the focus of the military command is on military forces and actions, integrating with civilian authorities has presented difficulties. The Department of Homeland Security has been in existence for less time than NORTHCOM, so cultural and institutional issues have inhibited operations. A second challenge has been developing contingency plans if NORTHCOM cannot provide forces to support civilian operations. Though the United States will not likely be at war for extended periods of time, current operations have lasted nearly 10 years, placing NORTHCOM capabilities at risk. Finally, the command has not fully established a readiness measurement system. Given the ambiguity of forces available, this challenge may be difficult for the command to overcome.

The U.S. Northern Command is likely at a crossroads in its existence with resources constrained at all levels, particularly at the state and local government

level. Similarly, current economic conditions at the national level will force Department of Defense planners to take a hard look at force structure and resource allocations for all joint commands. Until such time as the 39,000 civilian governmental jurisdictions can mount a cohesive national preparedness capability, the forces of NORTHCOM will be needed.

Samuel H. Clovis Jr.

See also Border Patrol; Civil Defense; Civil Disorder; Civil-Military Relations; Drug Interdiction; Homeland Security, Department of; Natural Disaster, Military Response to; Posse Comitatus Act

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U.S. PACIFIC COMMAND

The U.S. Pacific Command (USPACOM) is one of six combatant commands of the U.S. military. It is composed of the U.S. Pacific Fleet, U.S. Pacific Air Forces, U.S. Army Pacific, and U.S. Marine Forces, Pacific. USPACOM's area of responsibility (AOR) is the largest for any unified combatant command, stretching from the west coast of the United States to the western border of India and from Antarctica to the Arctic pole. The commander of USPACOM is the most senior American military official in the Pacific region and answers to the president of the United States through the office of the secretary of defense and the Joint Chiefs of Staff. USPACOM is headquartered in Hawaii and is currently headed by Admiral Samuel J. Locklear III.

Force Makeup of USPACOM

As of 2012, USPACOM forces numbered approximately 325,000, or roughly 20% of all active U.S. military forces. The heart of USPACOM is the U.S. Pacific Fleet. The fleet comprises six aircraft carrier

strike groups numbering approximately 180 ships, 1,500 aircraft, and 100,000 personnel. The Pacific Fleet is divided between the Third Fleet, stationed in California, and the Seventh Fleet, stationed in Japan and is supported by eight destroyer squadrons. Marine Forces, Pacific, contains two thirds of the Marine Corps's offensive capabilities, comprising the 1st and 3rd Marine Expeditionary Forces, numbering roughly 85,000 personnel. U.S. Pacific Air Forces comprises roughly 400 aircraft, with 100 of those stationed at Guam, along with approximately 40,000 personnel. Organizationally, U.S. Pacific Air Forces is divided into four air force groups. The Fifth Air Force is stationed in Japan, the Seventh in Korea, the Eleventh in Alaska, and the Thirteenth in Hawaii. U.S. Army Pacific personnel number roughly 60,000 and include five Stryker brigades for rapid deployment and projection of American ground power around the Pacific region. Army forces are divided between Alaska, Hawaii, and Japan, with U.S. Army forces in South Korea falling under the purview of the Eighth U.S. Army.

History of USPACOM

President Harry S. Truman created USPACOM on January 1, 1947, to consolidate and coordinate American military personnel and effort in what had formerly been the Pacific Theater of World War II. Admiral John H. Towers served as the first commander in chief of the Pacific Command. This designation was changed in 2002 to the title of combatant commander to clarify the idea of civilian control over the military services, since the president serves as the only commander in chief of the U.S. military. This date of establishment marks USPACOM as the oldest of the six unified combatant commands in the U.S. military. Prior to 1958, the U.S. Pacific Fleet was under the command umbrella of USPACOM but was designated as a separate entity starting in that year with its own command structure.

Over the course of its existence, USPACOM has grown steadily as it has absorbed various area commands that have been shut down. In 1957, USPACOM absorbed the Far East Command, which was established the same year as USPACOM. In 1972, USPACOM's AOR was expanded with the inclusion of the Indian Ocean basin, southern Asia, and the Arctic as well as incorporating Alaska

Command, which was disestablished that year. Four years later, its AOR was expanded to cover the area of the Indian Ocean up to the eastern coast of Africa, resulting in USPACOM being responsible for an area of more than 100 million square miles. Under President Ronald Reagan, USPACOM responsibilities were once again expanded as China and portions of Asia, including Mongolia and North Korea, were added to the command's region.

The organizational structure of USPACOM was overhauled with the passage of the Goldwater-Nichols Act of 1986 that provided for the most sweeping changes to the U.S. defense structure since the passage of the National Security Act of 1947. Under Goldwater-Nichols, interservice rivalries, which had been a major cause of consternation to American defense planners since World War II, were lessened as the chain of command between the president and unified combatant commanders was streamlined. Prior to Goldwater-Nichols, unified combatant commanders reported to their designated service chiefs who in turn reported to the secretary of defense and then the president. This tended to promote interservice friction as each military branch sought to maximize its own position in budgeting and influence. This lack of coordination also made it difficult for the United States to create an integrated military doctrine that balanced all aspects of the military. Goldwater-Nichols also provided for greater sharing of weapons technology between the branches, which prevented a repeat of the 1950s nuclear weapons development race that occurred between the army, the navy, and the air force.

Starting in the late 1980s, the trend of USPACOM's AOR increasing began to reverse itself as shifts within the American defense structure provided for a shrinking of the AOR. In 1989, a new Alaska Command was established that was made subordinate to, though separate from, USPACOM. That same year, responsibility for regions of the Middle East, including the Gulf of Aden and the Gulf of Oman, was placed under the direction of U.S. Central Command, and in 1996, the area surrounding the Seychelles was also transferred to Central Command. In 2000, it was decided that the eastern coast of Africa would be shifted from USPACOM to U.S. European Command. These steps were undertaken to help lessen the strain on

USPACOM resources and to help more clearly define borders between USPACOM and its fellow unified combatant commands.

In the aftermath of the terrorist attacks of September 11, 2001, USPACOM once again saw its AOR shifted as the U.S. military structure underwent an overhaul in response to the attacks. A new U.S. Northern Command was established to oversee homeland defense. Alaska command was transferred to U.S. Northern Command, but its combat forces stayed under the command of USPACOM. In 2008, a significant area of territory in the Indian Ocean was removed from USPACOM's purview and turned over to the newly created U.S. Africa Command. This marked the last major overhaul of USPACOM's borders and finalized the current six unified combatant commands areas of responsibility.

Major Exercises

USPACOM is responsible for fulfilling several major defensive alliances with major U.S. partners, including with Australia, the Philippines, Japan, and South Korea. Every 2 years in odd-numbered years, USPACOM participates in Operation Talisman Saber, a major training exercise undertaken with the Australian military. This exercise serves as the main training venue for the U.S. Seventh Fleet. Similar training exercises are held between USPACOM and the military of Thailand (Cobra Gold), the Philippines (Balikatan), and with the Self-Defense Forces of Japan (Keen Sword/Keen Edge). Arguably, the most important exercise undertaken by USPACOM is the biennial Rim of the Pacific (RIMPAC) that occurs in even-numbered years.

RIMPAC is the world's largest maritime military exercises. First held in 1971, RIMPAC serves as a venue for Pacific nations to promote stability in the region but has also increasingly taken on greater importance as the threat of several points of contention in the Pacific region, including continued strained relations between China and Taiwan, and North Korea and South Korea, has increased. The last RIMPAC exercises were held in 2012, with USPACOM forces being represented by the USS *Nimitz* and other elements of Carrier Strike Group 11. Twenty-two nations participated in the 2012

exercises, and these exercises marked the first time that Russian forces had participated.

Apart from training exercises, USPACOM has served an important role in humanitarian missions throughout the Pacific region in response to several major natural disasters. Since 1996, USPACOM has participated in 20 such missions operating in 12 different countries. The largest of these humanitarian missions was launched in response to the December 2004 tsunami that ravaged large sections of Southeast Asia, leaving nearly 300,000 people dead and more than 1 million displaced throughout 11 countries in the region. At the high point of American involvement in the relief efforts, USPACOM had dispatched nearly 16,000 personnel, 24 ships including Carrier Strike Group Nine, and more than 100 aircraft. In 2008, USPACOM forces took part in the international relief effort for Burma in the aftermath of Cyclone Nargis. In 2011, USPACOM responded to the earthquake and tsunami that hit northeastern Japan with Operation Tomodachi. This effort involved almost all possible USPACOM forces located in and near Japan, eventually resulting in an American effort totaling 24,000 personnel, 24 navy vessels, and almost 200 aircraft.

USPACOM has taken on an increasing importance with the decision of the administration of President Barack Obama to shift American military focus away from Europe to the Pacific region. This has led to a planned increase in the American military presence in the region, including the stationing of U.S. Marine forces in northern Australia. Much of the increased focus on the Pacific has been in response to America's regional partners' concerns over the growing military influence of China in the region as well as long-standing tensions with North Korea. Generally, American defense planners have maintained that North Korea remains the predominant military focus for USPACOM, but increasing tensions between China and the Philippines over the Scarborough Shoal in the South China Sea and between China and Japan over the Daiyou Islands in the East China Sea continue to weigh heavily on the minds of military planners working in the Pacific region.

Travis J. Hardy

See also Asia; Australia; China, People's Republic of; Goldwater-Nichols Department of Defense Reorganization Act; Humanitarian Intervention, Foreign; India; Japan; Korea, North

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U.S. SOUTHERN COMMAND

The U.S. Southern Command (SOUTHCOM) staff is organized into directorates and security cooperation organizations. SOUTHCOM comprises more than 1,200 military and civilian personnel representing the army, navy, air force, Marine Corps, Coast Guard, and other federal agencies. The armed services provide SOUTHCOM with the following component commands: U.S. Army South, U.S. Air Forces Southern, U.S. Naval Forces Southern Command/U.S. Fourth Fleet, and U.S. Marine Corps South. The SOUTHCOM enterprise also includes Command South, Joint Task Forces Guantanamo and Bravo, one Joint Interagency Task Force, and a network of Security Cooperation Offices. Combatant command authority is exercised through the commanders of SOUTHCOM's different components. The SOUTHCOM commander reports to the president of the United States through the secretary of defense.

SOUTHCOM is one of nine unified combatant commands within the Department of Defense. It is responsible for U.S. military operations and security assistance programs in South America, Central America, and the Caribbean. It originated from the Caribbean Defense Command (CDC), a prototype military structure created during World War II. From 1941 to 1947, an army two-star general commanded the CDC from Quarry Heights, Canal Zone. The CDC primarily defended the Panama Canal and Caribbean Sea lanes but also developed counterespionage and antisubmarine missions to ensure defense of the region. Latin American governments were aided by the CDC through military training missions, admittance of Latin American

soldiers to U.S. service schools, and disbursing Lend-Lease materials to Latin American partners. The European and Pacific theaters were assigned the majority of U.S. military personnel during World War II, but there were 130,000 uniformed personnel spread out across Latin America and the Caribbean.

Following World War II, the Joint Chiefs of Staff reorganized military commands to promote interservice cooperation. The Joint Chiefs of Staff unified the armed forces under the administration of Harry S. Truman and broke military commands into geographic regions. The conduct of all military operations, regardless of force type, was placed under the leadership of that region's lone commander. The CDC was deactivated in 1948 and replaced by the unified Caribbean Command, then commanded by a three-star general. The Caribbean Command still defended the Panama Canal, but now it is the American representative for security cooperation in Central and South America. It also oversaw the administration of military assistance programs in Mexico and the Caribbean.

Defense strategists removed the Caribbean basin from the Caribbean Command's area of responsibility (AOR) as the Cold War became hotter. It was thought that U.S. Atlantic Command in Norfolk was best suited to defend the hemisphere from this area. This change in boundaries held into the 1960s and the Caribbean Command remained unengaged in the Caribbean. President John F. Kennedy's administration redesignated the Caribbean Command as U.S. SOUTHCOM on June 6, 1963, to reflect a more accurate name. This transformation established a four-star billet for commander and shrank the command's AOR to the noninsular landmass of Latin America. SOUTHCOM continued to protect the Panama Canal, made contingency plans for Cold War activities, and was the face of the U.S. military throughout the AOR.

From 1972 to 1983, SOUTHCOM dramatically reduced and restructured its mission because of the Panama Canal treaty negotiations, the East-West détente, and political pressure to reduce the size of U.S. overseas military commands following Vietnam. The command was reduced to a three-star billet and was primarily relegated to emergency evacuations/disaster relief. Communist advances in Central America, increased drug trafficking, arms smuggling, and Panamanian militarism caused the Department of Defense to restore SOUTHCOM's

mission in 1983. The Reagan administration oversaw much of the reemphasis on SOUTHCOM. It was restored to a four-star command and began contingency planning for low-intensity conflicts and counterdrug operations.

The collapse of the Soviet Union in 1991 altered the geopolitical environment and caused SOUTHCOM to change again. The AOR underwent a period of relative stability, and democracy appeared to be strengthening. Still, the trafficking of drugs, arms, and illegal migrants continued to escalate. Additionally, political crises in Ecuador, Paraguay, Colombia, Venezuela, Peru, and Haiti weighed heavily on the command. Counterdrug operations, peacekeeping missions, humanitarian assistance, and security assistance operations all increased for SOUTHCOM from 1991 to 2001. In 1997, SOUTHCOM's headquarters was moved from Quarry Heights, Panama, to Miami, Florida, and the Caribbean Basin was returned to its AOR. This allowed the command to lessen its focus on keeping U.S. personnel safe in the Canal Zone. The terrorist attacks on September 11, 2001, initiated a period of geopolitical uncertainty and affected the SOUTHCOM's mission. Illicit trafficking in drugs, ethno-nationalist and populist movements, and changes in global terrorism began to weaken the relations that the United States and SOUTHCOM had built in the region. Counterterrorism operations increasingly found a prominent position among the command's other objectives.

Characteristics of the AOR

SOUTHCOM's AOR currently covers approximately 15 million square miles and 32 nations. Most areas are characterized by tropical forest and heavy rain, yet there are also deserts and arctic zones. The Andes mountain range dominates much of the landscape and creates fertile valleys that are perfect for the cultivation of coca leaves—more than 90% of the world's coca comes from here. These remote areas also offer ideal locations for the development of cocaine-processing facilities and air strips to move the finished product—more than 60% of the world's cocaine originates here. Multitudes of navigable waters through dense rain forests in the southern portion of the continent also create avenues to move drugs and arms clandestinely.

More than 500 million people populate SOUTHCOM's AOR. The population is a mixture

of Europeans, Hispanics, and native people. Most of the population lives in, or near, poverty in overcrowded cities. Many suffer from low education levels, poor health, and short life expectancies. Wealth is often concentrated in the hands of a few individuals; there is a small middle class, and a wide gap between the rich and the poor. These conditions, along with environmental conditions favorable for drug cultivation, have historically fostered an atmosphere of frequent insurgencies and drug trading as an alternative to poverty. The geographic and political circumstances have created a unique set of difficulties and obstacles for SOUTHCOM to overcome that other combatant commands rarely face.

Major Actions Taken

SOUTHCOM's major actions can be broken down into the following categories: military intervention/combat action, crisis action/advisory support, counterdrug operations, and humanitarian/peacekeeping missions. Antiterrorist operations have most recently been of utmost importance to the command. The role of Joint Task Forces, Guantanamo Bay, Cuba, in the Global War on Terrorism reflects this shifting role. Operation Just Cause, launched in 1989, is one of the most prominent military engagements in which SOUTHCOM has been involved. This operation was in response to the accession to power of Lieutenant Colonel Manuel Noriega following the death of General Omar Torrijos. Noriega stood in the way of constructive U.S./Panamanian relations by violating human rights and disregarding U.S. treaty rights. Eventually, the situation deteriorated enough for U.S. citizens in Panama to be faced with a continuous threat to their lives and livelihood. The conflict ended with the capture of Noriega and the restoration of civilian leaders in May of the same year. After Just Cause, SOUTHCOM reduced its focus on Panama.

The El Salvador civil war of the late 1970s and early 1980s is one of the best examples of SOUTHCOM's role in crisis action and advisory support. In this conflict, SOUTHCOM provided advisory, materiel, and political/military support to the El Salvador government in its battle against communist insurgents. Another example of crisis action came in December 1994 when SOUTHCOM supplied forces to suppress Cuban migrant riots in Safe

Haven camps. These migrants were angered about delays in their application for asylum in the United States.

The first counterdrug operation initiated by SOUTHCOM was Blast Furnace in May 1986. This was followed up by Operations Support Justice I–IV from April 1991 to September 1993. These operations were early examples of regional counterdrug operations conceived by SOUTHCOM's commander. They primarily identified the Peru-Colombia air bridge and documented narcotrafficking response to air interdiction. Counterdrug operations steadily continued after this point. From 1998 to 2002, the United States rapidly increased support for Colombia in the fight against drug trafficking and illegally armed groups. SOUTHCOM spearheaded this effort by providing support to Colombian counterdrug battalions through intelligence, logistics, and training. This strategy was known as Plan Colombia. It attacked drug trafficking directly and through improvement of socioeconomic problems.

SOUTHCOM is continually engaged in humanitarian and peacekeeping missions. Operation Promote Liberty (January 1990 to September 1994) demonstrated a component task force of SOUTHCOM assisting Panama in restoring democracy, security, economic growth, and internal improvements. It was viewed as a success because it culminated in the first uncontested presidential election that the country had seen in 50 years. The most recent and public example of SOUTHCOM's commitment to humanitarian assistance came in January 2010 with Operation Unified Response. This came in response to the catastrophic earthquake in Haiti that claimed the lives of hundreds of thousands of individuals. SOUTHCOM immediately responded and took its place as a leader in the global community seeking to aid the Haitians.

SOUTHCOM and its components regularly undertake humanitarian assistance missions. One of the most successful exercises in recent years has been under the label of New Horizons. These exercises are comprehensive in nature and stress internal improvements of countries, including the construction of schools and medical clinics. Medical readiness training exercises are a large part of these exercises. They utilize teams of doctors, nurses, and dentists to give general health care to host nation citizens. Humanitarian training missions



U.S. Air Force Staff Sergeant Matthew Gruber, a medical element logistics noncommissioned officer in charge, gives a child dewormer after the preventive medicine briefing at a medical readiness and training exercise here on March 9. Members of this team saw more than 370 San Juan villagers on Day 3 of the 4-day medical readiness and training exercise here.

Source: U.S. Air Force photo by Captain Candice Allen.

usually last several months, provide infrastructure improvements to host nations, and train deployed U.S. military forces and the host nation personnel. Generally, there are around 60 of these exercises per year.

Reorganization

In September 2007, the secretary of defense authorized the reorganization of SOUTHCOM into a more interagency-oriented organization. In May 2008, the reorganization was implemented. The impetus for this reorganization came from the U.S. Navy admiral James Stavridis, commander of SOUTHCOM from October 2006 to June 2009. Stavridis's command of SOUTHCOM was very innovative—he viewed the region as a “marketplace of ideas” and

felt that the changing nature of the U.S. mission in Latin America and the Caribbean required a more innovative approach to organization. Many of the security challenges that SOUTHCOM faced in its AOR were better addressed by multiple government departments and agencies. Mission lines needed to be crossed and different agencies needed to shift roles. Stavridis believed that this system would improve security challenges and regional understanding.

This reorganization increased the use of “soft power,” yet it did not change the mission of SOUTHCOM dramatically. It still remained a combatant command funded by the Department of Defense. The reorganization primarily altered the structural organization of the command and replaced the Napoleonic J-Code system with an Enterprise Support System. The Enterprise system



The high-speed experimental boat Stiletto sits pierside in Mayport, Florida, June 3, 2009. The 88-foot long, 60-ton vessel was scheduled to deploy on June 13, 2009, under the operational control of U.S. Naval Forces Southern Command and U.S. 4th Fleet under the tactical control of Joint Interagency Task Force—South to conduct counter illicit trafficking operations. Stiletto is manned by a joint army and navy crew and includes an embarked U.S. Coast Guard law enforcement detachment.

Source: Department of Defense photo by Mass Communication Specialist 2nd Class Alan Gragg, U.S. Navy (released).

is more widely used in other government departments, so in theory, it would make interagency cooperation easier. The reorganization was short lived, however. Following the 2010 Haiti earthquake, new commanding general Douglas Fraser, U.S. Air Force, reverted back to the J-Code system because he felt that the massive deployment necessary for disaster relief would go more smoothly under the J-Code organization. Opinions were quite varied in the Department of Defense and interagency community about this decision. Many felt that a combatant command should not move away from traditional military organization, while others saw the reorganization as ushering in a new

era. Regardless, SOUTHCOM continues to be the face of U.S. military relations with other countries in a region vital to U.S. national security and economic prosperity.

Richard A. Hulver

See also Brazil; Caribbean; Central America; Colombia; Cuba; Drug Interdiction; Global War on Terrorism; Goldwater-Nichols Department of Defense Reorganization Act; Guantanamo Bay Prison; Haiti; Haiti, U.S. Intervention in; Humanitarian Intervention, Foreign; Organization of American States; Panama; Panama, U.S. Intervention in; School of the Americas; South America

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U.S. SPECIAL OPERATIONS COMMAND

The U.S. Special Operations Command (USSOCOM) is a unified combatant command with about 60,000 active-duty, National Guard, and reserve personnel from all four services, as well as Department of Defense civilians, with headquarters at MacDill Air Force Base in Tampa, Florida. It is commanded by a four-star officer who may be selected from any service. Like the other eight functional and geographical unified combatant commanders, the commander of USSOCOM reports directly to the secretary of defense.

Approximately two thirds of USSOCOM's personnel are permanently assigned, and the other one third rotate in and out from the four services' special operations commands: U.S. Army Special Operations Command, Naval Special Warfare Command, Air Force Special Operations Command, and Marine Corps Special Operations Command. Some of the best known service components of USSOCOM are the Army Special Forces and Army Rangers, Navy SEALs, Air Force AC-130 Gunship Squadrons and Pararescuemen, and Marine Corps Recon Teams and Scout Snipers.

Special operations forces (SOF) were generally assigned a low priority by conventional forces leaders and the Department of Defense bureaucracy during and immediately after the Cold War. However, following the attacks of 9/11 and subsequent wars in Iraq and Afghanistan, a new emphasis has been

placed on SOF assets and skills. Indeed, President George W. Bush designated USSOCOM as the lead combatant command for planning, synchronizing, and conducting operations against terrorist networks in the Global War on Terrorism.

Command History

As a consequence of two joint operations in the 1980s involving participation by U.S. military SOF, it became apparent that there existed serious problems in command and control and interoperability across the various services in general and among special operations elements in particular. Operation Eagle Claw, the failed 1980 attempt to rescue American hostages from Tehran—and the communications breakdowns among joint force elements during Operation Urgent Fury, the U.S. invasion of Grenada in 1983—together helped spur congressional action resulting in the Goldwater-Nichols Defense Reorganization Act of 1986 and the Nunn-Cohen Amendment to the National Defense Authorization Act of 1987. One consequence was the establishment of USSOCOM and its activation on April 16, 1987, at MacDill Air Force Base. General James J. Lindsay, U.S. Army, was its first commander.

USSOCOM is not dependent on army, navy, air force, or Marine Corps funding for its budget or to develop and buy new specialized equipment, supplies, or services. In a sense, it is a fifth branch of service: the most “purple” service in Department of Defense lingo—the most thoroughly “joint” of the unified combatant commands. Indeed, it operates the Joint Special Operations University at Hurlburt Field, Florida, to serve the professional military education requirements of SOF officers.

Core Mission Capabilities

In addition to its counterterrorism capabilities, USSOCOM is uniquely trained and equipped to accomplish a wide array of both combat and non-combat missions. Among the former are direct action, unconventional warfare, counterinsurgency operations, and counterproliferation of weapons of mass destruction. Noncombat missions include psychological operations, foreign internal defense, civil affairs operations, information operations, special reconnaissance, and security force assistance. Each SOF service component specializes in one or more of

these missions and, thus, contributes to the overall synergy of USSOCOM. For example, the U.S. Army has special psychological operations and civil affairs operations capabilities.

The navy and air force have special reconnaissance and direct action capabilities. USSOCOM assets have global reach, unique flexibility and adaptability, exceptional physical fitness, and the cultural sensitivities and linguistic abilities often lacking in conventional forces.

Recent and Ongoing Operations

Operation Enduring Freedom in Afghanistan and Operation Iraqi Freedom have resulted in sustained, ongoing commitments by USSOCOM. In congressional testimony on March 1, 2011, the then USSOCOM commander, Admiral Eric T. Olson, said that 85% of USSOCOM's deployed troops are working in the U.S. Central Command's area of responsibility, which includes countries in the Middle East, Egypt, and Central Asia. Other Geographic Combatant Commands, including the newest, U.S. Africa Command, have much smaller numbers of "assigned" or "attached" SOF assets. USSOCOM forces have participated in all U.S. military operations abroad since 1987, often clandestinely and behind enemy lines, including Persian Gulf operations Earnest Will (1987–1989) and Desert Shield and Desert Storm (1990–1991). They have been active in counterpiracy operations in Somalia, in the Balkans (Bosnia and Kosovo), and in postearthquake Haiti, where they focused on establishing and manning an air traffic control operation where none existed.

Future Prospects

In an era of asymmetric warfare and unconventional threats it is easy to predict that USSOCOM forces and capabilities will continue to be in high demand. As the U.S. government comes to terms with budgetary realities and the increasingly critical challenge of deficit and debt reduction, American conventional forces are more likely to see reductions than SOF if the current international security environment persists. Indeed, some sources have predicted a modest increase in USSOCOM to about 70,000 members. Even at that number, it would represent just over 3% of the total U.S. active-duty, reserve, and National Guard personnel strength.

SOF are likely to remain "high demand/low density assets" for the foreseeable future.

William L. Dowdy

See also Civil Affairs; Counterinsurgency; Covert Actions, Military; Global War on Terrorism; Goldwater-Nichols Department of Defense Reorganization Act; Guerrilla Warfare; Iraq Insurgency (2003–2011); Iraq War (2003); Nation-Building; Psychological Warfare (PSYOP); Rangers; SEALs, Navy; Special Forces, Air Force; Special Forces, Army; Special Operations, Strategy; U.S. Central Command; War in Afghanistan

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U.S. STATE DEPARTMENT

America's first cabinet department, established in 1789, was the Department of State. From small beginnings, the State Department has expanded dramatically since World War II. In 1938, the staff of the secretary's office numbered 21; in the 1970s, it exceeded 350. Now, there are some 7,000 officers, mostly employed overseas. In Washington, there are some 15,000 employees. Most are civil service and support personnel. In addition to Americans, the Department of State employs tens of thousands of Foreign Service nationals abroad. Though it ranks as America's smallest cabinet department, it's the most far flung, with personnel in some 200 posts around the world.

The State Department is the lead agency for the conduct of policy and interaction with foreign

nations, save in time of war (in wartime, there is a functional coequal relationship between the military theater commander and the ambassador). Ambassadors are the president's representatives in foreign countries. A practice developed in the 20th century of sending special envoys complicates, and, some argue, diminishes, the traditional role of the ambassador and the embassy.

Diplomacy in its broadest meaning is usually thought of as negotiation, representation, information gathering, and furthering state interests. Classic duties of an embassy include public diplomacy and commercial relations. The U.S. Information Service was reintegrated into the Department of State in 1998. The U.S. Commercial Service was spun off from the State Department in the 1980s and given to the Department of Commerce. At the same time, another foreign service was developed in the Department of the Treasury. The Department of Agriculture, the Federal Bureau of Investigation, the uniformed services, and the Central Intelligence Agency have had distinct services overseas since the 1950s. After the Cold War, the actual overseas duties, missions, and responsibilities of the United States—and by extension of the State Department—have exploded.

Secretary of State

In the early Republic, the position of secretary of state remained influential and served as a stepping-stone to the presidency. Thomas Jefferson, James Monroe, John Quincy Adams, and Martin Van Buren all held the office prior to their election to the presidency. The secretary of state and diplomats conducted much of the diplomacy abroad in an era when the president did not journey outside of the United States and when communication centered on correspondence transmitted by vessels and later by telegraphs.

President Woodrow Wilson broke precedent in his decision to personally lead the American delegation to negotiate the Treaty of Versailles in Paris at the end of World War I. Franklin D. Roosevelt conducted much of his diplomacy during World War II with British prime minister Winston Churchill and Soviet leader Joseph Stalin without Secretary of State Cordell Hull accompanying him in travels that took him to Canada, North Africa, and even the Soviet Union. Distrustful of the State Department,

Roosevelt often appointed special representatives who reported directly to him, such as Harry Hopkins who journeyed on several occasions to Great Britain and the Soviet Union.

The development of jet aircraft and satellite communication has allowed and even encouraged presidents to negotiate more directly with foreign governments and travel abroad. Harry Truman followed Roosevelt's example and personally negotiated at the Potsdam Conference with Churchill and Stalin in 1945. Dwight Eisenhower traveled abroad extensively. Presidents regularly engage in bilateral meetings abroad with foreign leaders and also attend the meetings of a host of multilateral organizations, such as the North Atlantic Treaty Organization.

In spite of greater presidential activism in foreign affairs, the roles of the secretary of state and the State Department in formulating and executing foreign policy increased under a series of influential and controversial secretaries—George Marshall, Dean Acheson, and John Foster Dulles. The creation of the National Security Council and the position of National Security Advisor have institutionally diminished the role of the State Department, however. Under Secretary of State Dean Rusk who served during the administrations of John F. Kennedy and Lyndon Johnson, and William P. Rogers under Richard M. Nixon, the State Department was often marginalized in the decision-making process on key matters of war and peace. Henry Kissinger, as National Security Advisor during Richard Nixon's first term in office, conducted such sensitive diplomatic negotiations as establishing the beginnings of diplomatic relations with the People's Republic of China without the knowledge of the State Department. He played a pivotal role formulating the policy of détente with the Soviet Union and overseeing the negotiations that ended the war in Vietnam. Even when named secretary of state in 1973, Kissinger continued to marginalize the influence of the State Department with regard to foreign policy decision making.

Tensions between the State Department and the National Security Advisor continued under the administrations of Jimmy Carter and Ronald Reagan. Cyrus Vance often clashed with Zbigniew Brzezinski over the direction of U.S. foreign policy with the latter seeking a harder line with the Soviet Union during the Cold War. In 1980, Vance resigned in protest after Carter launched an ill-fated raid to

liberate the American diplomats held hostage by the Iranian government. Not only did Vance oppose a military solution, he also had not been briefed in advance before the operation was to take place and had promised congressional leaders that they would be informed in advance of the use of military force.

Alexander Haig, Reagan's first secretary of state, clashed repeatedly with National Security Advisor Richard Allen and other senior members of the administration over leadership of foreign policy before resigning. His successor, George Schultz, opposed the sale of arms to Iran, but despite these objections, this policy was being carried out secretly by National Security Advisor Admiral John Poindexter and his staff. After the Iran-Contra scandal broke in 1987, Schultz's influence over the direction of American foreign policy increased and Colin Powell replaced Poindexter as National Security Advisor.

James Baker dramatically increased the influence of the secretary of state and State Department under the administration of George H. W. Bush. Baker, a longtime political confidant and advisor to George H. W. Bush before the latter assumed the presidency, played an important role in formulating policies that helped bring about the end of the Cold War. Baker also played a remarkably skillful role in bringing together a diverse international coalition to go to war against Iraq to support the liberation of Kuwait in 1990 that not only included traditional allies such as Canada, Great Britain, France, and Germany but even Syria.

The end of the Cold War and the successful conclusion of the Persian Gulf War led to a growing reluctance by the American public to support an activist foreign policy. Warren Christopher, Bill Clinton's first secretary of state, generally favored a cautious approach in both Yugoslavia and Rwanda, even when it became evident that major human rights abuses, even genocide, were taking place. Madeline Albright, the first woman to hold the office of secretary of state, favored a much more aggressive role in intervening in the former Yugoslavia and asserting American influence abroad. She also was skillful in gaining support within Congress for increased appropriations for the State Department.

Colin Powell served as George W. Bush's first secretary of state; the influence of secretary of state in shaping foreign policy would be diminished,

especially with regard to the approach of the war against Iraq. Vice President Richard Cheney and Secretary of Defense Donald Rumsfeld played dominant roles in building support with the George W. Bush administration and the wider public to go to war with Iraq in 2003. Moreover, Powell and the State Department had only minimal influence in shaping the planning for postwar Iraq. Condoleezza Rice, the former National Security Advisor during George W. Bush's first term, became secretary of state in January 2005 and served until the inauguration of Barack Obama on January 20, 2009.

New York senator and former first lady Hillary Clinton became the third woman to assume the position of secretary of state. Clinton had been a fierce rival for the presidency against Barack Obama in the 2008 election, and before her appointment, there existed skepticism regarding her effectiveness. As secretary of state, Clinton developed a close working relationship with President Obama and traveled extensively abroad to engage in personal diplomacy. In early February 2013, she resigned as secretary of state and returned to private life.

On February 1, 2013, John Kerry, the son of a career Foreign Service officer, became secretary of state. Like Hillary Clinton, Kerry came from the U.S. Senate and also ran unsuccessfully for president (in 2004 as the Democratic nominee against George W. Bush). Representing the Massachusetts in the Senate for 24 years, Kerry gained considerable experience as member and later chair of the Senate Foreign Relations Committee on a range of issues including nuclear arms control and the Middle East Peace process. A Vietnam Veteran, Kerry's political career began as an outspoken opponent of the war after completing his tour of duty as an officer in the U.S. Navy.

Organization of the State Department

In recent years, the State Department has become a mix of geographic (Africa; east Asia, south Asia, and central Asia; Near East; and Western Hemisphere international organizations) and functional bureaus (Administration, Arms Control, Budget and Planning, Consular Affairs, Diplomatic Security, Legislative Affairs, Overseas Building Operations, and Public Affairs), each headed by an assistant secretary of state. The geographic bureaus and country desks are responsible for the daily monitoring

of events around the world. The functional bureaus dealing with congressional relations, intelligence and research, scientific and technological affairs, international organizations, drugs, human rights, politico-military affairs, gender issues, terrorism, and disasters, among others, are responsible for policies that stretch not only across countries and regions but also across other U.S. departments and agencies involved in foreign policy.

American Foreign Service officers (FSOs) are generally recruited through one of America's most arduous and competitive examinations. In recent years, about 20,000 applicants take the exam annually. In the end, only some 200 to 800 people are listed for possible openings in order of rank. There is a 5-year probation for the several hundred who enter each year. After 5 years, more than 90% remain in the service until retirement.

FSOs' work is divided into specialties, with some 1,000 generalists and another 1,000 distinct U.S. Agency for International Development (USAID) FSOs. USAID—the development arm of the State Department—is dramatically undermanned at half the levels of 30 years ago. A 2008 report by the American Academy of Diplomacy and the Stimson Center calculated that USAID required twice the current number of officers to achieve field effectiveness. In contrast to the Cold War era, there were but six engineers at USAID at the end of the G. W. Bush administration and 17 agriculture specialists. Many officers left for higher pay with contractors who worked in development. Development programs in the field were traditionally the responsibility of USAID, but since 2005, the Department of Defense has taken up the slack with Directive 3000, making nation-building a national mission, complete with work in assisting private enterprise, building judicial systems, setting up infrastructure, and promoting public education as an alternative to arms.

The State Department also undertakes wider missions, including disaster relief and protecting individuals who have been the victim of mass violence or genocide. The cost of the State Department's overseas aid, disaster relief, public diplomacy, and overseas work in general is less than 5% of what is spent on defense, some \$50 billion in all. The reduction in State Department funding has had negative ramifications for many of its officers. As America withdrew from Iraq and Afghanistan, for instance,

several dozen intensive provincial reconstruction teams were left underfunded, undermanned, and unprotected.

Another lingering problem with overseas work is the inadequate language competence of many Americans overseas, including that of both diplomatic and, increasingly, military officers in diplomatic roles. Foreign Service posts in so-called hard-language areas are often understaffed. All officers 5 years into service have had some language training. Fewer know the languages that take years to master and that are in the most demand. The Government Accountability Office recently found that more than 60% of positions in hard-language areas were filled by people who could not function without an interpreter.

Ideally, the State Department's institutional position ensures that the foreign policy establishment is operating within some consistent policy framework. However, the State Department's contemporary ineffective policy coordination results from a mismatch between the State Department's size and that of the foreign affairs bureaucracy to be coordinated. Moreover, its first function, of diplomacy—the negotiation and resolution of disputes by means of treaties and other agreements—has fallen from consistent use and repute. In the Cold War and the Global War on Terrorism, an emphasis has been placed on the use or threat of force rather than on negotiation. This has served to marginalize the State Department's role.

Personnel Problems at State

During the earliest decades of the Cold War, the Department of State underwent rapid expansion that left it internally incoherent and demoralized and, ironically, overstaffed. There were too many people pursuing too little substantive work in a bureaucracy that demanded advancement or obliged retirement. Many in the State Department tried to resist that growth. In 1958, the Ambassador to Brazil, Ellis Briggs, learning that he was about to be the recipient of a new science attaché, cabled the State Department, "The American embassy in Rio de Janeiro needs a science attaché the way a cigar store Indian needs a brassiere." Briggs's response was to no avail; within 10 years, the embassy had two science attachés.

In the early 1950s, the State Department was plagued by two personnel systems: first, an elite

group of FSOs stationed abroad who represented presidential policy and, second, a number of state-employed civil service employees responsible for administration, economic aid, and some intelligence work. When these two systems were merged, many employees found themselves unprepared and ill equipped to perform their new duties. Career diplomats—"generalists" by training and disposition—were shifted to technical jobs for which they were frequently ill prepared. FSOs lost overseas allowances and the opportunity to prove that they had political skills that still constituted the essential criteria of promotion. The purpose of the merger, it was said, was to ensure that American FSOs did not "go native," an endemic worry for many in Congress and the press.

In the heyday of Senator Joseph McCarthy's search for communists at the State Department, fear shattered Foreign Service morale. Many Asian experts were mustered out in the search for traitors. Even the military architect of America's victory in World War II, George Marshall, a model public servant who was also called from retirement to be secretary of state where he led the charge to rescuing Europe with a program that bears his name, was labeled a traitor by vocal elements of the Republican right. Dwight Eisenhower had been Marshall's military aide and speechwriter, but Eisenhower never defended his mentor and friend.

In the 1960s, the ghost of McCarthy walked the halls of Foggy Bottom. The mantra for officers entering the halls was "There are old officers and there are bold officers, but there are no old, bold officers." Fear and caution, endemic to most bureaucracies, was palpable, especially in older officers. Since the job of a veteran FSO has almost no civilian counterpart, officers in their middle or late 40s knew that they were at a real disadvantage when they contemplated any outside job. Skills in bureaucratic survival and the diminishing grasp of perhaps a half dozen foreign languages did not seem to be fungible assets in the private sector. Pensions and salary after 20 years in the Foreign Service were less than what a contemporary military officer might make.

The 1980 Foreign Service Act revised promotion and retention standards based on "performance." But there were still not enough jobs. Each FSO, according to the 1980 reform, had 20 years

to ascend the ladder to the highest rungs. If he or she did not, he or she was "retired." For the 1970s and 1980s, for all intents and purposes, diplomacy had become a 20-year career. The results affected the esprit de corps of older officers who considered themselves, with some justification, part of "a last great aristocracy." Promotions jammed up. Since the Foreign Service emphasized promotion or resignation after a few years in each grade, the pressure for good jobs (and good reports from one's superiors) became excruciating. The situation was made worse by the expansion of political appointees as ambassadors in the later part of the 1960s, and even more damagingly in the 1980s. Perversely, recruitment actually accelerated in the mid-1960s, and again in the mid-1980s. Thus, there were even more people chasing fewer good jobs.

This glut of FSOs lasted until the end of the Cold War. The situation did not come into balance until the end of the Soviet era when some 20 new nations appeared just when the State Department had fewer resources and manpower to cover them. For most of the 1990s, missions expanded but resources all but collapsed. After September 2001, personnel shortages became critical. Two wars soaked up more than 1,000 FSOs, some in continuous rotation through war zones for long stints without families. The Foreign Service, for the first time in two generations or more, was desperately undermanned.

Post-Cold War fiscal constraints during the 1990s reversed the chronic issue of overqualified and underemployed officers. Funding fell for nearly a decade. "Core" diplomats were given responsibilities ranging from epidemics to the detritus of dealing with the consequences of the Soviet collapse. Twenty new embassies were opened, principally in the states of the former Soviet Union and Yugoslavia, and staffs were slimmed or, in the case of Western Europe, closed. Overall, staff levels have remained remarkably consistent since the end of the Cold War, with a slight bump during the prosecution of two wars and the Global War on Terrorism.

An Uncertain Future

In the 21st century, with jobs more abundant, one would think that the "crisis at State"—a 35-year-old phenomenon—had abated. But fiscal austerity, the lack of a domestic constituency, and a succession

of hostile Congresses left the State Department very much orphaned. Secretary of Defense Robert Gates became an ally of Secretary of State Hillary Clinton. Together, Gates and Clinton embraced the cause of civilian soft power programs, and even Chairman of the Joint Chiefs, Admiral Mike Mullen, joined in a call to transfer monies from the Department of Defense to the long-suffering State Department. In early 2013, a new team headed the State and Defense Departments, respectively, with John Kerry at Foggy Bottom and former Republican Senator Chuck Hagel of Nebraska at the Pentagon. Although from different sides of the political aisle, both men served in Vietnam and remained cautious about deploying American forces abroad.

James A. Nathan

See also Congress, U.S.; Defense, Department of; Gates, Robert; Marine Guards, Embassy; National Security Council; Nation-Building; Powell, Colin; President as Commander in Chief; Soft Power

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U.S. STRATEGIC COMMAND

U.S. Strategic Command (STRATCOM) is the Unified Combatant Command responsible for strategic nuclear, space, cyber, and intelligence surveillance and reconnaissance planning and missions. STRATCOM was established in 1992 by order of President George H. W. Bush and is commanded by General Robert Kehler from its headquarters near Omaha, Nebraska.

STRATCOM traces its origins to the Second World War and the U.S. Army Air Forces. As effective strategic bombardment platforms emerged during the war, the long-range, large-scale attack of enemies by air became a possibility. Fleets of strategic bombers could deliver large amounts of

conventional weapons, inflicting severe damage, as seen in the 1945 American firebombing campaign of Japan's urban centers. During the same period, the development of atomic weapons resulted in greater implications for the use of strategic bombing. Recognizing this new capability, the Army Air Forces established Strategic Air Command (SAC) in 1946. Defense planners envisioned that the new command would accrete strategic air power assets within one body, simplifying the unity of command and building an organizational structure that would be able to craft and execute strategic nuclear and conventional war plans.

SAC Leaders and the Development of a Reliable Plan for Nuclear War

SAC's first commander was General George Kenney, a veteran of two World Wars. Kenney remained in command following the establishment of the U.S. Air Force in September 1947. Kenney was criticized for a lackadaisical approach to leadership of the command and the atrophy of any significant ability to conduct nuclear or mass conventional bombing operations and was replaced in the fall of 1948 by Lieutenant General Curtis E. LeMay, who the American public knew best as the man responsible for the firebombing of Japan during the Second World War.

Under LeMay, the command grew in size and ability. Through LeMay's leadership, the command developed or implemented many of the concepts and practices that would come to define Cold War nuclear operations, aspects of which survive to the present day. Most notably, LeMay insisted on a constant state of readiness for SAC's nuclear forces and personnel and fostered a palpable sense of urgency among his subordinates that bordered on paranoia. More tangibly, during LeMay's tenure as commander the transfer of nuclear weapons from the Atomic Energy Commission to SAC bases took place in 1954. LeMay advocated for and ensured new jet bombers like the B-47, and the still-serving B-52 bomber and KC-135 aerial tanker were introduced into the fleet. At the same time, LeMay developed a rigid program of command and control of nuclear operations, supported by extensive planning for countless scenarios under which nuclear war might occur.

Despite the rigorous efforts of LeMay and his successor, General Thomas S. Power, to prepare SAC to execute a nuclear war in myriad scenarios, confusion remained. SAC was only responsible for war planning within the command itself. The leaders of other commands and the staffs of the other armed services independently developed and prepared to execute their own war plans. By 1960, this lack of cooperation among the services and warfighting commands was apparent. Fratricide and duplicitous effort, as a result of multiple nuclear weapons being independently delivered unknowingly to the same target by separate services, topped the list of concerns. The Joint Strategic Target Planning Staff (JSTPS) was created to address these uncertainties.

JSTPS, SIOP, and SAC as a Specified Command

Established in 1960, JSTPS was designed to synchronize the forces of the armed services in a nuclear war. The JSTPS was housed in the SAC headquarters but reported to the Joint Chiefs of Staff. The staff included military representatives of the army, navy, Marine Corps, and air force, with a number of the air force personnel simultaneously serving as SAC staff.

JSTPS was responsible for producing the Single Integrated Operations Plan (SIOP), which was designed to prevent interservice fratricide and mission duplication during a nuclear war. The first SIOP was drafted in 1960, but covered Fiscal Year 1962, and was known as SIOP-62. A new SIOP was drafted for each fiscal year and described the essential details of each strike, as well as individual service responsibilities in the event of a nuclear war. The annual SIOP served as the cornerstone of Cold War planning for a nuclear exchange. Whereas SAC had created a reliable means by which to conduct a nuclear war, JSTPS and SIOP formed the nucleus of the national enterprise for carrying out such a war.

While JSTPS provided nuclear war plans, it was not a warfighting command, and it would not execute the plans it built. In addition to being a U.S. Air Force Major Command, from 1955 onward SAC was designated a Specified Command, serving as both a Combatant Command and an air force organization. SAC was given the responsibility for the command and control of a nuclear war. As such,

SAC would oversee the execution of a JSTPS-crafted war plan and coordinate the American strategic nuclear offensive for all the armed services in the event of a nuclear war. This arrangement would remain intact through the end of the Cold War in the early 1990s. With the conclusion of that conflict, however, there would be changes. During the post-Cold War reorganization of the U.S. military, STRATCOM was created to fully vest strategic nuclear planning, command, control, and execution in a true joint command.

The Birth of STRATCOM and Its Mission: 1992–2002

By the early 1990s, the Soviet Union was clearly in decline. As the Soviet Union quickly lost its ability to control satellite states in Europe and the Soviet government's ability to pay for expensive military programs abated, diplomatic and military tensions between the two superpowers eased. Given these dramatic changes and the internal interest of the United States in ending the military tensions and fiscal costs of the Cold War, George H. W. Bush directed the establishment of STRATCOM, effective June 1, 1992. This event would coincide with the simultaneous disestablishment of SAC. A provisional STRATCOM staff was established in 1991 to begin building the new command and to ensure the transfer of mission responsibility to the new Unified Command without loss of capability.

From its inception, STRATCOM's mission has been to oversee the planning and, if necessary, execution of a nuclear war. With the drawdown in military forces in the 1990s, particularly nuclear-related forces, STRATCOM assumed the majority of the command and control responsibilities previously held by SAC. In essence, STRATCOM became a singular embodiment of the separate mission of SAC and JSTPS.

Contemporary Mission, Organization, and Operations: 2002 to the Present

From its 1992 establishment until 2002, STRATCOM was almost exclusively a nuclear command, but with the 2002 disestablishment of U.S. Space Command and the assumption of that command's duties, STRATCOM diversified its mission set and roles. In addition to its traditional roles, space operations became an area of focus,

as well as the mitigation of threats posed by the rogue use of weapons of mass destruction, ballistic missile defense, strategic intelligence, surveillance, reconnaissance, and, eventually, cyber operations. Although initially envisioned as a predominantly nuclear command, STRATCOM has become the manager for the missions and functions that are not readily contained to a particular geographic region. STRATCOM is organized to support these missions.

Organized as a “Joint Staff” (see Table 1), the headquarters staff comprises members of each of the armed services, Department of Defense civilians,

select members of other government agencies, and contractors. Directorates are organized according to function.

At STRATCOM’s headquarters, military and civilian personnel work in the underground Global Operations Center, monitoring the global battle space, ready to command and control American forces engaged in a nuclear conflict. During the Cold War, the Global Operations Center housed what was often referred to as the “War Room,” the core of SAC operations. The Global Operations Center continues to provide a secure, hardened facility where the STRATCOM commander and staff can execute national policy despite the chaos of a nuclear exchange.

Each of the armed services has established a component command that provides apportioned forces to STRATCOM. The largest share of forces comes from the air force and navy, which share responsibility for the three major components of the U.S. nuclear arsenal, also known as the nuclear “triad” (see Table 2).

The army and Marine Corps also contribute forces to STRATCOM’s mission, though on a smaller scale, as neither service has nuclear weapons. U.S. Army Forces Strategic Command and Marine Corps Forces U.S. Strategic Command are responsible for support to STRATCOM’s mission. Most notably, the U.S. Army Forces Strategic Command provides the fielded forces responsible for interception of ballistic missiles threatening the United States. Given the recent emphasis on the

Table 1 Joint Staff Organization

J-0	Commander and his immediate staff
J-1	Personnel and manpower
J-2	Intelligence
J-3	Operations
J-4	Logistics
J-5	Plans/planning
J-6	Communications
J-7	Mission support
J-8	Organizational resources/requirements
J-9	Strategic analysis of command
J-10	Reserve personnel, management, and support

Table 2 Nuclear Triad Description

	<i>U.S. Air Force</i>		<i>U.S. Navy</i>
Command	Air Force Global Strike Command	Air Mobility Command	Fleet Forces Command
Location	Barksdale Air Force Base, Louisiana	Scott Air Force Base, Illinois	Norfolk Naval Station, Virginia
Responsibilities	First two legs of the nuclear triad • Strategic nuclear bombers • Intercontinental ballistic missiles	Worldwide aerial refueling Transporting of material Provides tankers to support Air Force Global Strike Command’s bombers on an as-needed basis	Third leg of America’s nuclear triad • Submarines armed with nuclear-capable submarine-launched ballistic missiles

cyber mission, both the army and marine component commands, which contribute to this mission, are likely to see an increased role in STRATCOM operations.

A Sub-Unified Command was created in 2010 for cyber operations and is known as the U.S. Cyber Command (CYBERCOM). Though attached to STRATCOM, CYBERCOM is commanded by a four-star general or admiral and is, in many ways, an independent actor. In recognition of its critical mission, there are increasing calls for CYBERCOM to be detached and made a Unified Command equivalent to STRATCOM. For now, national responsibility for cyber operations remains under the ultimate purview of STRATCOM.

Following its 2002 reorganization, command and control of the various functional areas overseen by STRATCOM were broken into more narrowly focused operational organizations. The new subcommands were given the title of Joint Force Component Commands (JFCC) and assumed joint-level responsibility for the coordination of the individual armed service components' contributions to a particular mission.

Four JFCCs were created:

1. *JFCC-Global Strike: Responsible for strategic deterrence and global strike planning and execution*
2. *JFCC-Space: Plans, coordinates, and executes U.S. space operations*
3. *JFCC-Integrated Missile Defense: Oversees the national ballistic missile defense mission, including the planning and coordination of a response to an attack*
4. *JFCC-Intelligence, Surveillance, and Reconnaissance: Serves as the coordinating body and clearinghouse for strategic intelligence, surveillance, and reconnaissance issues*

Task Forces are created on an as-needed basis for specific missions or functions. Current task forces include the ones dedicated to airborne command and control, aerial refueling, intercontinental ballistic missiles, submarine-launched ballistic missiles, and bombers and reconnaissance. From 2004 to 2010, there was a task force dedicated to the cyber mission, which was eliminated with the establishment of CYBERCOM. In the event of war, it would be the

task forces that would carry out STRATCOM's plans. The task force construct provides STRATCOM flexibility in building and employing forces.

In addition to the JFCCs, two centers were also created. The first of these is the U.S. Strategic Command Center for Combating Weapons of Mass Destruction, located in northern Virginia at Fort Belvoir. The intent of this center is to provide a knowledge base and expertise that can be leveraged to prevent the international spread of weapons of mass destruction. The second center is the Joint Warfare Analysis Center, also located in Virginia, at Naval Support Facility, Dahlgren. The Joint Warfare Analysis Center provides STRATCOM, as well as other commands, with technical and scientific expertise that can be applied to problems facing commanders and their organizations.

Commanders

The commander of STRATCOM can come from any of the armed services and, like the Department of Defense's other Unified Commands, holds the rank of four-star general or admiral. STRATCOM's first commander was air force general George Butler, who relinquished command to the organization's first navy leader, Admiral Henry Chiles, in 1994. On Chiles's departure in 1996, one of STRATCOM's most notable commanders was appointed, air force general Eugene Habiger. Though Habiger was assigned to SAC for much of his air force career, Habiger became known and respected for his emphasis on deescalating nuclear tensions and is seen as one of STRATCOM's most successful commanders.

In the post-9/11 era, two unique individuals served as commanders of STRATCOM: marine general James Cartwright, the only Marine to serve as the commander of STRATCOM, and air force general Kevin Chilton. Both leaders' appointments were questioned by some as neither officer had significant experience in nuclear operations. Ultimately, both were considered excellent choices and their periods in command were overall successes. In part, these officers were selected to signal a shift in command priorities from the nuclear-centric mind-set that had dominated the command to one that more broadly considered the concept of global strategic operations and the growing variety of missions that are under STRATCOM's purview. In the wake of a

recent series of air force nuclear errors, which took place outside of STRATCOM's responsibility, policymakers demanded a greater emphasis on nuclear readiness within the Department of Defense. As a result, it is likely that, in the immediate future, subsequent STRATCOM commanders will be drawn from the ranks of nuclear-experienced officers.

STRATCOM's current commander, air force general Robert Kehler, previously served as the deputy commander of the organization. Kehler's selection marked a return to the practice of selecting a commander with significant background and experience in nuclear operations. Kehler spent much of his air force career in intercontinental ballistic missile operations, but he is unique as the first air force officer to command STRATCOM who was not a pilot.

Notable Operations

Unlike the other Unified Commands, STRATCOM does not regularly engage in shorter duration, high-intensity operations. Instead, STRATCOM is primarily concerned with long-term monitoring or readiness missions. From 1992 to the present, STRATCOM has successfully carried out the task of global nuclear deterrence. Though not considered a singular operation in the traditional sense, the 20 years of successful nuclear deterrence provided by the men and women of the command has been a silent hallmark of the post-Cold War period. Additionally, despite continuing policy and military interest in de-emphasizing nuclear warfare, STRATCOM has increased American capability in that realm.

Similar to the nuclear deterrence mission, the 2002 assumption of U.S. Space Command's operational responsibilities, which included cyber security, means that STRATCOM has been responsible for monitoring and protecting American cyber resources. This mission was first executed through Task Force-Computer Network Operations and eventually became part of CYBERCOM. This mission continues as CYBERCOM's core focus. The specifics of these operations are not public due to security and classification issues.

One significant operation stands out: Operation Burnt Frost. In 2008, STRATCOM completed a well-publicized mission when President George W. Bush made the decision to shoot down an errant satellite that was in an uncontrolled orbit around

earth. Responsibility for this mission was given to planners at STRATCOM. Drawing on forces from at least three of the armed services (army, navy, and air force), STRATCOM successfully executed the operation. STRATCOM's success in orchestrating this operation was an indication of the growth and maturity the command had experienced since its assumption of duties, besides the field of nuclear deterrence and operations, beginning in 2002.

The Future

Though the Cold War ended more than 20 years ago, STRATCOM's primary mission of nuclear deterrence and operations will remain an area of national emphasis for the foreseeable future. In the coming decades, it is likely that this mission will be ramped down, in accordance with international treaties designed to reduce or eliminate nuclear weapons arsenals. At the same time, it is likely that STRATCOM will increasingly focus on long-range, conventional strategic strikes and cyber security. As long as missions exist that cross the geographic boundaries of the other Unified Commands and are of critical importance to the security and survival of the United States, there will be a need for STRATCOM.

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U.S. SUPREME COURT

Article III of the U.S. Constitution establishes the Supreme Court of the United States but says little else about it. The Constitution also gives Congress the right to declare war and gives the president the title of commander in chief. Over the years, the Court has been hesitant to intervene in military matters, preferring to leave them to the other branches. Nevertheless, it has rendered some important decisions in this area, which will be highlighted in this entry.

Early Decisions

During the tenure of Chief Justice John Marshall, the Court rendered many historic decisions. One of its less-noticed ones was nonetheless of importance to the military. In *Martin v. Mott* (1827), it looked at a clause in Article I, Section 8, of the Constitution giving Congress the power to call forth a state militia and place it under federal officers. Congress had delegated that power to the president, and the Court upheld that delegation because events occur while Congress is not in session.

The aftermath of the Civil War produced several decisions involving the military. In *Ex Parte Milligan* (1866), the Court overturned a conviction and death sentence given to a civilian by a military

tribunal authorized by the president because the civil courts were still functioning in that area. In *Georgia v. Stanton* (1868), the Court refused to issue an injunction to prohibit the secretary of war and two generals from enforcing the Reconstruction Acts. It held that the matter was a political question to be decided by the political branches of the government. Similarly, in *Ex Parte McCardle* (1868), the Court upheld Congress taking away its jurisdiction to hear an appeal from someone who had been tried and convicted by a military commission, as it said that Congress has control over the cases the Court may hear on appeal.

World Wars

World War I, on the other hand, saw only one decision involving the military, but it was an important one because the issue was about the constitutionality of conscription (the draft). There was a draft during the Civil War, but the Supreme Court heard no case concerning it. In 1917, Congress passed the Selective Draft Act, and there were a series of cases challenging it. The Court decided them jointly in the 1918 *Selective Draft Law Cases* and, to nobody's surprise, upheld it unanimously because of the power given to Congress in the Constitution to raise and support armies. As the Court said, "What good was it to be given a power and then have no way to enforce it?" Among the more interesting claims by opponents challenging the law were that it was involuntary servitude, thus violating the 13th Amendment, and it violated the First Amendment prohibition on governmental establishment of religion due to its exemption of ministers and theology students.

World War II, on the other hand, had several decisions involving the military. In the 1942 *Ex Parte Quirin* case, the issue was how President Franklin D. Roosevelt opted to try eight Nazi saboteurs captured after landing by submarine in the United States. They had on them devices to blow up buildings, bridges, and railroad centers, all of which were on lists they carried. Roosevelt ordered that they be tried by a military tribunal, and they were convicted of four charges involving violations of the law of war. Six were sentenced to death and two to imprisonment. A unanimous Court upheld the president's power to create military tribunals for offenses such as these due to various laws

passed by Congress under the war powers in the Constitution.

Next came the famous cases involving the 112,000 Japanese in the United States, of whom some 70,000 were American citizens. Roosevelt issued an executive order allowing military generals in charge of military areas to do what they deemed best to keep those areas secure. Congress later passed a law saying the same thing and providing penalties for those who disobeyed. The general in charge of the west coast at first decided to impose a curfew from 8 p.m. to 6 a.m. for all persons of Japanese ancestry as well as for German and Italian nationals. The Court in 1943, in *Hirabayashi v. United States*, unanimously upheld the curfew under the war powers for the president and Congress in the Constitution to prevent espionage and sabotage, saying that the military had to be able to use its discretion in executing those powers. Similarly, in the 1944 case of *Korematsu v. United States*, a 6–3 decision upheld a general’s order that all persons of Japanese ancestry living on the west coast be sent to internment camps. Once again, the reasoning was based on presidential and congressional war powers, with the military having discretion in deciding what was best for security purposes. The dissenters, on the other hand, thought the exclusion was based on race, not military necessity. The final case was the 1944 *Ex Parte Endo*, in which a unanimous Court ruled that once a person’s loyalty had been proven, that person could not be kept in an internment camp. Otherwise, race rather than military necessity would be an unconstitutional reason.

The last two cases stemming from World War II occurred in 1946. *In re Yamashita* was about whether a Japanese general, sentenced to death by a military tribunal because of the atrocities committed by his troops in the Philippines, should have been tried instead by civil authorities. The Court upheld his conviction in a 7–2 decision, saying that the Constitution did not apply to him as far as rights or civil courts were concerned. All that he was entitled to was to have his conviction appealed to a higher military body. *Duncan v. Kahanamoku* (1946) looked at the issue of the setting up of a military government to rule the Hawaiian Islands the day after the Japanese attacked Pearl Harbor. From that time until March 1943, the military ran everything, including trials. At that point, civil matters, but not criminal ones, were turned over to civil authorities.

Criminal matters stayed with the military until October 1944. The Court ruled that the entire length of the military rule was illegal. Congress, in setting up the government of Hawaii in the 1900 Organic Act, allowed for military rule only in cases of actual invasion or rebellion. Since neither had occurred there, the law was violated.

From the 1950s Through the 1990s

In the 1955 case, *United States ex rel. Toth v. Quarles*, the Court looked at the military justice area, in this case a section of Congress’s 1950 Uniform Code of Military Justice, which allowed a person who had been discharged to be subsequently court-martialed for something done while in service. The Court ruled the section unconstitutional as it was conflicting with Article III of the Constitution, which set up the federal courts with procedural safeguards not found in military tribunals. It was unimpressed with the arguments that the president as commander in chief and Congress in making rules for the armed forces could authorize anything such as this. Similarly, in the 1958 case of *Trop v. Dulles*, the Court struck down a law that allowed the taking away of citizenship for desertion from the armed forces, reasoning that since the 14th Amendment confers citizenship on those born in the United States or in its territories, the government cannot take away that citizenship. Also, even if it did have that right, it could not be upheld in this instance because it did not derive from Congress the power to wage war. A closely related case was *Kennedy v. Mendoza-Martinez* in 1963, where a 7–2 decision struck down sections of the 1940 and 1952 Nationality Acts that had allowed the government to take away citizenship without a trial of those who stayed out of the country in time of war to evade the draft. The rationale was that the acts were penal in nature and thus require the procedural safeguards found in the Fifth and Sixth Amendments. These safeguards would include rights such as a grand jury, a petit jury, and the right to counsel. The dissenters argued that the sections were a valid exercise of Congress’s war powers.

In the 1965 case, *United States v. Seeger*, the Court clarified the definition of being a conscientious objector and therefore exempt from the draft. In the draft laws of 1917, 1940, and 1948, Congress made provisions for conscientious objectors, in the

last law basing it on a person's religious training and belief, which was defined as "an individual's belief in a relation to a Supreme Being." The Court held that this belief did not just mean a belief in God in the traditional meaning but also meant "sincere and meaningful belief which occupies in the life of its possessor a place parallel to that filled by the God of those admittedly qualifying for the exemption." The Court, however, would not tolerate people burning their draft cards in public to show opposition to the war in Vietnam. In the 1968 case of *United States v. O'Brien*, an 8–1 decision upheld a 1965 law that made it a crime to knowingly destroy a draft card. It came under Congress's power to raise and support armies, and Congress had the right to see that its method of doing so—that is, the draft—would not be defeated by having the draft cards destroyed. It was an important decision in favor of the government and the Selective Service system.

In *Gutknecht v. United States* (1970), the Court ruled against the head of the Selective Service System who, 3 years earlier, had recommended that draft boards around the country immediately put into the military those who had illegally demonstrated against the draft, even if it meant reclassifying them. Some 500 students found themselves in the army in 1968 due to the cancellation of their deferments, but the Court ruled that the law did not authorize the Selective Service System to use immediate induction as a disciplinary or vindictive measure. Then, in the 1971 case *Gillette v. United States*, the Court heard another case involving conscientious objectors, this time concerning those who did not oppose war in general but did object to the Vietnam War. The Court held that under the law, conscientious objector status could only be given to those who oppose all wars, saying that the government had to have a fair draft system, one that was administratively workable, and the system set up for conscientious objector status was neutral and secular.

With the influx of women into the military, the Court decided two cases dealing with their status. In an 8–1 decision in the 1973 case *Frontiero v. Richardson*, the Court said that the military had to treat married women the same way as married men with regard to fringe benefits. In this case, a man in the military automatically received housing and health benefits for his civilian wife, but a woman in the military, to receive the same benefits for her

civilian husband, had to show that he was dependent on her for at least half the family's income. In the 1975 case *Schlesinger v. Ballard*, the Court upheld a regulation that allowed a woman who was passed over twice for promotion in the navy to stay in service for 13 years, whereas a man passed over twice for promotion could stay only for 9 years. The Court's rationale was that there was greater opportunity for promotion for men than for women.

Selective Service v. Minnesota Public Interest Research Group in 1984 was another case concerning the draft. The Court upheld a 1983 federal law that withheld financial aid from college students who did not register for the draft. The Court said that nobody was being punished. Any student eligible for financial aid could obtain it by registering. None of the students involved in the suit had tried to register. This was followed in 1985 by *Wayte v. United States*, in which the Court upheld the government's decision to prosecute those who publicly announced that they were not registered for the draft or that they were not going to register, as well as nonregistrants whose names were reported to the government. In this case, the one that involved 13 of the vocal nonregistrants, the rationale was once again the government's interest in raising and supporting an army.

The 1986 case of *Goldman v. Weinberger* involved the First Amendment rights of Goldman, who was a commissioned officer in the U.S. Air Force, an Orthodox Jew, and an ordained rabbi. In a 5–4 ruling, the Court upheld an air force regulation stating that only armed security police could wear headgear indoors. The Court found that the air force's strong interest in discipline justified the strict enforcement of its uniform dress requirements, and thus, it was constitutional to prohibit Goldman from wearing a yarmulke while on duty. Uniforms encourage unity, and therefore, the regulation was a reasonable one. The dissenters on the Court argued that one of the functions of the First Amendment is to protect the rights of religious minorities and that the air force did not show that the costs involved in accommodating Goldman's request would be significant. The military must abide by the Bill of Rights just as civilians must.

The 1990 case of *Perpich v. Department of Defense* was a unique one involving control over the National Guard. In 1952, Congress said that

in order for the federal government to activate the National Guard, it must get the consent of the state's governor. However, in 1986, Congress partially repealed that requirement, stating that a governor could not withhold consent because of any objection to the location, purpose, type, or schedule of such duty. The governor of Minnesota objected to his troops being sent on a 1987 training mission to Central America, but a unanimous Court upheld the federal government. Its rationale was that the Constitution allows Congress to order the National Guard to active federal duty for the purpose of training outside the United States without the consent of the governor or the declaration of a national emergency. The Guard loses its state status when called to active duty. Therefore, since the original governor's veto was not constitutionally compelled, its partial repeal was valid.

In the 1998 *United States v. Scheffer* case, the issue was the admission of a polygraph test to prove innocence. An airman had used the polygraph test to show that he had not used drugs, but the test results were inadmissible as the Military Rules of Evidence do not allow polygraph evidence in court-martial proceedings. In an 8–1 decision, the Court agreed that the polygraph results should be inadmissible, given that as a defense is possible without it, defendants can still testify in their own behalf, and there is no consensus that polygraph evidence is reliable.

The 21st Century and the Global War on Terrorism

The terrorist attacks of September 11, 2001, resulted in the United States declaring a Global War on Terrorism, and in the process of fighting in places such as Iraq and Afghanistan, the country captured hundreds of people it designated as enemy combatants. It decided to house them at Guantanamo Bay, an area in Cuba under the control of the United States. The legal issue that subsequently arose was whether these detainees could challenge their detention in habeas corpus motions to federal courts. In 2004, the Court, in a 6–3 decision in the case of *Rasul v. Bush*, held that federal judges do have jurisdiction to consider the detainees' petitions. The basis for the decision was that Guantanamo Bay was a territory in which the United States exercises exclusive

jurisdiction and control under its 1903 lease. The dissenters felt that the scope of the habeas corpus writ was being extended too broadly.

Another decision dealing with habeas corpus came in 2004 in the case of *Hamdi v. Rumsfeld*, which concerned the 2-year-long detention of an American citizen who was designated an enemy combatant. Although all the justices but one held the detention invalid, they were fragmented as to their reasoning. Justice Sandra Day O'Connor, in an opinion joined by Chief Justice William Rehnquist and Justices Stephen Breyer and Anthony Kennedy, wrote that the detention was permissible if the designation as an enemy combatant proved correct, but that Hamdi's inability to appear before a judge, challenge the government's evidence, and tell his side of the story deprived him of his constitutional right to due process. The plurality opinion said that there was statutory authority for Hamdi's detention, however, under the Authorization for Use of Military Force passed after 9/11, which authorized "all necessary and appropriate force" to pursue and prevent international terrorism. Justice David Souter, joined by Justice Ruth Bader Ginsburg, agreed with the plurality opinion that Hamdi should have had due process protections to challenge his status but argued that the detention had no legal basis as a matter of statutory authority. Justice Antonin Scalia, in a dissenting opinion joined by Justice John Paul Stevens, said that the detainee was entitled to a habeas corpus writ unless the government prosecuted him for treason or Congress exercised its constitutional authority to suspend habeas corpus. In a separate dissent, Justice Clarence Thomas argued that the detention was constitutional under the federal government's war powers.

In 2006, the Court, in the case of *Rumsfeld v. Forum for Academic and Institutional Rights*, unanimously upheld a 2004 federal law known as the Solomon Amendment requiring access to universities for military recruiters at least equal in quality and scope to that of other employers. Schools that do not comply risk forfeiting grants to the entire university from eight federal agencies. The case was brought by a coalition of law schools. The Court ruled that the law did not violate the free speech rights of universities that objected to the military's exclusion of homosexuals who are open about their sexual orientation under the "Don't Ask, Don't Tell" policy then

in effect. The law affects what law schools must do, not what they may or may not say. It neither limits what law schools may say nor requires them to say anything. In addition, the Court noted that allowing military recruiters on campus was not an inherently expressive activity (hosting interviews and receptions for recruiters is not speech); it did not interfere with the law schools' freedom of association (recruiters come to try to hire students, not to become members of the school's expressive association); a school may not get around the law by excluding all employers who do not commit to a nondiscrimination policy (an approach that would render the law largely meaningless); and Congress, under its power to raise and support armies, could have directly required the recruiters to be admitted instead of taking the more indirect approach of making access a condition of federal financing.

In the 2006 case of *Hamdan v. Rumsfeld*, the Court in a 5–3 decision ruled against the George W. Bush administration's attempt to put Guantanamo detainees on trial before military commissions, with the majority saying that these efforts were unauthorized by federal statute and violated international law. Although acknowledging that historically these commissions were established out of necessity arising from wartime conditions, the Court ruled that these conditions did not justify the abolishment of procedural protections. Common Article 3 of the Geneva Conventions applies to these detainees and is enforceable in federal court for their protection. The rules the Bush administration issued for the commissions failed to guarantee the defendant the right to attend the trial and allowed the prosecution to introduce hearsay evidence, unsworn testimony, and evidence obtained through coercion. Hamdan had been charged with conspiracy, and the Court said that conspiracy was not a violation of the law of war and, thus, could not be the basis for a trial before a military panel. The case against Hamdan started before the 2005 Detainee Treatment Act, which provided that no court, justice, or judge has jurisdiction to hear habeas corpus petitions filed by the detainees; thus, it did not apply to pending cases, including *Hamdan*. Justices Scalia, Alito, and Thomas argued in separate dissents that the Court lacked jurisdiction in this case.

In 2008, the Court decided two more cases involving the military. In *Munaf v. Geren* (2008), it unanimously held that two civilian U.S. citizens

being held in American military custody in Iraq were entitled to file habeas corpus petitions. The administration had argued that the two were technically held by the 26-nation multinational force there and thus federal courts did not have jurisdiction, but the Court ruled that what mattered was that they were held by American soldiers subject to a U.S. military chain of command. However, though it allowed the petitions, the Court denied them because the men were facing criminal charges under Iraq law, and their release would interfere with Iraq's sovereign authority to punish offenses against its laws committed within its borders.

In the other case, *Boumediene v. Bush* (2008), the Court in a 5–4 decision held that the detainees at Guantanamo Bay have a constitutional right to go to federal court under a habeas corpus petition to challenge their continued detention as enemy combatants. Thus, the Court found unconstitutional a provision of the 2006 Military Commissions Act that stripped the federal courts of jurisdiction to hear these petitions because the Constitution allows the writ to be suspended only in times of invasion and insurrection. The Court also said the Detainee Treatment Act's review procedure for the detainees fell short of being a constitutionally adequate substitute because it failed to offer habeas procedural protections. Under the act, the detainees had the right to challenge their designation as enemy combatants in the Court of Appeals for the District of Columbia, such designation having been made by a military panel called a Combatant Status Review Tribunal. The detainee was given a "personal representative" assigned by the military but no defense lawyer, and the tribunal was not required to disclose to the detainee the evidence or witnesses against him. If he did appeal to the D.C. court, the presumption was that the evidence was accurate and complete. The detainee was not permitted to present evidence in his favor that had been withheld from the record of the tribunal or was learned subsequent to the tribunal's determination. The tribunal's own fact-finding ability was so limited as to present considerable risk of error, thus requiring full-fledged scrutiny on appeal. The Court also viewed the cases of detainees housed at Guantanamo as exceptional, given the length of the Global War on Terrorism; the fact that it was among the longest wars in American history made it necessary to avoid any further delay, therefore rendering these cases exceptional and requiring no

further delay. The Court concluded by mentioning its importance in saying what the law is as opposed to the political branches of government. The dissenters thought the decision was overreaching and might be considered judicial activism, and that our procedural protections for the detainees were generous. There was one more case involving the military in 2008, but it did not concern the Global War on Terrorism. In *Winter v. Natural Resources Defense Council* (2008), the court narrowly rendered a decision that narrowly lifted lower court restrictions on submarine training exercises off the coast of southern California that may harm marine mammals. The restrictions required the navy to suspend the use of sonar if it detected a marine mammal within 2,200 yards and to reduce sonar levels when water temperature reached certain levels whether or not animals were present. The Court concluded that it must give great deference to the professional judgment of military authorities in these situations, and it emphasized the importance and difficulty of sonar training exercises. It also said that the extent of harm to the mammals was sharply disputed, although even given considerable harm, those injuries are outweighed by the public interest and the navy's interest in effective, realistic training of its sailors. In a dissent joined by Justice Souter, Justice Ruth Bader Ginsberg argued that the navy violated the National Environmental Policy Act, which requires the government to prepare environmental impact statements before undertaking major actions that will affect the environment. Because the navy did not obtain permission from Congress to bypass the National Environmental Policy Act's requirements, Justice Ginsberg found that the district court had imposed appropriate measures to mitigate harm until completion of the environmental impact statements.

In 2009, the Court, rendering a unanimous decision in *Porter v. McCollum*, passed a ruling that the failure of the defense lawyer in a death penalty case to present evidence of the trauma suffered by George Porter in the Korean War requires a new sentencing hearing. If evidence is available concerning posttraumatic stress disorder resulting from military service, it must be presented. The Court-appointed lawyer in the penalty phase in this case did not interview any of his client's relatives nor did he obtain any school, medical, or military service records. Had he done so, the justices held, he would have found out that his client had performed "heroic military service in

two of the most critical—and horrific—battles." Moreover, the jury might have imposed a different sentence had they been told of "the intense stress and emotional toll" that combat had taken on Porter.

Conclusion

The results of Supreme Court cases involving the military have been mixed. Recent decisions by the Court regarding the Global War on Terrorism indicate that the Court seeks to ensure that the Bill of Rights, in particular the right to due process of law, is observed by the executive and legislative branches. The decisions are not pro-military or antimilitary. Rather, they are checks on perceived excesses of the other two branches. How these matters will play out in the future is hard to tell, because the Court changes its perspective over the years as justices retire and new ones are appointed. The one constant is that the Court's decisions, whether supported or opposed, are closely observed as they are part of the rule of law on which U.S. actions are based.

Robert W. Langran

See also Congress, U.S.; Constitution, U.S.; Constitutional Rights, Personnel; Geneva Conventions; Global War on Terrorism; Guantanamo Bay Prison; Hague Conventions; Laws of War; President as Commander in Chief; Uniform Code of Military Justice; War Powers Act; Yamashita Precedent

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U.S. TRANSPORTATION COMMAND

The U.S. Transportation Command (USTRANSCOM or TRANSCOM) is one of the U.S. Department of Defense's (DOD's) nine unified combatant commands. Commanded by a four-star general, TRANSCOM coordinates and executes the deployment of forces to wherever they are required worldwide. The command synchronizes and executes the strategic movement of all U.S. forces globally by directing the entire joint deployment and distribution enterprise to

project strategic national security capabilities worldwide and to provide end-to-end distribution process visibility and responsive support to U.S. government, multinational, and nongovernmental force projection requirements. Headquartered at Scott Air Force Base in Illinois, the command consists of three component commands: (1) the air force's Air Mobility Command, (2) the navy's Military Sealift Command, and (3) the army's Surface Deployment and Distribution Command. TRANSCOM also coordinates missions worldwide through its commercial contract partners.

The DOD assigns four primary missions to TRANSCOM:

1. Provide common-user and commercial air, land, and sea transportation; terminal management; and aerial refueling to support the global deployment, employment, sustainment, and redeployment of U.S. forces.
2. Serve as the mobility joint force provider and, in coordination with the services and other combatant commanders, identifying and recommending global joint sourcing solutions to the chairman of the Joint Chiefs of Staff, and supervising implementation of sourcing decisions.
3. Provide DOD global aeromedical patient movement, in coordination with geographic combatant commands, through the defense transportation system.
4. Serve as the distribution process owner, coordinating and overseeing the DOD distribution system to provide interoperability, synchronization, and alignment of DOD-wide, end-to-end distribution, and developing and implementing distribution process improvements that enhance the defense logistics and global supply chain management system.

TRANSCOM commands and directs a massive fleet and workforce worldwide. The command directly controls a \$52 billion worldwide fleet of military assets, including 87 ships, more than 1,200 aircraft, more than 2,100 railcars, and \$1.4 billion worth of infrastructure. Through its commercial partners, TRANSCOM also directs an additional 1,000 aircraft and 360 ocean vessels. Its total workforce includes more than 51,000 active-duty military personnel, more than 88,000 guard and reserve personnel, and more than 16,000 civilian personnel.

TRANSCOM relies on its commercial partners to meet 88% of continental U.S. land transport, 50% of global air movement, and 64% of global sealift.

During a typical week, TRANSCOM will conduct more than 1,900 air missions, have 25 ships under way, and have more than 10,000 ground shipments operating in more than three quarters of the world's countries. It controls this worldwide enterprise through a technically advanced enterprise with a goal of seamless, integrated, end-to-end deployment and distribution under a single unified combatant commander during both peace and war. TRANSCOM executes missions through its three component subordinate commands, each with worldwide responsibilities.

The air component of TRANSCOM is Air Mobility Command (AMC), headquartered at Scott Air Force Base. AMC provides strategic and tactical airlift, air refueling, and aeromedical evacuation services for deploying, sustaining, and redeploying U.S. forces wherever they are needed globally. Many special duty and operational support aircraft are also assigned to AMC (including Air Force One). In addition, AMC contracts with commercial air carriers through the Civil Reserve Air Fleet (a fleet of commercial aircraft committed to support the transportation of military forces and material in times of crisis) and other programs for movement of DOD passengers and cargo. AMC's air fleet provides swift response as an element of America's global reach. Aircraft assets of the command include C-17 Globemaster III, C-5 Galaxy, C-141 Starlifter, KC-135 Stratotanker, KC-10 Extender, and C-9 Nightingale.

Military Sealift Command is TRANSCOM's sea component. Headquartered in Washington, D.C., Military Sealift Command uses organic U.S. Navy vessels as well as contract commercial ships to move unit equipment and sustainment supplies to and from theaters of operation worldwide in both peace and war. Including contracted vessels, Military Sealift Command frequently has more than 400 ships under way each day.

The third component of TRANSCOM is the Surface Deployment and Distribution Command at Scott Air Force Base. It is the overland and surface distribution command and manager for TRANSCOM. Surface Deployment and Distribution Command maintains a permanent presence in more than 20 ports worldwide. It manages the movement of more than 3.7 tons of ocean cargo, 500,000

personal property moves, 600,000 domestic freight shipments, 72,000 privately owned vehicles, and more than 500,000 passengers annually.

In 2003, TRANSCOM was named the distribution process owner for DOD. This makes TRANSCOM the single entity to direct and supervise execution of the strategic distribution system from fort to port. The command also manages the supply chain information technology systems and has the authority to establish a contracting activity for procurement of required commercial transportation services.

TRANSCOM was created in 1987 in accordance with the provisions of the Goldwater-Nichols Department of Defense Reorganization Act of 1986. The creation of a unified transportation command was in response to various joint exercises in the 1970s and 1980s that revealed a need for such a command.

The command first proved its worth during the Persian Gulf War (1990–1991) when TRANSCOM executed one of the largest deployments in history. The command moved more than 500,000 passengers, 3.7 million tons of dry cargo, and 6.1 million tons of petroleum products in a little more than 7 months. This is the equivalent of deploying and sustaining 2 army corps, 2 Marine Expeditionary Forces, and 28 air force tactical fighter squadrons. There is no comparable movement in such a short time in world history.

TRANSCOM has been involved in every contingency operation since its inception. This includes missions as varied as humanitarian relief operations, combat deployments, and evacuation of wounded soldiers. As a vital participant in the current conflicts worldwide, TRANSCOM has moved more than 2.2 million passengers and nearly 6.1 million tons of cargo.

Possessing the most capable, modern, and proven air, land, and sea strategic mobility forces in the world, TRANSCOM is the backbone of the nation's strategic mobility system.

Frank L. Wenzel

See also Aircraft, Transport; Logistics

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USA PATRIOT ACT

The USA PATRIOT Act was signed into law on October 26, 2001, after the shock of the 9/11 attacks on the Pentagon and the World Trade Center. The title of the law stands for Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, although it is typically referred to as the Patriot Act. Sunset provisions in the original law called for the expiration of many of the act's features at the end of 2005. Congress has since reauthorized the Patriot Act twice, in 2006 and 2011.

The law is divided into 10 titles. Title I (titled "Enhancing Domestic Security Against Terrorism") expanded the authority of the Federal Bureau of Investigation in regard to terrorism investigations. Title II ("Enhanced Surveillance Procedures") focused on expanding the federal government's surveillance capabilities, including its authority to intercept wire, oral, and electronic communications in order to conduct terrorism investigations. Controversy surrounded the allowance for government authorities to gather foreign intelligence from U.S. and non-U.S. citizens alike. Title III of the act focused on the prevention of money laundering and currency crime activity designed to aid terrorism. Title IV enhanced the powers of the U.S. attorney general and what was then known as the Immigration and Naturalization Service in regard to U.S. border security. Title V focused on removing obstacles to investigating terrorism (i.e., extension of Secret Service jurisdiction; e.g., one of its provisions extended Secret Service jurisdiction). Title VI amended the Victims of Crime Act of 1984 to update the administration of the

Victims of Crime Fund. Title VII's provisions dealt with increased information sharing for critical infrastructure protection. Title VIII ("Strengthening the Criminal Laws Against Terrorism") defined terrorism as an action or actions that endanger "human life . . . [and] are a violation of the criminal laws of the United States or of any State" with the goal to "intimidate or coerce a civilian population." Title IX ("Improved Intelligence") mandated that the director of central intelligence and the attorney general of the United States cooperate to share relevant intelligence information. Title X is a catch-all provision focused on miscellaneous laws that did not fit into other titles of the act, such as defining electronic surveillance, limiting the issuance of hazardous materials licenses, and protecting critical infrastructure. Congress overwhelmingly approved the passage of the Patriot Act (by a 98–1 vote in the Senate and 357–66 vote in the House). Support for the measure was bipartisan, which was thought to be at least in part due to the horror and fear engendered by the 9/11 terrorist attacks. As stated on its website, the Department of Justice takes the position that the act allowed tools already available for investigating organized crime and drug trafficking to be used in terrorism investigations. According to the Justice Department, "roving wiretaps," authorized for a person instead of a single communications line or device, had been used for years to investigate drug crimes and racketeering. These wiretaps could now be used under the act to investigate terrorism suspects. The act upheld the right of the law enforcement authority to investigate suspected terrorists without tipping them off early in the process. Notice would have to be given to the suspect or suspects, but with a "reasonable delay" as allowed by federal court review. Federal authorities under the act could now seek a court's permission to examine business records relevant to the investigation of terrorism cases.

The Supreme Court has upheld key provisions of the law. In *Holder v. Humanitarian Law Project* (2010), the Court upheld the Patriot Act's prohibition on offering material support to groups designated by the government as terrorist in nature. President Barack Obama signed legislation reauthorizing the Patriot Act on May 26, 2011, for an additional 4 years. It would therefore appear that key parts of the act are likely to continue indefinitely into the future, albeit with some modifications reflecting Supreme Court cases on the matter since

the act's initial passage. The act continues to have a greater impact on domestic law enforcement authorities than the military because of the original intentions of the legislation. A major concern continues, however, over the issue of precisely how information is shared by intelligence agencies with military and national security authorities.

The Justice Department and other supporters of the Patriot Act also argue that it helps domestic law enforcement, intelligence, and national security agencies share information about suspected terrorist activities. The firewalls that existed among these agencies in the past, preventing the sharing of information, lessened after passage of the act. The Justice Department also claims that the act merely updates the law to deal with new technologies and threats posed by "digital age" international terrorism. Search warrants concerning terrorism-related activities are easier to obtain by law enforcement agencies under the act. Such warrants can now be obtained in whatever district terrorist activity is alleged to have occurred, regardless of where the warrants will be executed. Finally, the Justice Department maintains that the Patriot Act justly increases the punishments for those who are found guilty of terrorist crimes (including those who aid and abet terrorists).

Critics of the Patriot Act argue that it unnecessarily violates the individual rights of American citizens. Prominent political figures, including the former vice president Al Gore, called for the repeal of the act after its passage on these grounds. The former presidential candidate Howard Dean called for repeal of part of the act. Librarians criticized the act on the grounds that they could be asked to deliver to law enforcement agencies detailed records of their patrons' information requests. Other critics argue that wartime emergencies have often been used in American history to justify the growth of overweening government power at the expense of individual liberties. Such critics point out the example of the damage done by Abraham Lincoln's abrogation of habeas corpus during the Civil War and by the Franklin D. Roosevelt administration's forcible internment of Japanese Americans during World War II. The fear engendered by foreign threats can lead to a governmental emphasis on security at the expense of liberty. Even when the foreign threat ends, critics contend, the precedent of expanded police powers remains in peacetime conditions.

During the 20th century, the United States lost the “free security” once provided by the Atlantic and Pacific oceans as intercontinental ballistic missile and bomber technology developed. The asymmetrical threat posed by Islamic terrorism in the aftermath of the Cold War arguably made Americans feel even more vulnerable than they had been during the Cold War. The 9/11 attacks intensified concerns about terrorism for many Americans. Terrorism has caused a rethinking of the boundaries between domestic law enforcement and national security operations. The Patriot Act reflects this change in the perceptions of Americans about themselves and the world of the 21st century.

Mark Polelle

See also Congress, U.S.; Constitution, U.S.; Laws of War; 9/11 (2001); 9/11 Commission; President as Commander in Chief; Terrorism; U.S. Supreme Court

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VENEZUELA

Venezuela is located at the northern rim of South America, and it is bordered to the north by the Caribbean Sea and the Atlantic Ocean. Its capital city, Caracas, is centrally located near the Caribbean coast and is the center of gravity in terms of population and politics. More than 90% of Venezuela's 27 million people live in urban areas, with more than 3 million of them living in Caracas. Significant economic activity related to the country's status as a major oil producer and exporter is located outside Caracas, near the oil fields in the states of Zulia in the west and Barinas in the east. This entry briefly reviews the history of Venezuela since the mid-20th century, the evolution of the armed forces under President Hugo Chávez, and the implications for relations between Venezuela and the United States.

Recent History

Venezuela became a democracy in 1958, and although it struggled against a leftist insurgency during its first democratic decade, it survived the wave of right-wing authoritarianism that swept the region during the 1960s and 1970s. Indeed, as a major oil producer, Venezuela prospered during the oil boom of the 1970s and established itself as a leader in the Organization of Petroleum Exporting Countries. Domestically, Venezuela undertook ambitious economic development projects, including the nationalization of the oil industry, the construction of major state-owned enterprises, and the expansion of the middle class through

government spending, cheap imports, and subsidized prices for food and energy. Venezuela's rapidly rising government spending included investment in military modernization, transforming the armed forces from an institution largely focused on counterinsurgency operations to a conventional force that operated French main battle tanks, Italian guided missile frigates, and French Mirage and U.S. F-16 fighter aircraft.

As the boom fizzled out during the 1980s, Venezuela found itself mired in economic stagnation produced by high spending and low oil prices, leading to substantial foreign debt. Attempts to address the crisis by moving toward free market policies produced a decade of political turmoil. Venezuela experienced mass urban rioting in 1989, two coup attempts in 1992, and the impeachment of a president in 1993. The highly contested presidential elections of 1998 resulted in the selection of an outsider candidate, the 1992 coup leader Hugo Chávez Frias. Chávez advocated a progressively more radical political agenda centered on the promotion of participative democracy; the deepening of state leadership of the economy, including government ownership of growing numbers of industries and agricultural enterprises; and the promotion of "Bolivarianism," an ideology based on a leftist reinterpretation of the thinking of the Venezuelan independence leader Simón Bolívar. Relations with the United States deteriorated, and a close alliance developed with Cuba.

The Venezuelan Armed Forces

The Venezuelan armed forces were transformed during the presidency of Chávez. They are now a

much more politicized institution that is oriented mainly toward social programs and internal security rather than external defense. The military traditionally consisted of an army, a navy, an air force, and a gendarmerie—named the Guardia Nacional Bolivariana—but now, it includes a militia answering directly to the president. While the traditional branches may have 163,000 active-duty and 100,000 reserve personnel, the addition of the Bolivarian militia makes it difficult to determine the true size of the armed forces. The government claims that there are hundreds of thousands of militia members, but it is thought that the number of those with substantial military training may be much lower, perhaps 10,000 to 20,000.

President Chávez had explicitly brought the military into his overall Bolivarian project of integrating society and the armed forces. This initially produced a split within the military between those enthusiastic about a new social development role and those who sought to retain their traditional defense role. This paralleled the growing tensions between pro- and anti-Chávez forces in society. The resulting political crisis produced popular mobilization against the government, a failed coup attempt in 2002, a strike by the oil industry in 2003, and a recall referendum against the president in 2004. Chávez adeptly used these as opportunities to purge officers who opposed him and to reward his supporters. In subsequent years, the armed forces have been loyal to the government. To ensure that this continued, he had institutionalized a direct form of presidential control over the armed forces and formed a Bolivarian militia, manned by his supporters, that was designed to defend the regime from opponents, including those remaining in the military.

U.S.-Venezuelan Relations

Since the early 20th century, the United States has influenced Venezuela through its participation in the development of petroleum production and through the tens of thousands of U.S. citizens who worked in this industry. On a personal level, many Venezuelans viewed the United States favorably, but intergovernmental relations have been more formal, especially during the democratic period (1958–1998). This was due to disagreements over oil policy—since Venezuela favored the Organization of Petroleum Exporting Countries and a stronger

government role in the industry—and over foreign policy, where Venezuela occasionally opposed the U.S. approach to the Cold War in Latin America, basing its foreign policy more on the promotion of democracy and regional solidarity than on opposing Soviet influence.

After 1941, the United States became the predominant source of military doctrine and training, reflecting Venezuela's sympathy for the Allied cause during World War II. During its counterinsurgency struggle in the 1960s, Venezuela also hosted the largest U.S. military assistance group in South America. Despite the acquisition of weapons systems from Italian, French, and other foreign manufacturers, U.S. military influence on Venezuelan training and doctrine remained strong, with a considerable number of Venezuelan military personnel training in the United States and a significant number of U.S. officers participating in personnel exchange programs with Venezuela.

However, during the Chávez period, U.S.-Venezuelan relations fell to a historic low. President Chávez repeatedly accused the United States of interference in Venezuelan politics and even of planning an invasion. Many in the U.S. government saw Venezuela as an uncooperative neighbor at best and an exporter of radicalism and anti-Americanism at worst. Under such circumstances, military-to-military contacts have collapsed. The United States has refused to supply spare parts for Venezuela's existing arsenal, and it has prevented most Western countries from supplying equipment. Instead, Chávez sought military training and equipment from Cuba, China, and Russia, including billions of dollars in new acquisitions.

The death of Chavez from cancer in March 2013 raises questions about his legacy for Venezuela and its relationship with the Western Hemisphere. As a sign of his close relationship with Cuba, Chavez went to Cuba for medical treatment in his 2-year struggle with cancer. He left a nation deeply fractured politically, economically, and socially. His vice president, Nicolas Maduro, narrowly won election as president in his own right several weeks after Chavez's death. Whether Maduro can maintain the grip on political power given the fragile nature of the economy that stems in part from falling oil production remains to be seen.

Harold A. Trinkunas



U.S. Navy Commander Robert S. Kerno (left), Commanding Officer, USS *Yorktown*, points out some sights to former president Hugo Chávez of Venezuela during a tour of the ship, on March 2, 2002. The *Yorktown* was visiting the city of Willemstad at Curacao, Netherlands Antilles, north of Venezuela, during the 43rd annual UNITAS (“unity” in Spanish) exercise. UNITAS is the largest multinational naval exercise conducted by U.S., Caribbean, and Central and South American naval forces, with the focus on building a hemispheric coalition for mutual defense and cooperation.
 Source: Department of Defense; Public ID: DNSD0509136.

See also Brazil; Caribbean; Central America; Cuba;
 South America

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VETERANS AFFAIRS, DEPARTMENT OF

The Department of Veterans Affairs (VA) administers benefits for servicemen and servicewomen who served in the armed forces of the United States. In 2012, the VA served a veterans population of more than 20 million veterans through 817 outpatient clinics, 152 hospitals, 300 veteran centers, and 56 regional benefit centers. It maintains a network of 131 national cemeteries, which contain the remains of servicemen and servicewomen who died in every American war. More than 7 million veterans hold a life insurance policy, and nearly 3½ million receive

disability or old-age pension through the organization. The agency has more than 300,000 employees, the second largest number among federal departments, only trailing the Department of Defense. The VA expended slightly more than \$140 billion in 2011.

Organizational Development

After the Civil War, the centerpieces of veterans' benefits were disability pensions and institutional care for disabled ex-soldiers. After gradual expansion, Civil War pensions for Union veterans (but not Confederate veterans) represented more than a quarter of the government's expenditures between 1880 and 1910; disbursement was administered by the Bureau of Pensions in the Department of the Interior. In the peak year of expenditure—1893—the Bureau of Pensions served more than 1 million pensioners.

When the U.S. entered World War I, President Woodrow Wilson and reformers sought to avoid creating another class of pensioners. To deal with the veterans' disability and the needs of dependents of wounded or killed service people, the government created a system of War Risk Insurance for the 4 million Americans serving in the armed forces. To meet the needs of veterans with service-related wounds and disabilities, a network of hospitals was created under the jurisdiction of the Public Health Service, before being absorbed into the newly created Veterans' Bureau in 1921. The Veterans' Bureau was mired in scandal under the administration of Warren G. Harding; the appointment of General Franklin T. Hines played an instrumental role in restoring credibility to this agency. In an effort to bring about greater efficiency, President Herbert Hoover created the Veterans Administration and folded the Bureau of Pensions, the National Homes for Disabled Volunteer Soldiers, and the Veterans' Bureau into this single agency. Hines continued in office under President Franklin D. Roosevelt, only retiring in 1945. Hines established a pattern that would be continued by other presidents and a number of retired generals, most notably General Omar Bradley, served as head of the VA.

World War I veterans believed that they had been unfairly denied a bonus, a cash payment for their service to compensate them for the low wages paid to those in uniform. Every president from Harding

to Roosevelt opposed the payment of the bonus. In 1924, Congress agreed to pay a bonus to these veterans after intense lobbying from the Veterans of Foreign Wars and strong grassroots pressure. Under the Adjusted Service Certificate Law of 1924, the bonus would be paid in 1945. During the Great Depression, many veterans mired in poverty and unemployment sought an early payment of the bonus and marched on Washington, D.C. Styling themselves the Bonus Expeditionary Force, these veterans created encampments near the Capitol, hoping to pressure Congress to provide an early payment. Hoover ordered the U.S. Army, under General Douglas A. MacArthur, to evict the demonstrators from downtown Washington, D.C. However, the first Administrator of Veterans Affairs, Hines, rejected the payment of an early bonus. An early bonus would be distributed only after Congress overrode the veto of Roosevelt in 1936.

Even before World War II ended, there existed a strong sentiment within the Roosevelt administration and with the most politically influential veterans' organization, the American Legion, that the federal government must develop government programs to help the 15 million men and women serving in uniform reintegrate into society. The American Legion also sought to promote the interests of World War II veterans in order to stay relevant to this newest generation of veterans. The resulting G.I. Bill of Rights of 1944 is widely considered to be one of the most progressive pieces of legislation ever passed by Congress. In contrast to earlier wars, the G.I. Bill created an array of programs explicitly targeting able-bodied veterans. The VA struggled to administer the diverse range of programs mandated by the G.I. Bill, which included (a) educational allowances; (b) unemployment compensation; (c) home, farm, and business loan guarantees; and (d) job placement service for returning World War II veterans. For instance, veterans seeking disability status and payments often had to wait months, even years, for the VA to make a final decision. Veterans attending college often had to contend with late payment of living allowances. Under the leadership of Bradley a number of major administrative changes were undertaken, including efforts to expand the agency's hospital system and affiliate it with medical schools to improve the quality of care.

Veterans' organizations would play a crucial role in lobbying on behalf of the VA and came to form a

potent political force in Washington. The American Legion, Veterans of Foreign Wars, and Disabled American Veterans attracted significant support from veterans of the two World Wars. The clout of the VA would be reflected in its effort to defeat attempts by President Jimmy Carter to end veterans' preferences for federal employment. In 1989, veterans successfully lobbied for the VA to be elevated to cabinet status, and President Ronald Reagan signed confirming legislation, even though he had come into office with a pledge to shrink the federal cabinet by eliminating the departments of Education and Energy. Veterans of Vietnam and later wars have joined veterans' organizations in fewer numbers; as organizations like the American Legion and Veterans of Foreign Wars shrink in size, the VA may struggle in Congress to receive the appropriations it needs to care for not only the needs of aged veterans of World War II, Korea, and Vietnam but also the needs of younger veterans from the wars in Afghanistan and Iraq.

Services

Organizationally, the VA is divided into three subdepartments: (1) the Veterans Health Administration maintains the largest single medical system in the United States and rivals the national health service of many industrialized countries; (2) the Veterans Benefits Administration administers a range of non-medical benefits, including disability payments, educational assistance, and group life insurance; and (3) the National Cemetery Administration maintains a network of cemeteries for veterans and provides monetary grants for the burial of deceased veterans. VA services are generally available only to veterans who were honorably discharged and meet other qualifying criteria.

Since the beginning of the American Republic, there has been a national consensus that the wounded, the disabled, the widowed, and the orphaned should be cared for by the nation. The VA administers programs to provide financial support for disabled veterans and survivors' benefits for widows and orphans. Although VA programs for the disabled enjoy broad ideological support, for decades the VA has come under fire for its overly bureaucratic processes in administering them. The question of what qualifies as a service-related disability has been a subject of dispute for years, with

critics arguing that the VA, in dealing with medical issues associated with Agent Orange, Gulf War Syndrome, and Traumatic Brain Injury, has often taken too narrow a definition of what constitutes a war-related injury. Until the 2000s, veterans could not retain the services of an attorney to assist with filing a veterans claim, under Civil War legislation that limited attorney fees to \$10. Veterans groups have played important roles in serving as ombudsmen for veterans filing claims with the federal government, and most organizations offer the services of service officers free of charge to veterans and their families.

Even with the expansion of the federal programs in the areas of education, health, and welfare, veterans programs still have a significant impact on American society. Educational benefits to veterans are the largest single source of financial aid to college students. With the rise of the all-volunteer army in the 1970s, the promise of financial support for college has been a major inducement for enlisting young men and women into the army. The post-9/11 G.I. Bill, authored by Senator James Webb of Virginia, provided increased benefits for veterans of the wars of Afghanistan and Iraq—the most generous educational benefits accorded to veterans since the original G.I. Bill of Rights of 1944.

The range of services offered to veterans are extensive and include (a) low-cost life insurance, (b) assistance in purchasing a first home, (c) provisions for unemployment insurance, and (d) medical care. Despite this array of services, the needs of a significant number of veterans have not been met in their efforts to successfully reintegrate back into American society. In the early years of the Afghanistan and Iraq Wars, neither the Defense Department nor the Veterans Administration effectively managed the transition of wounded warriors from the military system to the civilian one. Veterans of these recent conflicts experienced higher rates of unemployment and homelessness during the Great Recession of 2007. For those attending college, there is a significant attrition rate before completing their degrees.

No other major industrialized nation provides as wide-ranging a network of services exclusively reserved for veterans as the United States. Instead, most First World countries have opted to create expansive welfare states to care for all citizens, including veterans. The VA and the programs it administers stand as a unique testament to the

determination of American society to care for the men and women who served in the armed forces.

Yo Kotaki

See also Agent Orange; American Legion; Arlington National Cemetery; Benefits, Veteran; Cemeteries, Military; Gulf War Syndrome; Medical Disability, Veteran; Medicine, Veterans; Traumatic Brain Injury; TRICARE (Military Health Plan); Veterans of Foreign Wars; War Dead, Disposition of

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VETERANS OF FOREIGN WARS

The Veterans of Foreign Wars (VFW) is an organization open to all military personnel earning service badges for participation in U.S. overseas military campaigns. Founded after the Spanish-American War, the VFW serves as a fraternal association dedicated to the welfare of American veterans and their families. To that end, the VFW provides several services for veterans: (a) as advocates for federal veterans legislation, (b) as an intermediary between individual veterans and the veterans bureaucracy, and (c) in perpetuating the bonds of camaraderie associated with military service. Since its inception, the VFW also has voiced veterans' perspectives on U.S. national security and military issues. Throughout the 20th century, the VFW joined with other patriotic organizations to champion unswerving dedication to the political

institutions of the United States through antiradicalism initiatives known collectively as the Americanism program. Moreover, the organization helped develop and maintain the nationalist rituals of the United States, including the building of war memorials and commemorations of the nation's military heroes. By reaching out to thousands of communities across the country through local units called posts, the organization effectively mediates overseas veterans' relationship with the rest of American society.

Origins and Early Years

The VFW traces its origins to veterans groups of the Spanish-American and Philippine-American Wars that formed in 1899: (a) the National Association of the Army of the Philippines and (b) the American Veterans of Foreign Service. These groups formally merged in 1913 and consolidated in 1914 under the banner of the Veterans of Foreign Wars of the United States. The organization adopted as its insignia the Cross of Malta, signaling parallels between the organization and the crusading Knights Hospitallers. After 1914, the VFW opened its membership to all honorably discharged veterans who had served on foreign shores or in hostile waters in any war, campaign, or expedition—recognized by Congress with a campaign badge or service clasp. Nevertheless, the organization remained quite small until the U.S. entry into World War I, with only 5,000 members as late as August 1916.

U.S. participation in World War I transformed the visibility and reach of the VFW. The VFW opened its doors to some 2 million potential new members of the American Expeditionary Force sent to France. In 1916, the VFW national encampment voted to recruit active-duty soldiers, not just discharged veterans, to help build up membership. After 1917, the VFW waived membership fees for active-duty military personnel and heavily recruited from the American Expeditionary Force camps in France. While the VFW membership would grow to 20,000 members by 1919, it became completely overshadowed in the immediate postwar period by the organization's new rival for Great War veterans, the American Legion.

The 1920s and 1930s

During the 1920s, the VFW expanded its activities even though the American Legion eclipsed the organization in membership and political clout by a large margin. The two organizations worked

in tandem, however, to provide veterans benefits, including adequate medical care and pensions for physically and psychologically disabled veterans, vocational rehabilitation, and sufficient provisions for the widows and orphans of the war dead. In 1921, as a way to concentrate its lobbying strength, the VFW established a National Service Bureau in Washington, D.C., to promote veterans' interests.

In the decade of the 1920s, the VFW undertook several initiatives beyond the scope of veterans legislation. After 1919, the VFW began its Americanism program to promote the virtues of American culture and American political institutions as a way to undermine radicalism and "hybrid" ethnic identities. In 1922, the VFW initiated the annual Buddy Poppy drive, trademarking it in 1924. Since 1922, lapel-pin poppies have been sold by VFW members on Memorial Day to benefit disabled veterans and to remind Americans of the costs of war. Throughout the late 1920s, the VFW also sponsored legislation in Congress that would make Francis Scott Key's "Star-Spangled Banner" the official national anthem of the United States. In 1931, this drive finally succeeded. Throughout the decade of the 1920s, however, the VFW remained a secondary player on the issues affecting Great War veterans.

Bonus for World War I Veterans

Both the VFW and the American Legion lobbied for the payment of a bonus to World War I veterans as "adjusted compensation" for the meager wages received during the conflict. In 1924, Congress passed and put into effect, over President Calvin Coolidge's veto, a deferred bonus payment for Great War veterans in the form of an interest-bearing certificate payable in 1945.

In 1929, the VFW's fortunes turned when it began a concerted push for non-service-connected pensions for disabled World War veterans and for prepayment of the bonus. The efforts initially bore fruit as Herbert Hoover signed into law in 1930 a new non-service-connected pension for disabled veterans. This expansive and expensive program, however, lasted only 3 years as the 1933 Economy Act, championed by Franklin D. Roosevelt, eliminated these forms of pensions entirely in a drastic federal cost-cutting measure. The VFW, however, began to mobilize against the Roosevelt administration immediately and helped reinstate some of the most egregious cuts in veterans' pensions to the service-connected

disabled. Moreover, from 1929 to 1936, the VFW grew precipitously as a result of the organization's leadership in securing immediate cash payment of the bonus. From 1932 to 1936, the VFW never wavered in its support of immediate cash payment, a position that brought it into direct confrontation with both Hoover and Roosevelt. The VFW even played an important role in the origins of the 1932 Bonus March by continually fighting for immediate payment of the bonus in a period when the American Legion opposed the measure. The VFW's populist message in the 1930s brought the organization enormous institutional gains and placed it in the middle of Depression-era politics, especially the dissenting politics associated with Huey Long and Father Charles Coughlin. To be sure, the VFW never challenged the primacy of the American Legion as the largest veterans organization. But between 1929 and 1936, the VFW surged from fewer than 70,000 to 300,000 members, despite the fact that the Depression wreaked havoc on most dues-paying voluntary associations. In 1936, Congress granted veterans their bonus payment and the VFW a congressional charter in recognition of the organization's newfound national stature.

World War II and the Postwar Period

World War II brought new missions and a new infusion of members into the VFW. During the 1930s, the VFW joined with those in favor of isolationism and promoted strict neutrality in world affairs. After 1940, the VFW supported the slow drift toward war, including the massive military mobilization and the peacetime draft. With the Japanese attack on Pearl Harbor, the organization vigorously joined the war effort. VFW members served as civil defense personnel and training camp instructors. In 1942, the VFW instituted a pilot-training program that prepared new recruits desperately needed for flying duty in the armed services. Moreover, in 1944, the VFW became involved in the legislative battle over the proper manner in which to compensate returning veterans and ease their readjustment into civilian life. The VFW initially opposed the expansive benefits that were outlined in the Servicemen's Readjustment Act, more popularly known as the G.I. Bill, out of fears that such an expansive system was sure to be gutted in another "Economy Act." Ultimately, the VFW joined with the bill's sponsor, the American Legion, in helping secure the legislative victory of the G.I. Bill, one of

the most expansive pieces of social welfare legislation in the country's history, which provided education, housing, and job training to millions of veterans. VFW local and state officials proved instrumental in implementing the bill as the organization aided veterans in navigating the federal bureaucracy to secure their benefits. By the end of World War II, the VFW stood with the American Legion as the twin pillars of the formidable veterans lobby.

After World War II, the VFW stood at its greatest political and numerical strength, with some 1.5 million members. During the Cold War, the VFW continued the organization's record of staunch anticommunism begun in the years following the Bolshevik Revolution. In the waging of the Cold War,

from the U.S. involvement in Korea to Vietnam, the VFW supported an aggressive and militant foreign policy for the United States in battling communism. Even when public support for the Vietnam War waned, the VFW never wavered in its opinion of the war's merits or of American soldiers' honorable service. From World War II through the Vietnam conflict, the VFW attempted to account for, and repatriate, prisoners of war and soldiers missing in action. After the Vietnam War, the search for living prisoners of war and soldiers missing in action and the attempts to identify the remains of the unidentified dead became an even larger VFW project as it worked with the U.S. government and the governments and private citizens of Korea and Vietnam.



A U.S. veteran and member of the Veterans of Foreign Wars salutes during the Memorial Day commemoration ceremony at the Arlington National Cemetery in Arlington, Virginia, May 30, 2011. The Veterans of Foreign Wars traces its roots back to 1899, when its mission was to "honor the dead by helping the living" through veterans and community service, national security, and a strong national defense. Memorial Day is an honored day of remembrance for those who have died in the service of the nation.

Source: Department of Defense photo by R. D. Ward (released).

The Vietnam War

Since the Vietnam War, the VFW has maintained its active position in veterans' affairs. Despite the VFW's support for the war, it became an outspoken critic of the Veterans Administration's handling of Vietnam veterans' posttraumatic stress disorder and of the physical ailments tied to the exposure of the chemical defoliant Agent Orange. In these battles, the VFW struggled with the Veterans Administration and military bureaucracies before finally securing treatment and compensation, respectively. After the Persian Gulf War in 1991, the VFW sought to find answers to why American veterans were succumbing to a debilitating but mysterious illness. The VFW supported research into what came to be called the Gulf War syndrome and challenged the U.S. military to provide information on the vaccinations given to the troops and the possible reasons behind the illness. The post-Vietnam era also found the VFW very active in supporting public memorials for the veterans of the Korean and Vietnam Wars and World War II. Three new memorials on the Washington Mall were dedicated in 1995, 1982, and 2004, respectively.

September 11, 2001, and Beyond

After the attacks of September 11, 2001, the VFW championed the wars in Afghanistan and Iraq as part of the struggle against terrorism. These campaigns created hundreds of thousands of new potential members for the organization, but the VFW harshly criticized the U.S. government's treatment of soldiers and veterans. The VFW demanded that the government provide more material support, especially improved safety features, for the nation's military; blasted the Pentagon for inadequate hospitals and medical care for returning wounded veterans; and sponsored legislation that would create a new, expansive G.I. Bill for veterans of these conflicts. On June 30, 2008, the bill was passed into law and replaced the inadequate Montgomery G.I. Bill, paying the highest in-state public tuition rate and providing books, fees, and a living stipend. At that time, the VFW counted 2.3 million men and women veterans as members, the latter becoming eligible for membership only in 1978.

Throughout the history of the organization, the VFW national organization has been an outspoken champion of federal veterans' benefits, health care,

and pensions. At the state and local levels, VFW leaders and service officers also provide guidance to veterans of their communities who seek to navigate the veterans and military bureaucracies. In this capacity, the VFW has served as a vital intermediary between individual veterans and the federal government. The VFW brings together veterans from more than 8,000 locations across the country, where they serve their communities through charity fundraising, the granting of scholarships, the promotion of youth programs, and volunteering at Veterans Administration medical facilities and retirement centers. By sponsoring Memorial Day–Buddy Poppy drives, and parades and tributes on Memorial Day and Veterans Day, it also acts as a constant reminder of the long-term impact of war on the American people.

Stephen R. Ortiz

See also Agent Orange; American Legion; Arlington National Cemetery; Benefits, Veteran; Cemeteries, Military; Medical Disability, Veteran; Veterans Affairs, Department of; War Dead, Disposition of

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VIETNAM WAR

The Vietnam War remains one of the most controversial military engagements of the United States. This entry reviews the historical context of the conflict, its evolution during the 1950s and 1960s, the role of U.S. foreign policy in the conduct of the war, and the conclusion of the conflict in 1972. The entry then looks at historical perspectives on the Vietnam War and its implications for American foreign policy in the 21st century.

Origins of the Conflict

As part of its Cold War policy of containing the spread of communism, from roughly 1950 to 1975 the United States became involved in a failed attempt to prevent the unification of Vietnam under a communist system. The United States committed 3.4 million soldiers to the conflict (2.7 million serving in Vietnam), spent more than \$150 billion, and suffered more than 58,000 deaths and a further 250,000 injuries. Although the conflict was part of a broader geopolitical struggle, no understanding of U.S. involvement in the war is complete without an appreciation of Vietnamese history and the long-standing efforts of its people to stave off foreign intervention in their country. For centuries, the Vietnamese had resisted Chinese designs on their land. But during the 1880s, France took control of Vietnam and incorporated it into French Indochina. France remained in control until the outbreak of World War II. The defeat of France in Europe in 1940 greatly weakened the nation's ability to maintain control over its imperial territories. The Japanese—in an effort to expand their own empire—moved forces into Vietnam in July 1941. Seizing on the political upheaval created by the imperial power struggle, the committed nationalist Ho Chi Minh returned to Vietnam in 1940 to lead the Vietnamese independence movement. Ho had traveled widely, and while in Europe, he became greatly influenced by the anti-imperialist tenets of communism. In 1941, he formed the Vietminh as a broad-based independence group dedicated to fighting Japanese and French forces. Under the leadership of General Vo Nguyen Giap, the Vietminh waged an effective guerrilla warfare campaign until the conclusion of World War II. With Japan defeated, on September 2, 1945, Ho declared an independent Republic of Vietnam under the banner of communism. The French had other ideas and soon attempted to reestablish imperial control in Southeast Asia. In 1946, the French shelled the harbor city of Haiphong—killing thousands—in retaliation for Vietminh attacks on their soldiers. Violence on both sides escalated, precipitating the First Indochina War.

The First Indochina War

From 1946 through 1954, the French fought to reestablish their empire in Vietnam, while the Vietminh continued their guerrilla campaign of

ambushes, attacks on isolated French targets, and avoidance of head-on confrontations with the better equipped French forces. Given the United States' professed dedication to freedom and opposition to colonialism—expressed most fully in the Atlantic Charter and repeated frequently throughout World War II—Ho fully anticipated American support for Vietnamese independence. However, the U.S. response was entirely conditioned by their Cold War national security concerns. President Harry Truman's 1947 doctrine of containment pledged American support to all peoples fighting against perceived communist expansion. Consequently, even though Truman was ideologically averse to aiding a colonial power, the United States offered increasing amounts of financial aid to the French throughout the First Indochina War. By the early 1950s, the United States was underwriting nearly 80% of France's war costs. In 1950, Truman also sent a Military Advisors Group to Vietnam to provide assistance to the French—the first significant commitment of U.S. personnel to Southeast Asia. But the French were unable to break the back of the Vietnamese resistance, and tiring of a drawn-out and inconclusive engagement, they sought a climactic battle to bring an end to the war. The commander of the French forces, General Henri Navarre, chose to construct a heavily defended base near the town of Dien Bien Phu in an area of known Vietminh strength. The French hoped to draw communist forces out into the open, where the superior French firepower could inflict crippling casualties on their foe. However, Navarre underestimated the will of the Vietnamese, who dragged heavy artillery pieces up the surrounding hills and from March through May 1954 launched a wave after wave of devastating assaults on the French outpost, compelling the French to surrender.

The Division of Vietnam Into North and South

The Geneva Agreement that ended the First Indochina War divided Vietnam into northern and southern regions along the 17th parallel, with the proviso that free elections would be held in 1956 to reunify the country. Ho's communist forces controlled the North, while the South remained under the control of the Vietnamese emperor Bao Dai—a leader tainted with the reputation of having collaborated with the French while under colonial rule. Bao Dai eventually ceded power to Ngo Dinh Diem—a nationalist who enjoyed the



A French legionnaire with U.S.-provided tank, Vietnam, 1954.

Source: U.S. Air Force image.

support of the Dwight Eisenhower administration. Most predictions—including those of the Central Intelligence Agency—indicated that the communists would comfortably win a popular vote on reunification, prompting Diem to abandon the elections. For the United States, by the 1950s, stopping the spread of communism had become the primary foreign policy goal and a near-national obsession. Influenced also by the domino theory—which suggested that if one country fell into communist hands, the surrounding countries would follow—the Eisenhower administration feared that the fate of Southeast Asia might hang in the balance in Vietnam. Consequently, the United States offered Diem millions of dollars in economic and military aid in the hope that he could prevent the communist takeover of all of Vietnam. But despite glowing press reports of Diem's achievements in South Vietnam, his regime struggled to win widespread support among the Vietnamese people. Part of the problem was that the regime was endemically corrupt, hence much

of the economic aid provided by the United States remained in the cities and never reached the rural majority in Vietnam. Further alienating him from his people, Diem was also a Roman Catholic, and he tended to promote Catholics to prominent government positions, whereas the majority of South Vietnamese were Buddhist. The resulting sectarian tensions reached a dramatic and gruesome climax when in 1963 a Buddhist monk self-immolated in front of the world's press in protest against Diem's refusal to allow celebrations of Buddha's birthday.

Opening Hostilities

The abandonment of the 1956 elections prompted more aggressive actions from the North Vietnamese communists. In 1959, Ho sent increasing numbers of communists across the 17th parallel with the goal of attacking and destabilizing the Diem regime. In 1960, these forces were joined by the indigenous South Vietnamese communist organization the National Liberation Front (NLF)—more commonly referred to in the United States as the Viet Cong. The U.S.-backed South Vietnamese forces of the Army of the Republic of Vietnam (ARVN) proved largely ineffective in stemming the growing influence of the communists in the South. The United States continued to bolster the Military Advisors Group's presence, sending more supplies and military advisors to shore up the South. In 1962, the U.S. Air Force also began Operation Ranch Hand—a program of dropping chemical defoliants on the Vietnamese countryside to deny the communists the cover of foliage. The operation lasted until 1971 and had devastating effects on the environment as well as on many Vietnamese and U.S. soldiers who came in contact with the chemicals. Despite these efforts, South Vietnam remained chronically unstable, prompting more drastic action. When ARVN officers plotted to overthrow Diem in 1963, the U.S. authorities consented. Diem and his brother were assassinated in November 1963—just 3 weeks before the assassination of President John F. Kennedy.

Escalation

At the time of Kennedy's death, the United States had more than 16,000 military advisors in South Vietnam and had spent billions of dollars on a stubbornly unstable and vulnerable state. Lyndon B. Johnson faced an agonizing decision on his accession to the



A U.S. Air Force aircraft drops a white phosphorus bomb on a Viet Cong position in 1966.

Source: U.S. Air Force image.

presidency—(a) to abandon the policies of his predecessors and let South Vietnam (and potentially other surrounding countries) fall, (b) to attempt to maintain the status quo, or (c) to escalate America's involvement. Surrounded by optimistic advisors such as Secretary of Defense Robert McNamara, Johnson initially continued the incremental buildup of American aid to South Vietnam. Johnson used two events to make South Vietnam's fight an American crusade. The first was the Gulf of Tonkin incident. In August 1964, Johnson used a claim by two U.S. warships—much debate remains over the veracity of the claims—that they were under attack from North Vietnamese patrol boats to ask Congress for full authority to protect U.S. personnel in Vietnam. Under

the resulting Gulf of Tonkin Resolution, Johnson stepped up bombing of the Ho Chi Minh trail—the main conduit in Laos and Cambodia through which the North Vietnamese were supplying the communists in the South. The second incident was the attack by the communists on the U.S. airbase at Pleiku in February 1965. In retaliation, Johnson authorized Operation Rolling Thunder—extensive bombing attacks on communist targets, including those in North Vietnam—and sent U.S. combat troops to protect the airbases. Although Johnson refused to formally ask Congress for a declaration of war—neither did he mobilize the U.S. military reserves—for fear of escalating the stakes and the costs of what he hoped would be a limited engagement, his actions

meant that the burden of protecting South Vietnam now fell increasingly on the United States. By 1964, the Military Advisors Group had been absorbed by Military Assistance Command Vietnam under the command of General William Westmoreland, who now assumed responsibility for devising effective tactics to keep South Vietnam from falling into communist hands. The continued ineffectiveness of the ARVN and the South Vietnamese government, along with continued communist aggression, led Johnson to commit more and more U.S. troops to the cause. With the majority of the American public still supporting the war effort, U.S. troop levels reached more than 500,000 by 1968. The United States was also joined in the fight by forces from South Korea, Australia, and other countries as part of the Southeast Asia Treaty Organization, formed in 1954 to prevent the spread of communism in Southeast Asia.

U.S. Tactics

The paramount goal of the United States was to keep South Vietnam free from communist influence. Success, therefore, was difficult to measure. With no clear battle lines or territorial gains to be won, the main barometer of U.S. success became the “body count system.” The best way for the United States to defeat the communists was to kill as many of them as possible until the communist forces were no longer able to fight. To implement this strategy, Westmoreland employed a “search and destroy” strategy. Using bases such as Da Nang and Khe Sanh as staging posts, U.S. soldiers went out on patrols into hostile territory in an attempt to draw out enemy soldiers. Helicopters from newly formed Air Cavalry units were also used extensively to drop U.S. soldiers into enemy territory for the same purposes. The idea was that once the enemy was located, the United States could inflict overwhelming casualties through their superior firepower from artillery, helicopter gunships, and close air support from airbases and offshore aircraft carriers. The tactic was extremely effective in inflicting enemy casualties. In the Battle of Ia Drang, for example, in November 1965, U.S. Air Cavalry units inflicted heavy losses on North Vietnamese and NLF forces despite being greatly outnumbered.

During his tenure as commander of Military Assistance Command Vietnam, Westmoreland favored big-unit engagements with the enemy.

However, throughout the war, this sledgehammer method was augmented by the scalpel approach of counterinsurgency. Kennedy had given special attention to the buildup of America’s Special Forces counterinsurgency capabilities. He had hoped that such limited engagements would be sufficient to eliminate the threat of communist “wars of national liberation” in developing nations such as Vietnam. Early U.S. efforts to engender allegiance toward the South Vietnamese government among the population included the use of “strategic hamlets”—a program whereby villages would be consolidated into larger communities, which, in theory, were more easy to defend against communist aggression. This program often caused friction with the Vietnamese, many of whom resented being evicted from their ancestral homes. By 1965, under the Combined Action Program, marine squads were integrated within existing village structures to help prevent enemy infiltration. In the Central Highlands, the 5th Special Forces Group embarked on an ambitious program of training indigenous Montagnard tribes to interdict the communist forces. By 1967, these more covert attempts at nation-building were consolidated under the Office of Civic Operations and Rural Development Support. This organization then embarked on programs such as the *chieu hoi*, or “open arms” initiative, which promised amnesty for any Vietnamese wishing to renounce their allegiance to communism. When this more forgiving approach failed to pacify the population, more brutal methods were often introduced. From 1965 through 1972, the Central Intelligence Agency ran the Phoenix Program, which utilized capture, torture, interrogation, and assassination in an effort to counteract NLF activities in rural communities. These brutal measures—often undertaken in response to the similar tactics of their foes—neutralized tens of thousands of communist infiltrators.

U.S. Difficulties

The task of winning the war for the United States was made somewhat more difficult by its manpower policies. For example, the decision to rotate soldiers in and out of Vietnam after a 12-month tour of duty often had a negative effect on unit cohesion. Vietnam was also fought by relatively young soldiers: The average age of the combat soldier was 20, compared with 26 for World War II soldiers (contrary to

many popular stereotypes, approximately two thirds of the combatants were enlistees and not drafted). Moreover, toward the end of the war, manpower shortages often meant that some junior officers were rushed to Vietnam from Officer Candidate School with limited training and experience. However, throughout the war, U.S. soldiers tended to fight well and fared extremely well in direct engagements with the enemy: Indeed, the biggest obstacle to a U.S. victory in South Vietnam had less to do with the combat effectiveness of American and South Vietnamese forces and far more to do with the strategic advantages of their opponents.

As they had done against the French, the communists' guerrilla tactics proved highly effective. The NLF infiltrated South Vietnam's peasant communities, gaining new recruits all the time and making it increasingly difficult for American soldiers to distinguish their foes from those people for whom they had pledged to fight. They inflicted demoralizing casualties on American soldiers through the use of ambushes and booby traps, many of which they devised from unexploded U.S. ordnance. The massive bombing efforts of the United States were mitigated, in part, by (a) the sparse and rural nature of enemy targets, (b) the use of underground tunnels by the communist forces, and (c) the sophisticated anti-aircraft weapons systems supplied by China and the Soviet Union. Johnson was also fearful of widening the war in Southeast Asia or potentially drawing China into the conflict and so prohibited U.S. ground operations from venturing outside the borders of South Vietnam. Consequently, the communists had safe havens where U.S. troops could not follow them. Moreover, the United States could not target the main suppliers of weaponry for the communists—China and the Soviet Union.

One of the biggest problems faced by the United States was the inability to win over the hearts and minds of the Vietnamese people. The communists could cast the Americans as one more in a long line of foreign aggressors. Moreover, the terrific devastation of the Vietnamese countryside wrought by U.S. bombing was used as a useful propaganda tool by the communists. Combined with the continued weakness of the South Vietnamese government, it became increasingly difficult for the United States to create a viable, independent, and popularly supported South Vietnam. Finally, and perhaps most decisively, the Vietnamese communists were fighting

for their independence, which gave them a tremendous will to win and led them to accept enormous casualties without surrender. Although he would die in 1969 and not see the unification of an independent Vietnam, Ho had prophetically told the French, "You can kill 10 of my men for every 1 I kill of yours, yet even at those odds, you will lose and I will win." That same determination would carry his followers to victory over the United States.

Turning Point

Although the end of the war seemed nowhere in sight as 1968 began, U.S. politicians and strategists assured the public that battlefield victories meant that the war was being won. However, on January 31, 1968, while the Vietnamese were celebrating the Tet festival to usher in the lunar new year, the communists—still under the military leadership of Giap—launched simultaneous attacks on nearly every major town, city, and military base in South Vietnam. Most of the attacks were repulsed fairly easily, but in some areas, such as around the city of Hue and at the marine base at Khe Sanh, the fighting was vicious and protracted. Tet proved to be a military disaster for the communists, with nearly 100,000 casualties suffered. Westmoreland asked Johnson for 260,000 more troops to press home what he saw as a moment of weakness for the communist forces. However, Tet proved to be the key event in turning the fortunes of war firmly against the U.S. and South Vietnamese forces. Having been told for years that victory was at hand, the scale and ferocity of the Tet offensive made many Americans fear that the war could drag on for years with no guarantee of victory. Public opinion in favor of the war was beginning to wane before Tet as the U.S. death toll rose and images of bodies being brought home appeared on television screens nightly; but after Tet—particularly with trusted media figures such as the CBS news anchor Walter Cronkite predicting a stalemate—thoughts turned more toward salvaging national pride than on winning the war. Johnson refused Westmoreland's request for further troops and soon thereafter scaled back the U.S. bombing campaign. In a more dramatic turn of events, Johnson appeared live on American television on March 31, 1968, to announce that he would not seek reelection as the Democratic presidential

candidate so that he could devote his time to Vietnam and other domestic crises engulfing the nation.

Public opinion on the war further soured when revelations of U.S. atrocities against the Vietnamese came to light. The most notorious of these was the My Lai massacre, which occurred in March 1968 (although news of it broke in November 1969). At the village of My Lai, U.S. soldiers killed more than 300 unarmed villagers—mostly women, children, and the elderly—suspected of communist sympathies. Although this was an isolated incident in the overall context of the war, news of this and other atrocities increased questions about the brutality of the conflict and what it was doing to both Vietnamese civilians and the psyche of American soldiers.

The Home Front

From the very outset of the war, many Americans had questioned the nation's role in what seemed to some like the thwarting of a small nation's struggle for independence. But as the war dragged on, the questioning intensified. Beginning in April 1965, a series of protest marches—organized by groups such as the Students for a Democratic Society—descended on Washington, D.C. The biggest of these, in November 1969, drew more than 500,000 protestors as part of a nationwide Moratorium to End the War in Vietnam. Along with the moral objections to the war, many protestors opposed the ongoing draft that fueled the war's manpower needs. Johnson had refused to call up the nation's military reserves and the prospect of being called up to serve in an unpopular war forced many to take to the streets. Other sectors of society leading the protests included members of the counterculture youth movements, who experimented widely with drugs and advocated "making love not war." In the aftermath of Tet, an increasing majority of the American public came to believe that the war was no longer in the nation's interest. The final estrangement for many came with the 1971 publication in the *New York Times* of excerpts from a classified Department of Defense history of U.S. policy in Vietnam. The report, dubbed "The Pentagon Papers," was leaked by Daniel Ellsberg, one of the report's contributors, and it revealed that successive administrations had lied to the public about the steps taken toward

U.S. involvement in the war and in their estimations of the chances for victory. Toward the end of the conflict, a skeptical public was joined by many Vietnam veterans who joined the antiwar movement and offered first-hand testimonies of the brutality of the conflict.

Following the war's end, military strategists and many Vietnam veterans often decried the loss of public support as the main cause of the U.S. defeat. Ultimately, the loss of support on the home front did help convince the nation's politicians that U.S. involvement in the war was no longer feasible. But the public opposition to the war was no knee-jerk pacifist reaction; rather, it represented a broad-based consensus that the escalating casualties, enormous costs, and damaging impact on America's global standing constituted a burden no longer worth bearing.

Nixon and Vietnamization

When Richard Nixon succeeded Johnson as president in 1969, most Americans favored an end to U.S. involvement in the war. Nixon offered a vague promise of ending hostilities and bringing "peace with honor." His approach included increased negotiations with the North Vietnamese (which had begun after Johnson had suspended the bombing of North Vietnam following Tet), with National Security Advisor Henry Kissinger acting as the lead negotiator. As part of his wider policy of détente, Nixon also encouraged China and the Soviet Union to push North Vietnam toward a negotiated settlement. The second part of Nixon's plan was called "Vietnamization." This program involved turning over the burden of prosecuting the war to the South Vietnamese, while drawing down U.S. troop numbers. The ARVN would continue to get U.S. weapons and supplies, allowing it to theoretically maintain the security of South Vietnam. Nixon began the withdrawal of U.S. soldiers—25,000 in June 1969 and 150,000 in April 1970—clearly indicating that America was abandoning its crusade. This was a slow and painful drawdown, however, as more than 21,000 of America's combat deaths occurred after his election.

By the beginning of 1972, a little more than 140,000 U.S. soldiers remained in South Vietnam. Those who did remain tended to suffer from low morale and occasional lax discipline as the sentiment that "I don't want to be the last one to die

in Vietnam” became common among the soldiers. Even worse, in the closing years of America’s involvement in Vietnam, there witnessed growing incidents of enlisted men “fragging” their officers. The term “fragging” was the vernacular expression given to violent—often fatal—attacks against superior officers by some soldiers in Vietnam. The term referred to the use of fragmentation grenades sometimes used in such attacks. Although incidents of fragging had occurred in almost every conflict before and perhaps since Vietnam, the practice gained particular notoriety as America’s war effort began to draw down, particularly after 1970. Some press reporters and politicians highlighted the practice as being symptomatic of the decline in military discipline and morale. Studies of the motives behind fragging reveal that most incidents occurred in rear areas and not in the heat of battle. Contributing factors often included drug and alcohol usage by the perpetrators. In addition, programs such as Project 100,000, the Department of Defense initiative to admit soldiers who might previously have been rejected on physical or psychological grounds, also resulted in recruits who might not have been prepared for the discipline required of soldiering in Vietnam. Other attacks were racially motivated as some drafted minorities adopted the more radical antiwar doctrines of the Black Nationalism movement. While the incidents tended to stem from individual grievances against particular officers, the victims were often NCOs who were either too eager to lead their soldiers into the jaws of battle or who lacked the combat experience to be effective leaders. As the war wound down, the military became increasingly wary of such incidents and moved to restrict access to fragmentation grenades and individual weapons.

The final stage of Nixon’s plan actually included widening the war. In an effort to secure better peace terms from the communists by negotiating from a position of strength, Nixon targeted enemy sanctuaries in Cambodia. This attack was part of a new tactical direction for the Military Assistance Command Vietnam, introduced in 1969 under the new commander, Creighton Abrams, to take the fight more directly to areas of North Vietnamese army strength. News of the U.S. soldiers’ invasion of Cambodia led to some of the most violent antiwar protests of the Vietnam era. In May 1970, Ohio National Guardsmen at Kent State University opened fire on protesting students, killing four.

In April 1972, Nixon also restarted the bombing of North Vietnam, with massive air strikes—code-named Linebacker—in response to an attempted invasion of the South by North Vietnamese forces.

Endgame

Peace talks continued throughout 1972, with both sides seemingly keen on an agreement. But when talks stalled at the end of the year, Nixon increased the bombing of North Vietnam by launching Linebacker II, or “the Christmas Bombings.” The massive destruction wrought by these raids brought both sides back to the negotiating table in January 1973; by the end of the month, an agreement was in place. The provisions of the Paris Peace Agreement—signed on January 27, 1973, by Kissinger and his North Vietnamese counterpart, Le Duc Tho—included (a) an immediate cease-fire, (b) the withdrawal of all remaining U.S. forces, (c) reunification elections, (d) the recognition of South Vietnam by North Vietnam, and (e) the return of all U.S. prisoners of war. The agreement marked the end of significant U.S. involvement in South Vietnam. Although Nixon publicly lauded the final accords, they contained no enforcement mechanisms; without direct U.S. support, South Vietnam remained incredibly vulnerable to invasion from the North. Realizing this, the South Vietnamese president, Nguyen Van Thieu, refused to sign the agreement. With U.S. aid drying up, South Vietnam began to crumble. The corruption and military ineffectiveness that had characterized the nation since its inception had hardly abated. When North Vietnam launched its almost inevitable attack in 1975, the South Vietnamese proved wholly incapable of putting up sustained resistance. By April, communist tanks were in Saigon, forcing a desperate evacuation of the remaining U.S. personnel. The images of crowded helicopters fleeing from the U.S. embassy provided an appropriately ignominious end to America’s involvement in Vietnam. Public reaction in the United States was muted, and Congress refused President Gerald R. Ford’s attempts to provide any meaningful aid to the South.

Aftermath and Consequences

With North Vietnam forcibly reunifying the nation, America’s goals of creating a viable democracy in South Vietnam and preventing the spread of

communism had failed, thereby inflicting America's first military defeat in what was—at the time—its longest ever war. The war had proved to be terrifically destructive. In addition to the 58,000 U.S. deaths, the South Vietnamese lost an estimated 250,000 persons. Communist forces suffered more than 1 million killed, while estimated civilian casualties were as many as 2 million. Economically and environmentally, Vietnam was devastated and took years to recover. While a majority of America's Vietnam veterans returned to civilian life with little trouble, a significant minority suffered from the psychological trauma of fighting in a war that few of their countrymen appreciated. The dedication of the Vietnam Veterans Memorial in Washington, D.C., in 1982 offered some solace for their suffering, but the scars ran deep. The United States was culturally and politically shaken as the prosecution of the war raised questions about the trustworthiness of the government and the moral righteousness of America's military and Cold War mission. Consequently, the United States suffered a loss of international prestige during the 1970s in the wake of the defeat. Furthermore, the president's war-making powers were significantly circumscribed by the 1973 War Powers Resolution, and for a generation (at least up through the 1991 Persian Gulf War), the nation's ability to engage in military conflicts was hamstrung by a paralyzing fear of large-scale open-ended military engagements with unclear goals—a condition generally referred to as “the Vietnam syndrome.”

Historical Interpretations

The Vietnam War raised many questions about the nature of U.S. foreign policy and, perhaps more broadly, the American character. Unsurprisingly, therefore, historians have engaged in a lively and often polemic debate over the war's meaning. One of the biggest points of contention was—and remains—the question of why the United States got involved in the war—that is, was this the wrong war at the wrong time at the wrong place, or was the conflict a necessary part of the nation's global commitment toward containing communism? Perhaps the most pervasive view among scholars remains that the war might have been undertaken with good intentions by U.S. policymakers, but they erred in their calculation on several fronts, such as overstating the geopolitical importance of South Vietnam,

backing a corrupt regime under Diem, failing to appreciate the nature and ferocity of Vietnamese nationalism, and failing to develop a coherent and effective strategy to win the war from the outset. This combination of factors combined to create a situation from which the United States was never likely to emerge victorious. Such views have tended to permeate many of the most popular syntheses on the war, such as David Halberstam's *The Best and the Brightest* (1972), Frances FitzGerald's *Fire in the Lake: The Vietnamese and the Americans in Vietnam* (1972), Stanley Karnow's *Vietnam: A History* (1983), George Herring's *America's Longest War: The United States in Vietnam, 1950–1975* (1986), and George Donelson Moss's *Vietnam: An American Ordeal* (1990). One of the main architects of the war, McNamara, confirmed many of the tenets of this orthodox view in his memoir *In Retrospect: The Tragedy and Lessons of Vietnam* (1995).

During the 1980s, some scholars began to question the notion that the war had been a tragic mistake. Reflecting the conservative milieu of the 1980s and Ronald Reagan's notion that the Vietnam War had been a “noble cause,” revisionist scholars tended to accept that the war was a just cause given the need for anticommunist vigilance during the 1960s. Accepting the need for U.S. military intervention in Vietnam, these scholars then focused their attention on the reasons for the military defeat. Probably the most influential of the revisionist texts was Harry G. Summers Jr.'s *On Strategy: A Critical Analysis of the Vietnam War* (1982). Summers—an army colonel during the war—criticized civilian leaders for failing to fully mobilize the public behind the war effort and military leaders for focusing too much attention on the Viet Cong while ignoring the locus of communist power in North Vietnam. For Summers, greater attention to the counterinsurgency in the South, instead of the destructive war of attrition, combined with a more conventional assault on the North and on communist sanctuaries in Laos and Cambodia, could have produced a victory for the United States. More recently, several scholars have continued to argue that the war was a worthy crusade and that the United States could have won the conflict with different tactics. Michael Lind, in *Vietnam, the Necessary War: A Reinterpretation of America's Most Disastrous Military Conflict* (1999), argues that a failure to stand fast in Vietnam would

have hampered U.S. ability to wage an ultimately successful Cold War battle against what he sees as the dark tyrannical forces of communism. Lewis Sorley's *A Better War: The Unexamined Victories and Final Tragedy of America's Last Years in Vietnam* (1999) suggests that the switch to pacification and Vietnamization programs under Creighton Abrams was yielding positive results by 1971. By then, however, Nixon and Kissinger were more concerned with seeking a way out of the conflict and had lost any remaining hope of achieving a meaningful victory.

In seeking to explain the defeat, some conservative scholars have also blamed the media for the nightly beaming of negative images of the war effort into people's living rooms. The notion that the media turned the public against the war has gained considerable traction in conservative lore far beyond academic studies. Many military leaders also developed a distrust of press reporting during combat, leading to far greater restrictions on journalists' freedoms in conflicts such as the 1991 Persian Gulf War. Qualitative studies of press reporting suggest that the media reporting of the war was not biased and what the military considered negative reporting generally revealed the realities of the nation's plight. William Hammond's *Reporting Vietnam: Media and Military at War* (1998) reveals that most of the media coverage tended to reflect rather than drive the growing public concerns about the war.

Away from the broader political questions, the military experience of the average soldier has garnered a lot of attention. In the 1970s, as the nation struggled to find a meaning to the Vietnam experience, many veterans and journalists wrote insightful accounts of their time in Vietnam. Books such as Tim O'Brien's *If I Die in a Combat Zone* (1973), Michael Herr's *Dispatches* (1977), and Philip Caputo's *A Rumor of War* (1977) have provided some of the most powerful meditations on war ever written. Often, these accounts detailed the day-to-day brutality and drudgery of war. More recently, historical accounts of combat in Vietnam—such as Joseph Galloway and Hal Moore's *We Were Soldiers Once . . . and Young* (1992) and Andrew Wiest's *The Boys of '67: Charlie Company's War in Vietnam* (2012)—have alluded to the camaraderie, heroism, and sacrifices of the soldiers involved. Some historians have, however, questioned the fairness of the draft in selecting those who did serve. Most notably, Christian Appy,

in *Working Class War: American Combat Soldiers and Vietnam* (1993), claimed that the vast majority of those drafted tended to come from disadvantaged families. According to Appy, more privileged citizens could attain college deferments or other avenues to avoid the draft, leaving the burden of military service to fall more heavily on the shoulders of the impoverished or less educated. As with most of the historical issues surrounding the Vietnam War, the questions raised by Appy and others continue to have contemporary relevance. Consequently, scholarly and public interest in the Vietnam War is likely to remain high in the foreseeable future.

Mark B. Boulton

See also Agent Orange; Alliances; Giap, Vo Nguyen; Media Relations, Military; Military Advisors, U.S.; My Lai Massacre; Peace Movements; Public Affairs, Military; Special Forces, Army

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VIRGINIA MILITARY INSTITUTE

Virginia Military Institute (VMI), in Lexington, Virginia, is the oldest state-supported military college in the United States. It was founded on November 11, 1839, on the site of Lexington state arsenal, when the first corps of cadets relieved the personnel on duty at the facility. This entry will provide a brief overview of the institution's history and its contribution to the education and development of important U.S. leaders, both political and military. In addition, it will highlight some of the significant changes that have occurred in the institution over the course of the past 20 years.

Early History

In the years between its founding and the outbreak of the American Civil War, Virginia Military Institute quickly achieved a reputation as a first-rate learning institution. The first class, composed of 16 cadets, graduated in 1842. Probably the most famous instructor to teach at the school during its early years was Thomas "Stonewall" Jackson, who began his tenure at the institution in 1851, as professor of natural and experimental philosophy. Cadets from VMI were present at the execution of John Brown in 1859.

Civil War

During the Civil War, the cadets at the institute made important contributions to the Confederate war effort from the outset. Primarily, they assisted in the training of Confederate armies. A number were dispatched under Jackson to aid in the training of new recruits at Camp Lee outside Richmond.

The cadets themselves were called into action on 14 different occasions. The most significant call-up of the corps of cadets at the institute involved their participation in the Battle of New Market on May 15, 1864. In this engagement, the cadets took part in the fighting as an independent unit. The cadets who served that day ranged in age from 14 to 22, with some reports alleging that boys as young as 12 took part in the fighting. In the Battle of New Market, the corps of cadets suffered 52 casualties but did succeed in turning the tide of the battle in favor of the Confederate forces. As a result of their participation in the battle, Virginia Military Institute is the

only military college or academy whose troops hold the distinction of serving as an actual combat unit.

In 1864, Union Army troops under the command of General David Hunter shelled and burned much of the institute's campus as part of the Valley Campaign. The destruction was nearly complete. For a time, classes were held at the Alms House in Richmond. The corps of cadets was actually disbanded as Richmond was evacuated in April 1865 due to the fall of Petersburg. The Lexington campus reopened in October 1865 and has remained in operation ever since.

World War II

VMI alumni made significant contributions to the Allied war effort during World War II. The most notable of those who played a role in the war was George C. Marshall, the top U.S. general during the war. He went on to serve as secretary of state and remains the only military leader to win the Nobel Peace Prize.

In addition, the institute participated in the War Department's Army Specialized Training Program between 1943 and 1946. This program provided training in engineering and other war-related fields to enlisted men at numerous colleges across the country. During the period listed above, the institute served more than 2,100 enlisted men in the Army Specialized Training Program.

Code of Honor

VMI is known for its strict code of honor, which has remained unchanged since the facility's founding. Under the code, students do not lie, cheat, or steal, nor do they tolerate anyone who does. Violation of the code itself as well as protection of violators through failure to come forward both are offenses punishable by dismissal from the institution.

Corps of Cadets

Currently, VMI houses 1,300 cadets from 37 states and nine foreign countries. To enter the institute, prospective cadets must be between the ages of 16 and 22, be unmarried, and meet the physical requirements for membership in the Reserve Officers' Training Corps. In addition, they must be graduates of an accredited secondary school or demonstrate completion of an approved home-schooling

curriculum. The composition of the student body has changed over the years to reflect the changes in American society. For instance, the institute accepted the first African American cadets in 1968. In addition, after a long legal battle, the first coed class, which included 30 female cadets, was introduced in the institute in 1997. They matriculated in the class of 2001. Tradition is a hallmark of student life at VMI. The uniforms worn by the students are of the same design as those issued to the first class of cadets in 1839. In addition, the members of the upper classes subject the incoming first-year cadets, colloquially known as “rats,” to additional close inspection and heightened discipline. The various rituals that form a part of life at the institution aid in the inculcation of the esprit de corps in each successive class.

Conclusion

Since its inception in 1839, the Virginia Military Institute has strived to achieve and maintain a high level of academic excellence in its cadets. The alumni of the academy have demonstrated the success of the institution in attaining this goal repeatedly over the years. As the institute has moved into the 20th century, it has changed to meet the new demands of the society it serves, at some times more willingly than at

others, but it has not sacrificed the core principles that contributed so much to the success of its graduates.

James R. Mc Intyre

See also Civil War, American; Ethics; Military Science; World War II

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VO NGUYEN GIAP

See Giap, Vo Nguyen

W

WAR, PRINCIPLES OF

There are nine commonly recognized principles of war in military doctrine: objective, offensive operations, mass, economy of force, maneuver, unity of command, security, surprise, and simplicity. Recognizing the experience of joint operations in the Iraq and Afghanistan wars, recent Joint Service doctrine adds restraint, perseverance, and legitimacy to the historical set of nine. Planners and commanders use the principles of war conceptually rather than as a formal checklist. The principles of war are a distillation of centuries of military thought on the common elements of successful military operations. Incorporating the principles of war in a war plan does not guarantee success, but historical examples suggest that such plans do have a higher likelihood of success. Military planners use the principles of war conceptually to study past campaigns. As an analytical tool used in military education, the principles of war highlight common elements of successful military operations at the tactical, operational, and strategic levels of war.

Development of the Principles of War

One of the earliest military thinkers who attempted to identify and define common characteristics of warfare was Sun Tzu. While Sun Tzu's *The Art of War* does not proffer specific elements that should be part of military operations, it does provide an intellectual framework for general concepts of common

operations. Ancient Greek writers also sought to capture principles of warfare in their works by identifying common characteristics of successful battles. Two of the most popular military thinkers of the 19th century, Carl von Clausewitz and Baron Antoine de Jomini, built on those earlier examples to explain the success of Napoleon Bonaparte in his continental campaigns.

In the 20th century, the French marshal Ferdinand Foch was the first military thinker to produce principles of war recognizable in U.S. military doctrine today. He based his concepts on study of the successful Prussian campaigns of the late 19th century, and Foch's work became the basis for training French officers up to World War I. British General J. F. C. Fuller developed the original principles of war borrowed by the United States after reflecting on the experience of World War I.

U.S. military doctrine formally defined the principles of war after its experience in World War I as movement, economy of force, surprise, objective, mass, offensive operations, cooperation, security, and simplicity. During the interwar years, military officials questioned the use of these principles because of the introduction of armor and aircraft technologies. World War II, however, proved that the adaptation of tactics to utilize these new technologies did not invalidate the principles. In doctrinal updates following the war, cooperation changed to unity of command and movement to maneuver. The counterinsurgency experience of the Vietnam War seemed to invalidate the principles of war, but Cold War doctrinal updates reaffirmed the use

of the principles of war in the 1980s. Today, all branches of the U.S. armed forces incorporate the nine principles of war into their respective operational doctrine manuals.

The Principles of War Defined

A military objective is the end goal of a warring party and must be clearly defined, attainable, and produce decisive results. The *objective* is the focal point that all subsequent planning is based on. Commanders must understand the implications of achieving, or failing to achieve, the military objective. Political implications must be considered at the strategic level of war since military means achieve political ends. While always important, this aspect has greater meaning in stability and support operations because of the proliferation of communication capabilities around the world and closer interaction of military forces and civilians. The ability to broadcast an event around the world nearly instantaneously has greatly expanded the power to shape perceptions of that event. Commanders, therefore, must clearly understand and communicate objectives to subordinates to maintain positive relationships with host nation civilians and facilitate political relationships.

The principle of *offensive operations* is the key to all decisive military campaigns. Units pass to the defense to consolidate and reorganize or to protect infrastructure and population centers among other reasons. Defense is a temporary position and is usually a small part of a larger offensive plan. Offensive operations seize initiative and confuse or disorient the enemy. Maintaining initiative forces the enemy commander to make decisions that create opportunities for friendly forces to exploit. This principle resulted in large part from the experience of trench warfare in World War I. The use of the machine gun contributed to stalemated lines in western Europe. The cost in human lives was high and the combatants struggled to develop new technologies and tactics to break through. Among these was the first generation of tanks. World War I proved so ghastly in its human costs that after the war most military thinkers agreed that maintaining offensive operations was the best way to conclude a war quickly, thereby reducing the number of deaths and human suffering.

The principle of *mass* suggests that commanders should bring the most combat power available to

them to bear on the enemy at a decisive point on the battlefield. This principle remains the same despite changes in the technology of warfare. During the American Civil War, this principle included the use of infantry, horse-mounted cavalry, and artillery to achieve an objective. In World War II, commanders brought together infantry, armor, long-range artillery, and bomber aircraft. The Korean and Vietnam wars included the use of helicopters, while the recent wars in Iraq and Afghanistan showcased the use of artillery fired from aircraft. In all of these examples, the technology has improved while the concept remained the same. Commanders bring together all available assets to overpower an enemy, and massing combat power achieves the best result when applied to the decisive point on the battlefield. A commander determines where the decisive point is during his planning process by deciding where success will lead to achieving the stated objective.

On the opposite end of mass is the principle of *economy of force*. A commander economizes force by devoting only the minimal combat power needed to achieve secondary objectives. This, in turn, leaves the maximum amount of combat power available to mass on the primary objective. Operations always have constraints against available combat power as a result of the distribution of forces as orders pass successively from higher command levels to lower. Commanders wisely choose where and when to commit smaller forces to secondary objectives by communicating a clear objective and vision for accomplishing the mission. A commander using a feint to draw away enemy forces from his or her primary objective is an example of economizing force. In this example, the feint would be composed of only enough combat power to make the enemy commander believe it was the decisive force. Once the enemy commander commits his forces to the feint, the friendly decisive force is able to mass its combat power on the objective.

The principle of *maneuver* encompasses how a commander moves and employs all available combat power during an operation. At the tactical level, maneuver includes the positioning of small units on the battlefield. Blocking positions, checkpoints, withdrawals, and raids are examples of small unit maneuvers among others. The concept remains the same at the operational level while the units and the geographical areas are larger. Strategically, maneuver includes all branches of the Department

of Defense, U.S. and overseas basing, and even manpower and equipment structures. The recent restructuring of the army to provide modular brigades and the rebasing of units from Germany to the United States are examples of strategic-level maneuvers. Operationally and tactically, the principle of maneuver includes how a commander positions assets in both space and time to achieve an objective.

The most effective way to maintain command and control of a military operation is to have one unified commander. This is the principle of *unity of command*. Operations with multiple commanders lack synchronization and unity of effort, resulting in wasted organizational energy and failure to achieve the objective. No unifying structure to keep all subordinate units working toward the same goal results in operational drift. The challenge of maintaining unity of command has increased with the modularization of military forces and further integration of military and other governmental agencies in theaters of operation. Multiagency operations, such as Operation New Dawn in Iraq, show the difficulty of maintaining unity of effort. A brigade commander is likely to have members of the State Department on staff, yet those staff members report simultaneously to the brigade commander as well as their own superior within the State Department. The U.S. Army experienced problems with this in Somalia in 1993, as many nongovernmental organizations sought to provide aid to the local population but had no coordination with military units operating in the same geographical area. Unity of command is essential to the other principles of war. Without a single responsible commander, it is difficult to achieve the others.

The principles of *security* and *surprise* are reciprocal. The goal of security is protecting friendly combat power, while achieving surprise facilitates the destruction of a confused enemy. Commanders use a variety of techniques to maintain security and prevent the enemy from surprising friendly forces. The enemy commander may send reconnaissance patrols, or may employ more passive measures such as video records, to answer questions that facilitate his attack plans. This is true in high-intensity conflict as well as stability and support operations. The enemy has employed goat herders and farmers in the Iraq and Afghanistan wars to collect intelligence on U.S. forces. The use of video recorders has aided the enemy in the placement of improvised explosive devices along convoy routes

to achieve surprise. Conversely, friendly commanders employ the same measures to provide security for their forces. Counterreconnaissance patrols and unmanned drones identify enemy attempts at intelligence gathering and prevent the enemy from achieving surprise. Deception is another method of maintaining security. Commanders use feints to keep the enemy off-balance and prevent him from discovering the true objective of the operation until it is too late. Successful security measures allow a commander to mass combat power on his objective.

The principle of *simplicity* suggests that the best plans are those that are direct and easy to understand. These two characteristics reduce the potential for confusion and facilitate the flow of an operation. Simplicity is tremendously important in multinational, coalition, and joint operations as well as those involving other government agencies. In multinational and coalition operations, cultural and language differences can lead to misunderstandings that reduce the ability of the unified commander to mass combat power on the objective, maintain security, and effectively maneuver forces. Joint operations, or those involving more than one branch of the armed forces, must be kept simple because of doctrinal and equipment differences. Other government agencies operate under different rules from any branch of the armed forces, and most are unfamiliar with military operational terms and graphics. Simple plans help smooth over these differences and keep all elements working toward the same goal.

Joint doctrine adds three additional principles: *restraint*, *perseverance*, and *legitimacy*. The principle of restraint suggests that the avoidance of unnecessary collateral damage and excessive force helps maintain the support of the populace for military presence and operations. Restraint makes a direct link between the strategic and tactical levels of war by pointing out the potential political, and therefore strategic, problems that result from the excessive use of force. Excessive force in some areas of Iraq following the toppling of Saddam Hussein's regime contributed to the rise of the insurgency in late 2003. Unnecessarily detained or threatened Iraqis saw little difference between Hussein's regime and U.S. forces. Many came to view the insurgency as a fight for freedom against an occupation force. The infamous events at Abu Ghraib also demonstrated the effects of a lack of restraint by U.S. forces. Restraint is a principle that commanders train into their forces.

The rules of engagement and engagement criteria are operational control measures that help maintain restraint.

Perseverance refers to the commitment necessary to achieve national objectives. This principle is useful primarily at the strategic level since units at the operational and tactical levels have no input into how long an operation will last, except their reports and assessments that feed into that decision. Joint doctrine advises that economic and diplomatic measures in conjunction with military operations are sometimes necessary to achieve national goals. These additional measures may be required to address the underlying causes of a conflict and take time to fully implement.

Finally, joint doctrine adds the principle of legitimacy. Legitimacy has two components: (1) the legitimacy of joint forces and (2) the legitimacy of host nation governance. The legitimacy of joint forces supports perseverance. When the legitimacy of an operation is in question, the perseverance required to attain national objectives may not materialize. Conversely, when an operation is legitimate, the will to persevere is more likely to be present. An operation's morality and legality undergird its legitimacy, and the will and support of both the U.S. public and the civilian population within the area of operation maintains its legitimacy.

The second part of legitimacy is the maintenance of the legitimacy of host nation governance. If U.S. forces conduct all operations on behalf of the host nation government, then the public may call the legitimacy of that government into question. Restraint exercised by U.S. and host nation forces reinforces legitimacy. Public services provide another avenue to maintaining legitimacy. When a host nation government is able to provide security, water, education, and other standard services, its population is more inclined to accept governmental authority. Insurgent forces that are able to provide basic services to local populations erode the legitimacy of the host nation government. U.S. forces must bolster host nation legitimacy in ways that do not compromise security but also do not accidentally delegitimize host nation forces by doing too much.

The Future of the Principles of War

During the Vietnam War, U.S. doctrine writers called the usefulness of the principles of war into question. The principles seemed more applicable to the

high-intensity conflicts of the World Wars and the first year of the Korean War than to the counterinsurgency of Vietnam. U.S. planners revived the principles when they focused on a potential World War III against the Soviet Union. Many believed the stunning success of coalition forces in the 1991 Persian Gulf War validated the principles of war. Nevertheless, the recent wars in Iraq and Afghanistan and the resulting addition of three principles to joint doctrine show that as war evolves, so too will the principles of war.

Recent military thinkers have suggested the need to create national principles of war and rename the traditional principles of war as "the principles of military operations" to better synchronize military means with political ends. The development of national principles of war would provide a guideline for elements of national power other than the military, and these principles would parallel the familiar military principles of war. Pointing to a lack of strategic coherence as the traditional American way of war, proponents of the national principles of war argue that the difficulty in achieving the described national aims of the Iraq and Afghanistan wars proves the need to synchronize economic, diplomatic, and information assets with military operations. In this way, all assets of national power can be cohesively leveraged to accomplish national goals rather than relying on military power alone.

Cyber and information warfare has presented another challenge to the principles of war. The past decade has witnessed the inclusion of these two types of conflict in military doctrine to recognize the technologies and complexities of the current operating environment. While some military thinkers argue that the principles of war pertain to actual conflict between armed forces, others argue that cyber and information warfare is integrated into ground combat rather than conducted separately and, therefore, is already contained within the principles of war. Proponents of applying the traditional principles of war to cyber and information operations argue that these capabilities are merely new tools for commanders to achieve the same effects as the traditional tools of warfare. Joint doctrine already describes this realm as being equivalent to, rather than separate from, the realms of land, sea, and air. Therefore, there is no need to expand the traditional principles of war.

The conflicts of the 20th and 21st centuries have demonstrated the durability of the traditional nine

principles of war found in U.S. military doctrine. It seems that debate over the usefulness and applicability of the principles of war is over. Yet debate over the modification of the principles of war, if they should change at all, will likely continue as the parallel debate over what future threats will look like occurs. This remains primarily an intellectual debate as military planners do not use the principles of war as an operational checklist. They serve as an intellectual basis for planners to conceive of operations to meet stated goals. The principles facilitate the study of past wars to help planners better understand how and why some operations succeeded while others failed. Debate over the principles of war is a healthy exercise as it demonstrates the continued striving of military professionals to perfect their craft and achieve the goals of the nation that they serve.

David Glenn Williams

See also Combat Power; Just War Tradition; Plans, Operational; Plans, War; Sun Tzu

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WAR DEAD, DISPOSITION OF

Since the American Civil War, the disposition of the war dead has been a matter of considerable importance to Americans in and out of uniform, with military authorities taking great care to recover, identify, and inter the fallen, as Americans more generally

have made them central to their conversations about war. As preeminent symbols of the risks and rewards of military service and national belonging, the war dead have been used to glorify and condemn war, to soothe and enflame wartime antagonisms, and to expand and restrict routes to full American citizenship. They have lent themselves to powerful revisions of the nation's principles, as in the Gettysburg Address, and inspired its most visited national shrines, such as the Tomb of the Unknown Soldier and the Vietnam Veterans Memorial. They have also sparked controversy, as when the Department of Defense banned news coverage of remains repatriation from the outbreak of the Persian Gulf War in 1991 until that policy was reversed in 2009. This entry examines the origins, evolution, and purpose of the U.S. military's efforts to recover the war dead in order to better understand recent controversies over the representation of the fallen.

Origins and Evolution

The outlines for today's casualty resolution practices emerged during the Civil War. Before then, authorities took little interest in the war dead, restricting their efforts to repatriating the remains of officers while making minimal accommodations for those who wished to honor less exalted warriors. But with the staggering death tolls of the Civil War, federal officials adopted a more democratic approach toward the final disposition of the dead, with Congress creating the national cemetery system in 1862, while the War Department ordered commanders to inter their dead in individually marked graves therein. These mortuary practices soon became central to popular understandings of the conflict and public support for it, as reflected in President Abraham Lincoln's Gettysburg Address, which made the orderly rows of the Union dead sacred symbols of the new democratic and racial order that the war promised.

Because they were so important to emerging visions of the nation, the war dead remained important to combatants on both sides of the conflict long after the Civil War ended. Federal forces labored to recover and rebury more than 300,000 Union dead in the years after the war, identifying a little more than half that number. Unprecedented both in scale and character, this effort endeavored to find, identify, and inter every Union corpse, regardless of rank, at public expense. Yet even this historic

undertaking left vast numbers of federal dead missing or unidentified, and it neglected entirely the 258,000 Confederate dead. Initially excluded from national cemeteries, Confederate remains did not win the right to federal custodianship until 1898, when the Spanish-American War brought sectional reconciliation in a wave of resurgent nationalism.

The Civil War's memorial innovations were further refined in the 20th century, when total war required new levels of public mobilization and posed new threats of wartime oblivion. Like other combatant nations, the United States undertook a massive effort to locate and rebury the dead during and after the First World War, recovering all but 3,000 of the 80,000 Americans killed in Europe. Under a policy of voluntary repatriation, some 70% of the fallen were returned to the United States for burial. The remainder were interred in overseas cemeteries constructed throughout western Europe. To stand in for those who would never be found or, if found,

never identified, an unidentified American warrior was returned to Arlington National Cemetery and buried at the Tomb of the Unknown Soldier. This tradition was repeated after the Second World War, which left far more Americans missing and unidentified, some 87,000 total. While mortuary affairs advanced during and after the war, allowing for the positive identification of 97% of all recovered casualties, far-flung military operations left huge numbers permanently lost, especially in the Pacific. Thus, while most families elected to have their loved ones repatriated to the United States at the war's end, more than 20% never had such an option. The same could be said of the Korean War, where nearly 8,200 Americans were left missing after the fighting ended, more than 22% of all American deaths in the conflict. Indeed, so many American bodies were lost behind enemy lines in the war's early fighting that graves registration units discontinued the practice of burying the war dead in theater in late 1950.



Union Soldiers Monument, Hampton National Cemetery.

Source: Photo by David Haas. Courtesy of the Library of Congress.

Instead, they instituted a policy of concurrent return, whereby the dead were shipped to Japan for identification before being returned to the United States for burial while combat continued, a practice that continues to this day.

From that point on, Americans came to expect that the war dead would be returned to the United States while fighting continued, and they grew increasingly intolerant of situations where that proved impossible. By and large, the U.S. military proved capable of satisfying public expectations. As American warfare grew more asymmetric in Vietnam and after, and as the military grew more proficient in speeding the dead and wounded from the front to the rear, the number of missing dropped precipitously. In Vietnam, just 2,500 Americans remained missing at

war's end, fewer than 5% of those killed. But because those "missing in actions" became a source of significant controversy in the 1970s and 1980s, prompting allegations that the U.S. government was not doing all it could to recover missing warriors, civilian and military officials grew increasingly sensitive to the costs of mishandling the war dead. This sensitivity prompted a new emphasis on force protection, which some critics derided as "casualty aversion," and a new determination to control access to images and information about American casualties.

Recent Policy and Political Controversies

The U.S. government has regularly restricted access to images of American casualties during wartime,



The remains of Air Force Captain Jefferson S. Dotson are carried to his final resting place by members of the Army's Old Guard Caisson Platoon during a Full Honors Funeral Repatriation at Arlington National Cemetery, Virginia, October 25, 2002. Dotson, an F-100F Super Sabre pilot, was declared missing in action more than 30 years ago when his fighter-bomber went down during a Forward Air Control reconnaissance mission over the Ho Chi Min trail in central Laos. Dotson's remains were discovered in spring 2002 near his jet's crash site and were positively identified through DNA testing.

Source: U.S. Air Force photo by Technical Sergeant Jim Varhegyi (released).

censoring photos of the war dead throughout most of World War II, for instance. Still, from the Civil War through the Cold War's end, it was common for Americans to see graphic images of the dead and less disturbing images of flag-draped coffins. Even in World War II, officials eventually authorized the publication of photos of the dead to motivate Americans to see the war through to its end when most were looking ahead to the resumption of peace. Rather than undermine support for the war, authorities assumed that images of dead Americans would rekindle anger at the enemy, calculations that proved correct and persisted through the Vietnam War. But when war in Vietnam proved unpopular, many observers began to rethink this view, and by the late 1980s, it had become conventional wisdom that bloody imagery of American casualties in Vietnam had eroded support for the war, with some even claiming that critical press coverage had caused an otherwise avoidable American defeat.

Such thinking, which was particularly attractive to those intent on reasserting the utility of force in the post-Vietnam War era, informed the first Bush administration's decision to prohibit press coverage of remains arrivals at Dover Air Force Base on the eve of the 1991 Persian Gulf War and to otherwise restrict public access to politically sensitive information. Secretary of Defense Dick Cheney, a longtime critic of the news media and staunch advocate for government secrecy since his days in the administration of Gerald R. Ford at the end of the Vietnam War, was the lead architect of the policy. And though his restrictions on reporters prompted an outcry from the press, the war was so short lived and relatively cost-free in American lives that controversy soon subsided, and the ban on images of caskets returning to Dover formally remained in place.

But despite the ban on news coverage of Dover repatriation ceremonies, images of flag-draped coffins were common in the Clinton years and early in the second Bush administration. In 1998, photos of returning caskets of Americans killed in the bombing of the U.S. embassy in Nairobi, Kenya, were disseminated, for instance, as were images of caskets returning from the terrorist attack on the USS *Cole* in 2000. And the coffins of Americans killed in Afghanistan were often photographed en route to Dover. Throughout this period, policymakers spoke of "the Dover test" when contemplating military

action, suggesting both the public's continued access to images of the war dead and continued official unease over that access. Thus as the Bush administration prepared to invade Iraq, it revisited the issue, imposing a worldwide prohibition on media coverage of all deceased U.S. military personnel. Pentagon officials cited the privacy of military families as their sole consideration, but critics saw this step as the latest in a series of moves by administration insiders like Vice President Dick Cheney that were intended to conceal the war's true costs from public view.

As the Iraqi insurgency intensified in late 2003 and American casualties grew apace, such criticisms mounted, with news outlets printing photos from Dover after an air force agency mistakenly granted a Freedom of Information Act request in 2004, while ABC's *Nightline* devoted a program to reading the names of Americans killed in Iraq as it aired portraits of each. In June 2004, Senator Frank Lautenberg, a New Jersey Democrat, sought to amend a defense spending bill to allow journalists to report from Dover, though the measure was rejected by the Republican majority. If Republican lawmakers had convinced each other of the merits of the ban, though, they failed to persuade the public, with 62% of Americans telling pollsters that coverage of returning remains should be allowed. And the war dead appeared frequently in cinematic treatments of the war in both reverential and critical forms. In the face of continued opposition, the Pentagon softened the ban in 2005 by agreeing to release official Department of Defense photos from Dover to the press, a compromise that remained in place through the 2008 election.

Soon after President Barack Obama took office in 2009, Secretary of Defense Robert Gates announced that news media would be allowed to attend remains repatriation ceremonies at Dover and photograph the coffins of the war dead so long as the families of the dead consented. Though some families protested the change, in the 6 months after the ban was lifted, 60% of families asked for reporters to attend the remains repatriation ceremony, suggesting that their views on the ban were in line with those of the general public. But after the novelty of such coverage wore off, it became clear that few reporters or ordinary Americans wished to witness the repatriation of remains on a regular basis. At many arrivals, the Associated Press and military camera crews are the

only media present. And so the Defense Department that once prohibited images of the fallen has more recently become the leading distributor of such images.

If this outcome is ironic, it is not historically surprising. Throughout American history, military authorities, military veterans, and military families have been among the leading proponents and primary instruments for recovering, reburying, and celebrating the war dead. Through honoring the sacrifices of the dead, those parties did more to encourage respect for the military and to foster support for war than they did to dampen enthusiasm for either. The notion that the sight of the American dead alone diminished public support for war or the military reflected a misreading of the Vietnam War that reduced that conflict's manifold problems to a single media scapegoat. On the other hand, respect for the fallen cannot sustain support for war in the absence of other compelling rationales or evidence of progress, and awareness of war's costs can and should serve to dissuade societies from entering it lightly or waging it indefinitely. Sending this message has been one reason that military institutions, soldiers, veterans, and military families have traditionally endeavored to recover and commemorate the war dead.

Michael J. Allen

See also American Battle Monuments Commission; Arlington National Cemetery; Cemeteries, Military; Customs and Traditions; Joint POW/MIA Accounting Command

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WAR FILMS

New York Times columnist Russell Baker once sardonically stated that President Ronald Reagan “had trouble distinguishing history from old movie plots.” If so, Mr. Reagan was no different from millions of other people who have come to see films as a reflection of historical reality. Motion pictures can both shape and reflect our understanding of the past in general and of military history in particular. That influence is pervasive and complex. Indeed, the first war film—*Tearing Down the Spanish Flag* (1898)—appeared at the dawn of the age of moviemaking and had great public appeal. It reflected the general enthusiasm for the war and stimulated widespread interest in motion pictures as mass entertainment. War films have retained their fascination for filmmakers and audiences into the 21st century. However, the nature of war films has radically changed; simple appeals to patriotism or the endorsement of national ideals and martial objectives evident in that first film on the eve of the 20th century and brought to perfection during the Second World War no longer elicit patriotism. The old appeals to victory and honor have been replaced almost entirely in the 21st century by a pervasive anti-war spirit emphasizing the futility of war and its baleful consequences for soldiers and civilians. The slaughter of two World Wars and the legacy of the Vietnam syndrome (defeat and humiliation) have replaced the traditional patriotic narrative.

Though *Saving Private Ryan* (1998) was an ode to the veterans of the “Good War,” the patriotic message was undermined by the graphic images of wounds and death and the narrow goal of the soldier heroes—survival. Today, war films are more likely to picture casual slaughters, chaos, atrocity, and posttraumatic stress disorder than national ideals. The idea of the experience of war as meaningful, patriotic, romantic, or glorious has faded to black.

To appreciate how these war films become “history” and how cinema history is framed for viewers, note the method employed by the historian Paul A. Cohen in his study of the Boxer Rebellion in history and memory. He argues that an understanding of the past can best be reached through an analysis of history as event (history as reconstructed or narrated by historians), history as experience (history

from the point of view of the participants), and history as myth (present-minded or usable history). All three approaches have merit and all three speak “the truth.” The same triangulation can provide a framework for understanding war films (feature films as opposed to documentaries) of the late 20th and early 21st centuries:

1. War films as event (docudramas)
2. War films as experience (films that focus on the intimate experience of war and combat)
3. War films as myth (films that seek to use history for some political, racial, or ideological purpose)

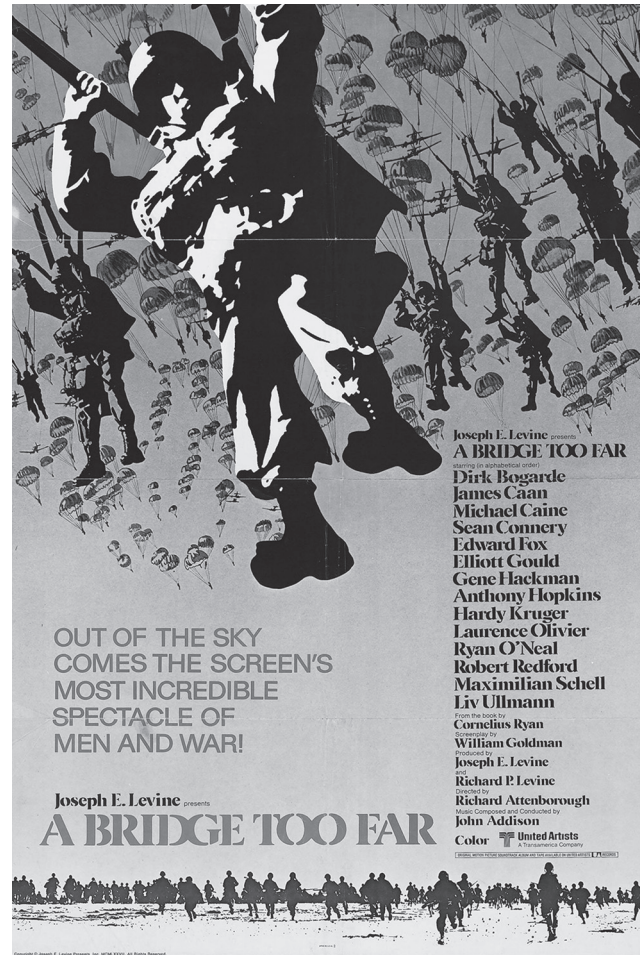
The categories are not exclusive, however, and frequently overlap.

Consider the two developments in the technique of filmmaking that have irrevocably changed the visual image of war films. The first is Stephen Spielberg’s recreation of the American landing at Omaha Beach on D-Day in *Saving Private Ryan*: The washed-out color, the imitation of combat cameras, and especially the graphic violence have forever altered the vicarious experience of war—no longer do soldiers die as if they are fainting or falling asleep. Such realism has become the model representation of combat.

The second major influence is the digital revolution (computer-generated imagery), which has largely replaced conventional optical effects and allows war movies to show vast numbers of men and equipment through virtual reality and at a fraction of the cost to previous moviemakers. Before computer-generated imagery, film required an army of extras or actual soldiers and equipment as in *The Longest Day* (1962), *A Bridge Too Far* (1977), *Patton* (1970), and *Waterloo* (1970); now computer software can be employed instead. See, for example, the re-creation of the Japanese attack on the American battleships in *Pearl Harbor* (2001), the British army at the Battle of Cowpens in *The Patriot* (2002), the Lafayette Escadrille in *Flyboys* (2006), or the Battle of Thermopylae in *300* (2006).

The War Film as Event

Docudramas attempt to re-create wars or particular battles but are not documentaries. They portray historical figures or composite figures to come as



A movie poster for *A Bridge Too Far*—this movie from 1977 was filmed before the digital age enabled computer software to create battle scenes through a virtual reality.

close to history as event as understood by the writers, directors, and historical advisers. *The Longest Day* (1963) re-created D-Day from both the Allied and German sides. *Tora, Tora, Tora* (1970) restaged the attack on Pearl Harbor from the Japanese and American perspectives. *Valkyrie* (2008) reenacted the attempted assassination of Hitler by German officers. Such films tend to exclude romantic subplots and claim to present a detached “historical” image of the event.

Gods and Generals (2003) is a “prequel” to *Gettysburg* (1993) focusing on Thomas “Stonewall” Jackson from the beginning of the war to May 1863, when he was killed by friendly fire. The film also focuses on Joshua Lawrence Chamberlain of the 20th Maine. The battles of First Bull Run,

Fredericksburg, and Chancellorsville are featured in the original 5-hour version. It is a pro-Southern, heroic interpretation of the war that goes against the grain of recent films by emphasizing the glory of battle—a “museum movie” according to one critic.

Silmido (2003), a South Korean film based on a military uprising in the 1970s, begins in January 1968, when 31 North Korean commandos enter South Korea and try, but fail, to assassinate the president of South Korea, Park Chung-hee. To retaliate, South Korea gathers a team of 31 outcasts and criminals (a Korean version of the “Dirty Dozen”). The mission is eventually recalled, and to keep it a secret, the South Korean intelligence agency decides to eliminate the men. Learning of the plan, the men escape and try to get to Seoul to tell their story. They are trapped and commit mass suicide. A follow-up investigation report is filed away and ignored.

Joyeux Noel (2005) tells of the famous Christmas “truce” on December 24, 1914, during which British, French, and German troops met in no-man’s-land to exchange greetings and share a common respect among the men on both sides: “The country? What does it know of what we suffer here? Of what we do without complaint? Let me tell you, I felt closer to the Germans than those who cry, ‘Kill the Krauts!’ before their stuffed turkey!” The film ends with an Anglican priest exhorting the men to hate the enemy. It is an antiwar message based on a true incident.

Charlie Wilson’s War (2007) is the story of Wilson, a Congressman, who, along with a Central Intelligence Agency agent, organizes support for Afghan mujahideen to resist the Russian occupation of Afghanistan.

Wilson: What is U.S. strategy?

The agent: Most strictly speaking, we don’t have one. But we’re working on it.

Wilson manages to funnel funds to his group. His efforts evolve into the Reagan Doctrine designed to support anticommunist resistance all around the world. But Wilson’s proposals are frustrated when the American government loses interest in the remote region with eventual tragic consequences after the Russians withdraw from the country.

Defiance (2008) is based on the true story of the four Bielski brothers, who operate as Soviet partisans, saving Polish Jews and recruiting them to

fight the Germans; but the tone of the film is bitter: “Merciful God,” one character prays,

we commit our friends—Ben Zion and Krensky—to You. We have no more prayers, no more tears; we have run out of blood. Choose another people. We have paid for each of Your commandments; we have covered every stone and field with ashes. Sanctify another land. Choose another people. Teach them the deeds and the prophecies. Grant us but one more blessing: take back the gift of our holiness. Amen.

The Alamo (2004), unlike the 1960 John Wayne patriotic version, attempts to present the viewpoint of both sides—Mexican and American. In a revisionist departure from all other versions, Crockett is seen being executed after surrendering rather than fighting to the death as the heroic legend would have it. *The 9th Company* (2005) is a Russian film about their Afghan war. A group of recruits leave home, are subjected to brutal training, and are caught in a savage battle with the mujahideen. The film is loosely based on a real battle in early 1988 at a place called Hill 3234 during one of the last Russian military operations. In the film, only one soldier survives; the rest are forgotten by the military leadership. In reality, the attack by 200 to 250 mujahideen on January 7 and 8, 1988, was repulsed 12 times by the Russian troops, who lost 6 men and had 28 wounded out of a total of 39. This was the first big-budget, big-screen Russian film about the failed war in Afghanistan. *Shake Hands With the Devil* (2007) is based on the Canadian general Romeo Dallaire’s account of his failed multinational peacekeeping assignment in Rwanda during the genocide in 1994. He begged the United Nations to intervene effectively to stop the slaughters but to no avail—a fierce critic of the failure of the West and the United Nations to take effective action, Dallaire is a witness “to what the rest of the world doesn’t want to see.” *Atonement* (2007) re-creates the British defeat at Dunkirk. But the image is one of chaos and indiscipline rather than heroic retreat.

Other movies in the film-as-event category include *Blackhawk Down* (2002), an account of the failed American intervention in Mogadishu in which 18 elite American soldiers were lost, and *We Were Soldiers* (2002), the Battle of the Ia Drang Valley in Vietnam, a costly battle involving

400 American soldiers surrounded by 2,000 North Vietnamese troops. It is a story of faith and heroism. Nevertheless, the narrator says,

There were no bands, no flags, no honor guards to welcome them home. They went to war because their country ordered them to. But in the end, they fought not for their country or their flag, they fought for each other.

The War Film as Experience

Fighting for each other is the theme in films that focus on the experience of combat. They emphasize group loyalties and the personal, intimate experience of war. Such films see combat in terms of the fear of exhibiting cowardice, survival, and loyalty to one's comrades—history from the bottom up. This trend in war films also reflects the trend in military history since the appearance of John Keegan's seminal book *The Face of Battle* (1976), which emphasized the agency and experience of the common soldier over the narrative of kings and generals. The combat or other wartime experience is like a pixel in a photograph—only one small particle in a larger picture but essential to it. Greater causes (e.g., the defeat of fascism) are peripheral if not absent all together. *Band of Brothers* (2001) is a 10-part miniseries about World War II adapted from a book by the historian Stephen Ambrose. Steven Spielberg followed up on *Saving Private Ryan* by producing this program that centers on E (Easy) Company of the 2nd Battalion, 506th Parachute Infantry Regiment of the 101st Airborne Division. The series depicts events told to Ambrose in interviews with surviving members of E Company. "The only hope you have is to accept the fact that you're already dead," one of the paratroopers says. "The sooner you accept that, the sooner you'll be able to function as a soldier is supposed to function: without mercy, without compassion, without remorse. All war depends upon it." *Cold Mountain* (2003), based on the novel by Charles Frazier, is set prior to the start of the Civil War and gives way to an account of the bloody Union defeat at the Battle of Crater. Revolted by his experience of war, a Confederate soldier deserts and walks back to his home in North Carolina. It is a tale of meaningless violence both on the battlefield and on the rebel home front: "I ain't getting shot again for some cause I don't believe in," the deserter-hero states.

No Man's Land (2001), set in Bosnia, depicts war as a black comedy. Two soldiers from opposite sides—a Bosnian Muslim and a Bosnian Serb—both wounded in battle find themselves in a trench along with a third man unable to move because he is transfixed by a booby-trapped antipersonnel mine. Sent to help, the local UN commander leaves the scene revealing the impotency of the peacekeepers and the utter senselessness of the conflict. At the end, a cameraman asks: "You're sure you don't want me to film the trench?" The correspondent replies reflecting the futility of the war: "No. A trench is a trench. They're all the same." *Taegukgi* (2004) is a Korean film influenced by the story frame and photographic techniques of *Private Ryan*. The movie focuses on the Korean War and how it affects two brothers (a metaphor for the division between North Korea and South Korea). The title of the film comes from the name of the prewar flag of Korea and the post-war flag of South Korea. "I wish this was all just a dream," one brother says to the other, "I want to wake up in my bed, and over breakfast, I'd tell you that I had a strange dream. Then I would go to school, and you and mom would go to work."

Two films by Clint Eastwood form a diptych about the Pacific War and the universality of sacrifice by the common soldier: *Flags of Our Fathers* (2006) tells the story of the six men in Joe Rosenthal's iconic photograph of the raising the American flag on Iwo Jima and the impact of this event on their lives. Following the battle, the film takes up the events in the lives of the survivors after the Rosenthal photograph has a huge impact in America. It is a message of how courage is used and misused for national purposes and the unhappy effects on individual lives. "I know it's a good thing, raising the money and that, 'cause we need it," the actor playing the real Ira Hayes says, "But, I can't take them calling me a hero. All I did was try not to get shot. Some of the things I saw done, things I did, they weren't things to be proud of." *Letters From Iwo Jima* (2006) was released in the same year, opening first in Japan. It tells the story of the battle from the Japanese perspective. In 2005, Japanese archeologists are investigating tunnels on Iwo Jima. The movie then flashes back to 1944 where the Japanese are digging fortifications in anticipation of an eventual American invasion. The film ends with the archeologists finding a bag of buried letters. The message: The so-called fanatical Japanese soldiers

were no less human than their marine opponents. “You are quite a soldier,” a Japanese general says to one of his men. “No, just a simple baker,” he replies.

Generation Kill (2008) is based on the book by Evan Wright. An embedded reporter follows the fortunes of the 2nd Platoon of Bravo Company, 1st Reconnaissance Battalion in Iraq. The series begins with marine scouts preparing to invade Iraq and follows them through the invasion where they come face to face with the reality of the war and its aftermath, both for them and for Iraqi citizens. In the conclusion, the men see themselves on a video made by one of the team—as it plays out, they leave the room one by one overcome by the images of death and the futility of it all. “You’re incompetent, sir,” a marine says to his officer. “I’m doing my best,” he replies. In *1968 Tunnel Rats* (2008), soldiers attack the elaborate Viet Cong tunnel systems. In the fight, both sides come to see the worst in themselves revealed. There is a tie-in video game based on the movie—a perfect comment on the growing influence of the digital revolution. *Rescue Dawn* (2007) is based on Werner Herzog’s 1997 documentary *Little Dieter Needs to Fly*. Filmed in the jungles of Thailand, it is the story of a German-born U.S. pilot who is shot down over Laos in 1964. He is tortured and imprisoned, but he escapes. Although released to the public on July 4, the movie actually focuses on a personal story of survival—“No, I never wanted to go to war. I just wanted to fly,” the hero says.

Three Israeli films cover the frustrating war in Lebanon in 1982: *Beaufort* (2007); *Waltz With Bashir* (2008), which uses cartoon images of real and composite characters to tell the story; and *Brothers at War* (2009) about members of a tank crew. All three pictures focus on the experience of war by common soldiers and all three send clear antiwar messages. In *Waltz*, a veteran laments, “After the . . . invasion I lost all my memory. Now I’m looking for those who can never forget.”

Of the Iraq war films, the typical message is one of betrayal, atrocity, grief, prisoner abuse, and post-combat disorders: See, for example, *Home of the Brave* (2006), *In the Valley of Elah* (2007), *Battle of Haditha* (2007), *The Mark of Cain* (2007), *Redacted* (2007), and *The Messenger* (2009). *Saving Jessica Lynch* (2003) told the true story of the rescue of an American prisoner of war, but the “heroic” details were later revealed to be inaccurate; the film is more important for its portrayal of “good” and

“bad” Arabs and the concept of The Other. *The Hurt Locker* (2009) is the story of an explosive ordnance disposal unit. It offers a narrative centering on action and the appeal (“adrenaline fix”) of combat. The movie opens with this quotation: “The rush of battle is often a potent and lethal addiction, for war is a drug.” The hero is a loose cannon who thrives on the thrill of bomb disposal. There is no higher motivation.

The War Film as Myth

War films as unalloyed tribute to the values of patriotism or imperial dreams have disappeared in the 21 century. In their place are films that reflect revisionist war stories, identity politics, and unappreciated sacrifice. Edward Zwick’s *Glory* (1989) depicts a story of the 54th Colored Volunteer Regiment in the American Civil War at the Battle of Fort Wagner. It set the stage for other war films recounting the wartime contributions of minorities. Interestingly, unlike the majority of post-Vietnam War films, there is no graphic violence as in the now common *Private Ryan* method; the soldiers, more important, do have a higher cause than mere survival or comradeship—racial justice. But as one private tells the White colonel: “We ante up and kick in, sir. But I still don’t want to carry *your* flag” [*italics added*]. *Windtalkers* (2002), directed by John Woo, deals with the Native American contribution to the war as radiomen in the Marine Corps whose esoteric language confuses the Japanese. *Days of Glory* (2006) is an Algerian *Private Ryan*. In North Africa, many indigenes (Algerians, Tunisians, and Moroccans) were recruited into the first French army of the Free French Forces. While in transit, they learn of the discrimination that pervades the French army. The film ends with the sole survivor, now an old man, visiting the graves of his fallen comrades. *Miracle at St. Anna* (2008) is director Spike Lee’s Black *Private Ryan*—a tribute to soldiers in World War II who face discrimination and racist officers but fight heroically. (Lee had been publically critical of Eastwood for not including Black marines in his Iwo Jima movie.)

In *A Very Long Engagement* (France, 2004), a variation on the theme in Stanley Kubrick’s 1957 antiwar classic *Paths of Glory*, five soldiers mutilate themselves to avoid further combat in trenches of the Somme. The film views them as tragic hero-victims

and their commanding officer as a murderous lecher. This is a “postheroic” film that fits the context of the historian James Sheehan’s *Where Have All the Soldiers Gone?*: “The eclipse of the willingness and ability to use violence that was once so central to statehood has created a new kind of European state, firmly rooted in new forms of public and private identity” (p. 221).

War Films and the Loss of Mastery

Consider how far the notion has changed of what constitutes a war story when there is no grand narrative. Zoltan Korda’s *The Four Feathers* (1939) was a rousing tale of courage and comradeship culminating in the victory of the British Expeditionary Force over the army of the Mahdi in the Battle of Omdurman in 1885. Truly, a boy’s own adventure. When the remake of the *Four Feathers* by Shekhar Kapur appeared in 2002, the film ended not with the real history of an imperial victory but, incredibly, with a British defeat: History turned upside down. As one British officer says to another in Kapur’s historical imagining,

You may be lost, but you are not forgotten. For those who have travelled far, to fight in foreign lands, know that the soldier’s greatest comfort is to have his friends close at hand. In the heat of battle it ceases to be an idea for which we fight. Or a flag. Rather we fight for the man on our left, and we fight for the man on our right. And when armies are scattered and the empires fall away, all that remains is the memory of those precious moments that we spent side by side.

In the 21st-century war film, courage under fire is understood only as bravery in the face of confusion, chaos, violence, atrocity, and national and imperial delusions—existential courage. If there needs to be further proof of the transformation of the war story, see the director Quentin Tarantino’s phantasmagoria of sadism and violence—*Inglourious Basterds* (2009)—the director’s Jewish *Dirty Dozen* about revenge and the fiery assassination of the top Nazi leaders in a movie theater. (The movie poster shows a German helmet hanging from a bloody baseball bat.) This motion picture is so unhinged from the reality of history that it demonstrates that the war film genre in any traditional or triumphalist understanding has

come to a dead end. As one of Tarantino’s characters says, “I am going to burn down the cinema. . . .”

Frank J. Wetta and Martin A. Novelli

See also Censorship; Literature and War; Propaganda; Public Affairs, Military; Public Opinion on War and the Military

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WAR IN AFGHANISTAN

The Afghanistan war of the 21st century began when the global terrorist organization, al Qaeda, attacked the United States on September 11, 2001. At that time, al Qaeda’s main bases were located in Afghanistan, under the auspices of the Taliban government, then in control of much of the country. Since the attack (known as 9/11), the United States has led an international coalition of allied nations to secure a peaceful, terrorist-free Afghanistan as part of its ongoing effort to combat terrorism worldwide.

This conflict traces its roots in the Cold War. The Soviet Union militarily intervened in Afghanistan in 1979–1989 to secure a communist government on its border. The United States supported anti-communist insurgents at the time, some of whom later joined the Taliban or otherwise turned against the United States and its allies after the Soviets withdrew, which

ultimately led to the attack of September 11, 2001. On May 1, 2011, U.S. counterterrorist units killed Osama bin Laden, al Qaeda's founder and the mastermind of the 9/11 attacks. Meanwhile, the International Security Assistance Force (ISAF) efforts in Afghanistan continued, with the eventual aim of transitioning security responsibilities to the Afghans and withdrawing ISAF forces by 2014, followed by further international aid pledged through 2024.

This entry outlines the evolution of U.S. involvement in Afghanistan, paying special attention to the creation of ISAF and its counterinsurgency (COIN) campaign. Created under a UN mandate, the ISAF mission has been to support a more democratic Afghan government capable of securing itself, to counter the insurgency against the government, and to stabilize Afghanistan by implementing reconstruction and socioeconomic development programs. ISAF faced the same hard lesson learned by the Soviets during their occupation of Afghanistan, namely, that security gained through successful military operations was short lived unless reinforced or protected by strong political institutions rooted in local traditions as well as geopolitical arrangements suitable for regional stability where many neighboring powers compete for influence in or around Afghanistan. After outlining the evolution of U.S. involvement in Afghanistan, this entry concludes by underscoring Afghanistan's geopolitical importance and the strategic threats this region poses to U.S. national security should it again become a safe haven for terrorists. The dangers of befriending the enemy of one's enemy—a strategy that lies at the heart of this conflict—require longer term strategic vision to manage the risks.

Afghan War's Cold War Roots

During the Cold War between Russia (formally known as the Union of Soviet Socialist Republics or the USSR) and the United States, America's strategy was dedicated to containing and eventually defeating communism. When the USSR invaded Afghanistan, the United States supported those who resisted the new communist regime.

Afghan Communists and Soviet Intervention

The Communist People's Democratic Party of Afghanistan (PDPA), as well as anti-communist Islamic groups, formed in the 1960s during the

relatively prosperous and peaceful rule in Afghanistan of Western-friendly King Zahir Shah. In 1973, the King's nephew and prime minister, Mohammad Daud Khan, led a coup that overthrew the monarchy. Daud became Afghanistan's president. In April 1978, a PDPA coup known as the *Saur Revolution* replaced Daud's rule with a communist government. PDPA had two warring factions: *Parcham* and *Khalk*. The *Khalk* leader, Nur Mohammad Taraki, became president; Taraki's protégé, also of *Khalk*, Hafizullah Amin, became second in command; and *Parcham* leader, Babrak Karmal, became third in command of the new state. The Afghan people, however, rejected PDPA's socialist reforms (including atheism, equality for women, and land redistribution), which undermined Afghanistan's Islamic, tribal, and feudal traditions. Political persecution further spurred resistance. Islamic groups led an armed insurgency against the communist rule.

To combat this growing insurgency and threats of foreign interference (particularly from the Islamic Republic of Pakistan and the Islamic Republic of Iran, each of which supported several different insurgent groups), PDPA repeatedly appealed to the USSR for direct military involvement. Initially, Soviet leadership chose to offer PDPA a generous aid package of military hardware and advisors but rejected the Afghan communist government's requests for direct military intervention. Nevertheless, when PDPA's factional strife culminated in Amin's killing of Taraki, Soviet leaders ordered their *spetsnaz* (Special Forces) to kill Amin in late December, 1979, and installed Karmal as the head of state. However, these changes failed to stabilize Afghanistan, eventually forcing the USSR to deploy more than 100,000 ground troops within Afghanistan attempting to quell the ongoing insurgency.

Insurgency

The insurgents were known collectively as the mujahideen (Islamic holy warriors). They had different political visions for Afghanistan, reflecting the country's complex social, tribal, ethnic, and religious composition. Religiously, Afghanistan is split between the roughly 80% majority of Sunni Muslims and a Shia minority. Ethnically, the Pashtuns (about 42% of the population) have traditionally ruled the state and lived concentrated mostly in the south and east of Afghanistan as well

as in the neighboring Pakistan (their ancestral lands predate modern borders). The Tajiks (who constitute about 27% of the population), Uzbeks (9%), and Turkmens (3%) concentrate mostly in the north and west of Afghanistan (bordering the ethnically similar Central Asian regions, then USSR's nominally quasi-independent Tajik, Uzbek, and Turkmen Socialist Republics). The mostly Shia Hazara (about 9%) populate the center. Other and mixed ethnicities live throughout Afghanistan. Family relations and tribal code shape allegiances and order. These lasting distinctions affected insurgent power bases and international politics surrounding the war. Insurgent groups were led by various political and religious figures (based mostly out of Pakistan or Iran) and often had different field commanders for combat operations inside Afghanistan.

Groups and Motivations

Many insurgent groups operated inside Afghanistan. Dominant among them were the Sunni groups, known as the Alliance of Seven, supported mainly by Pakistan and the United States (as well as Saudi Arabia and China, among others), and the Shia groups, known as the Union of Eight, supported mainly by Iran. Alliance and union were rather loose terms.

The Sunni Alliance of Seven groups (also known as the Peshawar Seven) headquartered in Peshawar, Pakistan. Among them, the more religiously radical and fundamentalist (first four on the following list) sought to establish a theocratic Islamic state in Afghanistan, whereas others were royalist or emphasized other Afghan traditions:

1. Hezb-i-Islami (Party of Islam), led by a Pashtun engineer, Gulbuddin Hekmatyar (who was originally from Afghanistan's north, where the Pashtuns are a minority), became a ruthless fighting force that lacked a concentrated local power base but was linked to powerful religious and political forces, such as the Muslim Brotherhood, throughout the Middle East.
2. Hezb-i-Islami (Khalis) was a breakaway faction of Hekmatyar's Hezb-i-Islami led by a Pashtun cleric and former schoolteacher, Yunus Khalis. It had strong traditional support in southeastern Afghanistan, as well as powerful commanders such as Jallaluddin Haqqani and Abdul Haq (both Pashtuns).
3. Jamiat-i-Islami (Islamic Society), led by a Tajik professor Burhanuddin Rabbani, operated mainly in the ethnic minorities-dominated north and included the legendary field commander and political leader Ahmad Shah Massoud (a Tajik, who controlled the strategic Panshvir Valley near Afghanistan's capital, Kabul).
4. Ittihad-i-Islami (Islamic Unity), led by a Pashtun former professor and Wahhabi Islam adherent, Rasul Sayyaf, operated near Kabul with Saudi Arabia and Muslim Brotherhood support.
5. Harakat-i-Inqilab-i-Islami (Islamic Revolutionary Forces), led by a Pashtun cleric, Nabi Mohammadi, favored monarchy and attracted tribal and religious leaders in the south and east.
6. Mahar-Milli Islami (National Islamic Front), led by a Pashtun hereditary master (Pir) of Qadiri Sufi order, Ahmed Gailani, was based in the south and sought to restore the King.
7. Jabha-i-Nijat-Milli (Afghan National Liberation Front), led by a Pashtun Sufi leader, Sibghatullah Mojaddedi, was likewise a royalist group in the south.

The Shia Union of Eight groups relied primarily on Iran, which at the time of the Soviet invasion of Afghanistan in 1979 had just undergone the Islamic Revolution. These groups sought the ultimate goal of transforming Afghanistan into an Islamic republic similar to Iran led by the Grand Ayatollah Khomeini (and, in the shorter term, checking the influence of the Sunni Alliance of Seven):

1. Hezbe Allah (Allah's Party), led by a Shia mullah, Kari Akhmad Yakdaste, operated mainly in the west and south seeking to export Iran's Islamic revolution to Afghanistan.
2. Nasr (Victory), led by Shia sheiks, Abdul Ali Mazari and Shafak, also promoted Iran and operated in the Hazara-dominated center of Afghanistan known as the Hazarajat.
3. Islamic Revolutionary Guard Corps of Afghanistan, controlled by Iran's Islamic Revolutionary Guard Corps and led by Akbari, likewise pursued Iran's interests operating in Afghanistan's central provinces.
4. United Front of the Islamic Revolution consisted of four Shia organizations (the Young Mullahs

of Afghanistan, Islamic Society of the Tawheed School, Islamic Society Fighters, and Movement of the Disadvantaged), which supported the recognition of Khomeini as the worldwide leader of Islam and establishing an Iran-like Islamic Republic in Afghanistan.

5. Islamic Movement of Afghanistan, led by Mohammed Asef Mohseni (Kandahari), cooperated with the Shia Hazara underground forces in Kabul and cities in the southeast and west, as well as with some of the pro-Pakistan Sunni groups, in countering the Afghan communist government. Though headquartered in Iran, this group had an office in Quetta, Pakistan, as well as presence in Afghanistan. Internal strife split it into two: Islamic Movement Kandahari and Council of Islamic Unity.
6. Council of Islamic Unity, led by Ali Beheshti, was a nationalist organization of the Hazara people pursuing withdrawal of Soviet troops and autonomy for the Hazarajat.
7. Organization of Fighters for Islam in Afghanistan, led by Mosbahzade, was a Shia Hazara group that opposed the communist revolution in Afghanistan.
8. Islamic Revolution Movement, led by Nasrullah Mansur, split from the pro-Pakistani Islamic Revolutionary Forces and spread Iran's influence among the Pakistan-based insurgents.

While notorious for their disunity and frequent changes in loyalties and alliances, the mujahideen shared the common goal of ousting the infidels (non-Muslims) from the government and Afghanistan. Mujahideen motivations ranged from jihad (Islamic holy war) to tribal, ethnic, or political allegiances, to personal gain (including from narcotics trade and other illicit activity). Their recruitment drew from local power bases, Pakistan (e.g., Islamic religious schools called madrassas and Afghan refugees), Iran (e.g., Afghan refugees and migrant workers there), and foreign supporters of anti-communist jihad (particularly from the Arab states). Osama bin Laden formed al Qaeda in 1988 in Afghanistan to train and support these jihad fighters.

Strategies and Tactics

In the absence of unified leadership, the disjointed insurgents lacked an explicit common strategy, but

they shared the determination to exhaust, oust, and outlast the foreign forces and their unpopular puppet regime. Harsh Soviet anti-insurgency tactics and ill-suited communist social policies served to further strengthen the mujahideen cause and its popular support.

Insurgent tactics reflected the mujahideen forces' military capabilities and resources. Individual fighters were generally highly motivated and skilled with weaponry, owing to the centuries-old traditions of tribal and anticolonial warfare, but often lacked military discipline and organization. They were also generally hampered by shortages of resources and by military equipment that was broadly inferior to that of the USSR's war machine. As a result, after a series of initial defeats in direct confrontations with Soviet troops, the insurgents came to rely on asymmetric warfare tactics—such as ambushes, subversion, and concealment among civilian populations—where knowledge of local terrain and ties to the native people gave them an edge over the militarily superior outsiders. Insurgent military operations also commonly followed fighting seasons, such as launching offensives during the spring and summer when the mountain snows melted allowing easier cross-border passage, followed by a lull in the winter (as well as around the Islamic holy month of Ramadan when the faithful must fast).

U.S. Support for the Insurgents

The mujahideen pursued different visions for Afghanistan, but their goal of ousting the Soviets matched America's Cold War objectives. The U.S. government thus embarked on a policy of direct political support and covert military aid to the mujahideen. The aid was covert to maintain the ability to deny involvement if necessary for political or other objectives. The weaponry and other military aid from the United States flowed via Pakistan's Directorate for Inter-Services Intelligence, which had local ties to the insurgents. Recipients of U.S. aid included not only the generally pro-Western Massoud, Abdul Haq, and others who would later ally with the United States against the Taliban and al Qaeda but also the fundamentalist Islamists Hekmatyar, Haqqani, and others who would later support or become the Taliban and al Qaeda and fight against the United States and its allies.

American weapons, particularly shoulder-fired Stinger missiles, changed the course of the war by

1986. Easily transportable by foot, these missile systems enabled the insurgents to hit Soviet combat helicopters and low-flying aircraft from the ground more effectively than with common rocket-propelled grenades or light arms fire. This significantly diminished Soviet air advantage, which was essential to its war strategy in mountainous and unfamiliar terrains, leading to fewer military raids into the mujahideen-held territories as well as to the increase in higher altitude bombings and long-distance shelling. However, the resulting loss of precision not only significantly diminished the effectiveness of these tactics in inflicting damage on the mujahideen, but the associated collateral damage further drove the populace away from the USSR-supported PDPA regime and toward the opposition.

Stalemate Prompts Soviet Strategy Change

Soviet leaders underestimated the Afghan resistance and international opposition to the occupation. Without political reinforcement, even successful military actions proved insufficient, as Communist governance failed in the captured territories due to resistance against the new social order as well as government corruption and factional strife. By 1986, the new USSR leader, Mikhail Gorbachev, changed the Soviet approach. The earlier goal of establishing a friendly communist regime gave way to the priority of expedient withdrawal. The Soviet leadership also replaced the faltering Karmal with the more capable Mohammed Najibullah (previously Afghan KGB [Komitet Gosudarstvennoy Bezopasnosty or Committee for State Security]-like secret police/security service chief) as Afghan government leader.

Soviet Withdrawal and Support for the Afghan Government

Even after the Soviets decided to leave, it took 3 years to withdraw all ground troops. A 1988 international agreement known as the Geneva Accords between Afghanistan and Pakistan, undersigned by the United States and the USSR, established a formal February 15, 1989, Soviet withdrawal date. In preparation for and following its departure, the Soviet Union provided massive military and humanitarian aid as well as political support to the Afghan government. The Soviet military supplied, trained, and partnered with Afghan security forces to raise a commando force as well as conventional military, police, local militias, and tribal formations.

The USSR supplied Afghan forces with fuel, equipment, aircraft, tanks, weapons, and other provisions. Soviet and Afghan forces partnered in securing airports, communications, the withdrawal route, an air bridge to Kabul for airlifting vital supplies, and other critical assets. The Soviet military also supplied food, fuel, and other essentials for the Afghan population.

Factional Strife in Afghanistan After the USSR Collapse

The insurgents waited out the Soviet withdrawal and reinvigorated military action against the Afghan government afterward. Soviet strategic planning and massive aid to the Afghan government, however, enabled its survival past the withdrawal of Soviet troops and even beyond the USSR's eventual dissolution in 1991. As the USSR ceased to exist, Soviet aid to Afghanistan ended. While the resources amassed over the previous years may have lasted, the USSR's collapse spelled for Najibullah's government the loss of its strategic external major power patron—in a region where Afghanistan serves as a buffer zone or battlefield for the competing major power interests and proxies. Meanwhile, Najibullah's opponents still enjoyed their external support (e.g., Pakistani and Saudi support for the Sunni mujahideen), and factions within the government had realized the changing fortunes. The Afghan government held until 1992, felled not by military defeat but internal political feuding between *Parcham* and *Khalk* loyalists as well as the eventual betrayals of key government officials and military commanders. In particular, Najibullah's own defense minister, Shahnawaz Tanai, staged a coup, which (although ultimately failed) exposed deep fractures within the government, and one of the strongest Afghan communist military commanders, Abdul Rashid Dostum, with his well-trained and formidable (Uzbek-dominated) forces defected to the opposition—eventually sealing the communist government's fall.

Insurgents Fight Among Themselves for State Power

After the communist government collapsed, the Sunni mujahideen leaders were preparing arrangements to take power in Kabul. Hekmatyar, however, sent his forces into Kabul to seize power for himself. Massoud's forces neutralized Hekmatyar. On April 28, 1992, the mujahideen leaders' Interim Council arrived in Kabul and installed Mojaddedi as an interim president, to be followed by Rabbani

as the president of what became the Islamic State of Afghanistan. Other mujahideen figures also entered the new government. Rabbani maneuvered to remain president through 1996.

The new regime enjoyed little real authority, however. Afghanistan fragmented into areas controlled by local military and political forces such as the former mujahideen or ethnic militia groups, which had also absorbed some of the former communist government and military members. The groups continued to fight among themselves for control of land and power. The fighting nearly destroyed Kabul. Meanwhile, Pakistan and India sought stability and safer routes across Afghanistan to trade with the newly independent Central Asian states (the former Soviet Republics).

Taliban Movement Forms and Wins State Power

A new group called the Taliban offered a vision of order suitable for regional stability and attractive to war-weary Afghans. Led by Mullah Mohammed Omar (a Pashtun and formerly a minor field commander under the Pakistan-based Alliance of Seven), the Taliban movement formed in 1994—with Pakistan's support—from Islamic religious students, some of them mujahideen and former members of the Afghan military (notably, some Soviet-era pilots, giving the Taliban an air force). By that time, the traditional ruling Pashtun elites and institutions were decimated by communist repressions and war, leaving a power vacuum. The ideological, disciplined, and well-funded Taliban filled this vacuum by promising order to the weary and successfully playing the local ethnic and tribal politics and traditions.

The Taliban rapidly captured three fourths of Afghanistan, rolling through Pashtun areas largely unopposed. Initially rebuffed from the north by Massoud's forces near Kabul and Dostum's forces defending the Salang Pass through the Hindu Kush Mountains, the Taliban went around via the Pashtun-dominated east and south and then via the ethnically fragmented west, making deals or fighting. They captured Kabul by 1996 and established the totalitarian Islamic Emirate of Afghanistan based on Sharia law and led by Mullah Omar, who was named the Leader of the Faithful. A religious police for the Promotion of Virtue and the Suppression of Vice enforced law and order with brutal punishments. Taliban government revenues came from Pakistan and al Qaeda as well as from opium and other illicit trade.

Toward 9/11

The Taliban and al Qaeda shared ideology, mutual support, and tangible connections. The Taliban protected al Qaeda and provided it with bases in Afghanistan. Al Qaeda shared the Taliban's radical Islamist ideology and provided fighters for the Taliban as well as training, inspiration, logistics, and networks for global jihad. Al Qaeda also helped the Taliban by eliminating its most serious opponent within Afghanistan, Massoud, whose forces still threatened the Taliban near Kabul. Massoud enjoyed vast Afghan and Western support, and he led a loose anti-Taliban alliance of former mujahideen and other opposition forces known as the Northern Alliance. On September 9, 2001, al Qaeda suicide bombers killed Massoud.

On September 11, 2001, al Qaeda terrorists hijacked four civilian U.S. aircraft on U.S. soil, crashing two into the World Trade Center's Twin Towers in New York City, one into the Pentagon, and one into a Pennsylvania field due to passenger resistance. (The operation followed al Qaeda's earlier declaration of intent and call to kill Americans and their allies in any country.) This attack killed nearly 3,000 people, including Americans and citizens of 80 other nations; damaged the Pentagon; and destroyed the Twin Towers.

After 9/11

Quickly linking the evidence to al Qaeda and the Taliban (for aiding and abetting al Qaeda) for being responsible for 9/11, the United States and its allies responded by initiating a series of direct military and political actions in Afghanistan as part of a global counterterrorist campaign known as the Global War on Terrorism. After the Taliban refused U.S. demands to turn over al Qaeda, these actions included efforts to oust the Taliban from power and destroy terrorist assets as well as provide humanitarian aid for the people of Afghanistan.

Counterterrorist Response Defeats the Taliban and Ousts al Qaeda

Following the 9/11 attacks, U.S. president George W. Bush announced the Global War on Terrorism as part of national security strategy to counter terrorist networks worldwide and governments that support them. Beginning against al Qaeda and the Taliban government in Afghanistan, this strategy aimed to

find, stop, and defeat every terrorist group of global reach. The tactics involved a broad range of means including diplomatic, military, intelligence, financial, and law enforcement actions in coordination with allies around the world.

The Afghanistan military campaign, dubbed Operation Enduring Freedom, commenced on October 7, 2001, and sought to eliminate the terrorist threat using a limited American footprint on the ground. Initial air strikes focused on destroying the Taliban's limited air defenses and communications infrastructure. Small teams of U.S. Special Forces and Central Intelligence Agency operatives were then inserted to make contact with the indigenous anti-Taliban forces of the Northern Alliance (of former mujahideen and local militias) to facilitate offensive action against the Taliban and to call in close air support for bombing enemy positions. The strategically important cities, such as Mazar-e-Sharif, Kabul, and Kandahar, were recaptured from the Taliban in November 2001. The Taliban's control of Afghanistan ended when it surrendered the town of Spin Boldak, the movement's birthplace on the border with Pakistan. The battle of Tora Bora then decimated the al Qaeda forces hiding in this mountain cave complex.

Thus, by December 2001, Operation Enduring Freedom destroyed terrorist bases in Afghanistan, deposed the Taliban regime, and put the remnants of the Taliban and al Qaeda on the run, clearing the way for humanitarian aid delivery to the Afghan people and the eventual establishment of a new Afghan government. However, both bin Laden and Mullah Omar escaped, and many of their fighters found safe haven in the tribal areas across the Afghan-Pakistani border—living to fight another day—and the United States still lacked a longer term campaign strategy for stabilizing Afghanistan to prevent the return of the insurgents/terrorists.

New Afghan Government and ISAF

Central government rulers in Kabul have customarily been Pashtun, deriving their power from the traditional tribal ruling elites. In general, support among the Pashtuns for the Taliban—combined with the Taliban's earlier capture and execution of Abdul Haq, one of the few prominent pro-Western Pashtun mujahideen commanders (during his October 2001 attempt to rally the Pashtuns against

the Taliban)—left the United States and its allies few viable choices to support for leadership of a new government in Kabul.

In December 2001, the UN-brokered U.S.-backed Bonn Agreement established an interim administration, led by Hamid Karzai—a Pashtun with distinguished Durrani tribal lineage that fit the long-standing tradition of rulers in Kabul. Karzai, among others, assisted in defeating the Taliban regime. However (unlike Abdul Haq), Karzai lacked standing as a mujahideen commander and thus lacked a direct prominent role in fighting the Soviet occupation, which limited his de facto power among key factions and the people. His interim government was to convene an emergency *Loya Jirga* (a traditional Afghan grand assembly of tribal and other prominent leaders) in order to facilitate future multiparty elections, constitution development, and parliament formation. A UN Security Council resolution also established the ISAF mandated to create a secure environment in and around Kabul and support the reconstruction of Afghanistan. In 2002, the *Loya Jirga* elected Karzai to lead the Transitional Authority as an interim president for 2 more years.

Meanwhile, al Qaeda and Taliban fighters attempted to coalesce in Afghanistan's eastern provinces but were rebuffed by the United States and Allied forces in Operation Anaconda in 2002. In 2003, the U.S. secretary of defense declared major combat in Afghanistan over. The subsequent shift of U.S. attention and resources in the Global War on Terrorism to Iraq, however, coupled with the Afghan government's inability to consolidate power and stabilize the country, eventually allowed the Taliban, al Qaeda, and various other disaffected parties to regroup and resurge across Afghanistan and the Afghan-Pakistani border, where the mujahideen had enjoyed a safe haven since the Soviet times.

The North Atlantic Treaty Organization (NATO, an originally anti-Soviet Cold War-era military alliance) formally assumed ISAF command in 2003. Later that year, The United Nations extended the ISAF mandate across Afghanistan to assist with overall security and stability, counternarcotics, reconstruction, elections security, and the training of Afghan National Security Forces. A popular vote elected Karzai president of the Islamic Republic of Afghanistan in 2004 and reelected him in 2009. Both elections, however, were marred by low turnouts, alleged fraud, and violence, as well as underlying

problems of the more than 70% illiterate mostly rural population unfamiliar with notions of Western democracy.

Emphasizing its multilateral international approach to assisting Afghanistan, ISAF expanded to nearly 50 troop-contributing nations (by 2012), with the United States and the United Kingdom providing the most troops followed by Germany, Italy, Poland, Australia, Canada, France, and Turkey among others. ISAF expanded in part to counter a growing and spreading insurgency.

Insurgency

The Taliban regrouped, called for jihad, and led an armed resistance against ISAF and the Karzai government, despite the government declaring itself Islamic.

Groups and Motivations

This insurgency displayed many of the Soviet-era characteristics—to the point of involving some of the same groups and leaders—while benefiting from the post-Cold War global economic and political developments. As during the Soviet times, many different groups emerged sharing the common goals of ousting the Afghan government from power and the foreign forces from the country. Again spanning the Afghan-Pakistani border, key groups included Mullah Omar's Taliban and bin Laden's al Qaeda as well as the Haqqani network and Hekmatyar's organization (which had received U.S. support during the Soviet era), among others, such as Pakistani Taliban and other factions. The Taliban continued to pursue its radical Islamist ideology and the goals of reestablishing its theocratic governance incompatible with Western democratic values. The Haqqanis supported the Taliban's aspirations while fighting for political control of their ancestral land (primarily in eastern Afghanistan), where they fought ferociously against both the communists and the West. Al Qaeda shared the Islamist ideology but as a global movement, not as an Afghan nationalist one. The opportunistic as well as Islamist Hekmatyar aligned with the Taliban and al Qaeda.

Strategy and Tactics

By the first decade of the 21st century, globalization eased the movement of terrorist funding, materiel, weapons, people, and information. This allowed

even relatively small local groups a global presence and a strategy of portraying the Afghan struggle in ways that attracted support for themselves (e.g., as protectors of the Muslim faith and land against the infidels) while undermining the Afghan government and ISAF nations' domestic as well as international support for ISAF efforts.

Tactically, the insurgents began to utilize modern technologies (e.g., the Internet for propaganda and recruitment) while continuing to use the tried-and-tested Soviet-era as well as age-old asymmetric warfare tactics on the ground. The extremist Islamist motivations spurred wider use of suicide bombing tactics. Makeshift bombs known as improvised explosive devices emerged as a leading threat to ISAF and Afghan forces as well as civilians. Remnants of Soviet-era parts still found in Afghanistan as well as a variety of other materials (e.g., from fertilizer smuggled from Pakistan to household items) served to make those bombs. Insurgents also utilized more advanced detonation and communication technologies, but they still fundamentally relied on age-old tactics of hiding among the population, leveraging local ties, and exploiting Western values against hurting civilians. They rarely fought direct battles but rather utilized ambush, rocket attack, and hit-and-run tactics followed by disappearing into the mountains or the countryside, planted improvised explosive devices and mines, or conducted deception and suicide bombing-based operations, including using ISAF uniforms to infiltrate and attack coalition facilities and personnel. The tactic of infiltrating, turning, or otherwise inspiring members of Afghan security forces to betray and kill their Western partners (incidents known as green-on-blue attacks) grew into a major threat as the ISAF campaign evolved. Such attacks eroded not only security but also ultimately the trust needed for the joint coalition-Afghan operations at the core of what became ISAF's COIN and Afghan forces' training mission.

Security Deterioration

Prompts U.S. Strategy Change

After a relative lull in 2003, insurgent violence increased by 2006 driven by Taliban resurgence in the east and south of Afghanistan, where its Pashtun ties allowed access to resources and safe havens along the Afghan-Pakistani border and leveraging

the relative decline in attention as the United States and its allies focused on the war in Iraq. The Afghan government's corruption and inability to establish power and services in many rural areas (the same problem faced earlier by the Soviets) contributed to popular unrest and insurgent re-infiltration of the cleared areas.

Whereas the initial post-9/11 goals of the United States and its allies focused on eliminating the terrorist threat posed by al Qaeda and its Taliban benefactors, the growing insurgency threatened to undermine the non-terrorist-supporting government in Afghanistan. Such a government was necessary for the success of U.S. national security strategy toward eliminating any future terrorist threats emanating from this region. In an attempt to stabilize Afghanistan, the U.S.-led campaign eventually (by 2009) evolved from counterterrorism to a population-centric counterinsurgency dubbed COIN (with continued counterterrorist operations).

Population-Centric Counterinsurgency

Protecting the People

The new COIN campaign focused on protecting and gaining the support of the population to defeat the adaptive enemies who hid among, used, or terrorized the people. This approach relied on *The U.S. Army/Marine Corps Counterinsurgency Field Manual* (FM 3-24) developed under the leadership of U.S. Army general David Petraeus (later appointed ISAF Commander) and U.S. Marine Corps general James Mattis, among others. The manual was published in 2006 and, by 2007, proved itself by helping turn the tide against an Islamist insurgency in Iraq (a different battlefield in the ongoing Global War on Terrorism).

In Afghanistan, the COIN principles were advanced, in particular, by the U.S. Army general Stanley McChrystal, who became the commander of ISAF in 2009, and his successor as commander of ISAF, General Petraeus. Afghan COIN campaign focused on undermining the insurgency by growing trusted networks among the population to be accomplished by winning the population's "hearts and minds" with better security, economic development, and improved governance. In this context, the military operations against violent insurgents also continued, but often under the constraints of minimizing civilian casualties including restricting many

ISAF troops' Rules of Engagement for using deadly force against the insurgents. (Restrictive Rules of Engagement often risked greater ISAF casualties and morale setbacks in the service of the population-centric COIN strategic goals.) The ultimate success of this COIN approach, however, relied on the political stabilization of an Afghan government accepted by its people and capable of providing domestic security and checking global terrorist threats emanating from its territory. The challenge and potential flaw of this approach was that the ISAF troops had little direct influence over such outcomes, which only could be achieved by the Afghans themselves. ISAF's COIN lines of effort sought to facilitate such outcomes by supporting Afghan governance, reconstruction and development, and security—each facing substantial difficulties.

Governance

Pursuing Afghan government stabilization, ISAF promoted democracy and Western notions of the rule of law in a traditional tribal society unaccustomed to such norms as well as in a country afflicted with corruption and violence. As during the Soviet times, military successes risked dissipating without political reinforcement. Post-Soviet experience also showed that intragovernmental factional strife was a potentially more lethal problem to the government than the insurgency. Attempts to negotiate and reconcile with the Taliban and other extremist factions threatened a return to a terrorist-friendly tyranny.

Reconstruction and Development

The ISAF established Provincial Reconstruction Teams to support the COIN mission by securing areas where other national and international, including nongovernmental, organizations conducted reconstruction work and humanitarian assistance aimed to improve Afghans' economic and living conditions undermined by war and lawlessness. Prior experience of relative economic development under King Zahir Shah has offered hope, but the Afghan government's reliance on billions of dollars in foreign aid and questions about the effectiveness of its use, as well as widespread corruption and misuse of aid, have challenged the prospects for Afghanistan's economic viability and future development. Illegal narcotics and other criminal activities were prevalent in the country's economy.

Security

Security was intended to support governance, reconstruction, and development. The U.S. and other ISAF forces succeeded in many operations. ISAF combat operations as well as mentoring, training, equipping, and partnering with the Afghan National Security Forces sought to quell the insurgency and help Afghans to eventually secure themselves. The earlier Soviet success in fielding a capable Afghan military has offered hope, but low Afghan literacy levels, defections, insurgent infiltration, and fratricidal attacks have challenged progress. Lacking strategic and political solutions, security in many locations was fleeting despite numerous valorous military achievements. The Taliban and their allies continued to launch offensives and terrorize the population particularly in the east and south of Afghanistan where they benefited from the Pashtun tribal ties as well as safe havens and reinforcements across the Pakistani border. NATO operations cleared many insurgent strongholds, but lack of governance often allowed the insurgents to return. The ongoing insurgent activity as well as high-profile attacks, including an attempted assassination of President Karzai, prompted a 2009 U.S. policy review to recommend a surge in U.S. troops in support of the COIN effort.

U.S. Withdrawal Announcement Undermines Troop Surge Objectives

Successful execution of the adopted population-centric COIN required more time and additional ground troops. ISAF coalition forces reached approximately 67,000 by 2009 and surged to more than 130,000 several months later (akin to Soviet-era levels) largely due to the addition of 30,000 U.S. troops per President Barak Obama's surge policy, announced in December 2009 following a policy review that endorsed the COIN approach. Thus, by 2009, the United States had developed an integrated COIN campaign but resourced it with fewer troops than originally requested by the then commander of ISAF General McChrystal. Moreover, in the same speech, the president announced both the surge as well as the commitment to begin troop withdrawal in 2011, producing deleterious strategic effects: The surge provided more targets (constrained by the COIN Rules of Engagement) for the enemy to attack but not enough troops to fully resource the adopted COIN approach. The withdrawal announcement

incentivized the enemy to conserve its main forces for a decisive struggle after the U.S. and ISAF departure, while potentially discouraging the local population and regional players from a commitment to support the government, knowing that its external major power support was waning.

ISAF's 2010 Marja offensive against the Taliban and drug-trafficking strongholds in the southern province of Helmand served as a test for the surge-reinforced COIN approach in partnership with the Afghans. The operation was designed to clear the insurgents while minimizing civilian casualties, then roll out Afghan government services to hold security as well as build the local institutions and capacity for peace, prosperity, and safety. The offensive was announced in advance, forgoing the military advantage of surprise against the enemy in favor of protecting the population. The military operation succeeded in ending the Taliban rule, but the promised governance faltered. Long-term success hinged ultimately on the Afghans' own desire and ability to keep the Taliban and its allies from returning.

By 2011, ISAF in partnership with the Afghan armed forces cleared the Taliban from several of its important safe havens in Afghanistan's south and east (including in Helmand and Kandahar), as well as select areas of the north where the Taliban had spread. Additional gains included holding and helping build better governance capacity in the cleared areas and capturing or eliminating numerous insurgent and terrorist leaders. ISAF also pursued counternarcotics and anticorruption efforts toward fostering an Afghanistan capable of securing and governing itself. However, the corruption and faltering governance created power vacuums, which the Taliban filled by establishing its own shadow governments and conflict resolution methods—brutal but speedy and effective.

Nonetheless, the United States and NATO continued the course of ending their involvement in Afghanistan. The 2012 NATO summits in Lisbon and Chicago produced international agreements to complete the transition of security responsibilities to Afghan leadership as well as the withdrawal of ISAF troops by 2014. International donors pledged continued aid to help sustain the Afghan government through 2024. The government's sustainability and independent viability, however, remained at risk.

Victory was also elusive. Lack of a clear U.S. strategy and political will to win made the hard-fought military gains appear reversible in the absence of political commitment to defeating the insurgents. With the U.S. and other coalition forces drawing down, ISAF transition of security responsibilities to the Afghans relied on recruiting, training, and mentoring the Afghan forces in close partnership and joint operations, but the increasing Afghan fratricidal attacks against their Western partners eroded the trust, curtailing some joint efforts.

If the insurgent patterns of behavior since the Soviet times are indicative, the insurgents may (as they did following the Soviet withdrawal) simply wait out the departure of foreign troops and afterward intensify their quest for power as well as their support for terrorist sanctuaries, which in the past had led to 9/11.

Continued Counterterrorist and Intelligence Operations

Intelligence-driven special operations have continued alongside COIN, including targeted elimination of key terrorist and insurgent figures and their networks in Afghanistan, Pakistan, and beyond. These operations have increasingly utilized unmanned aerial vehicles known as “drones” for intelligence, reconnaissance, and strikes. A covert U.S. campaign to target and kill al Qaeda, Taliban, and allied extremist groups’ leaders and operatives has carried out hundreds of drone strikes since 2004, killing more than a 1,000 targets in total.

High-value targets have also been pursued by manned, often Special Operations Forces, teams to achieve higher precision, ensure mission success, and collect additional intelligence on the ground, among other objectives. Despite higher inherent risks to personnel, these allowed for potentially significantly greater payoff, as seen with the elimination of bin Laden in Pakistan by a Navy SEAL team on May 1, 2011. After bin Laden’s death, al Qaeda’s second in command, Ayman Al-Zawahiri, assumed the organization’s leadership as well as primacy on the U.S. most wanted terrorists list. Al Qaeda has been degraded, but not yet defeated.

Ongoing Regional Challenges and Strategic Lessons

Insurgency and instability across the Afghan-Pakistani region threaten U.S. national security and

strategic interests. Terrorists, trained and operating there, continue to threaten not only their region but also the U.S. homeland as well as allies and assets overseas. The ongoing conflict may have also served to radicalize more individuals into becoming terrorists, particularly martyrs, for religious reasons (fighting infidels) or from having been victims of anti-insurgent activity (analogous to the dynamics during and following the Soviet era, as jihad veterans of Afghanistan spread the fight worldwide).

However, short of victory, a hasty withdrawal, or negotiated settlement with the Taliban and its allies (who had already turned against the United States despite benefiting from the U.S. support against the Soviets) risks the eventual return of a terrorist-friendly tyranny in Afghanistan. Such an outcome in the past had led to 9/11 among other attacks and threats.

In turn, Pakistan seeks influence in Afghanistan to gain strategic depth on Afghan territory as a contingency for a possible war with India. Especially following the bin Laden raid, Pakistan’s reliability as a U.S. ally has been questioned. Pakistan has also sought greater military cooperation with China. The Islamist elements inside Pakistan and their ties with the insurgents threaten the stability of Pakistan’s (as well as Afghanistan’s) government and the security of Pakistan’s nuclear weapons. These weapons may fall into anti-American hands should U.S. influence in the region wane. Iran’s suspected support for the insurgents as well as growing Russian influence in former Soviet Central Asia and ties with the former Soviet ally, India, as well as increasingly with Pakistan, also threaten to undermine U.S. interests in this nuclear-tipped and terrorist-prone region. Understanding and prosecuting the Afghanistan war in its broader geopolitical, socioeconomic, historical, and strategic context outlined in this entry can help develop longer term successful strategies for security, peace, and U.S. leadership in this important region and the free world.

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See also Asia; Central Asia; Counterinsurgency; Guerrilla Warfare; India; Iran; Iraq War (2003); 9/11 (2001); North Atlantic Treaty Organization; Pakistan; Petraeus, David; Russia; Terrorism; War in Afghanistan

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WAR OF 1812

Long-simmering tensions between the United States and Great Britain gave way to war in the late spring of 1812. On June 18, 1812, Congress declared war against Great Britain within days of London's suspension of the Orders in Council, one of the major sources of tension between the two countries. American strategists planned to invade Canada from Detroit and New York state. In the northern theater, American regular and militia forces fought against British regulars, Canadian provincials, and their Native American allies in the Old Northwest, on the Great Lakes, along the Niagara Frontier, and along the northern front from Fort Erie to Montreal. Additional fighting took place along the Chesapeake Bay and in the American South in the Creek War. The latter conflict began as a civil war among the Creek Indians and then expanded to become embroiled in the War of 1812 when the Red Stick faction attacked the settlement of Fort

Mims. Naval activity took place on the Great Lakes, in Chesapeake Bay, along the Atlantic coast, British raiding of coastal towns from Maine to Georgia, and in other isolated confrontations worldwide. American and British peace commissioners signed the Treaty of Ghent on December 24, 1814. The treaty formally went into effect on February 17, 1815.

Causes of War

The tensions that led to war between the United States and Great Britain in 1812 had existed since the 1780s. American foreign policy revolved around commercial interests and to a lesser extent, expansionist aims. America sought to establish itself as a neutral power in order to maintain neutral rights, enabling it to continue trading with warring powers, notably England and France. Americans perceived the British Orders in Council, decrees designed to regulate trade with France, as a violation of their neutral rights. The Orders barred all neutral trade with Continental Europe. The only exception was made for ships that entered a British port and obtained a license to proceed. An additional and particularly onerous British policy included in the Orders was the practice of impressments. The inability to distinguish British subjects from American citizens led to the impressment of at least 3,000 American sailors during England's wars with France during the Napoleonic Era. For the Americans, impressment was an emotionally charged issue—a matter of national pride that topped every list of complaints against British practices. After the *Chesapeake-Leopard* affair in 1807, during which an English warship stopped and boarded an American ship of war, President Thomas Jefferson pursued a course of economic coercion, and Congress passed the Embargo Act in December 1807.

The Embargo was enacted with disastrous results. American commerce suffered more than the British economy. The Non-Intercourse Act of 1809 replaced the Embargo and resumed trade with all countries save Great Britain and France. By 1810, Macon's Bill No. 2 replaced the ineffective Non-Intercourse Act. The bill lifted all restrictions on American trade and gave the president authority to impose nonintercourse on either France or Britain after the other revoked its edicts against the United States. Far from securing neutral rights, this coercive act opened the door for disagreements and

misunderstandings between England and the United States, especially after President James Madison, falling for Napoleon's empty promise that he would respect U.S. neutral rights, resumed trade with France and enacted nonintercourse against England in November 1810.

The vagueness of agreed on boundaries in the 1783 Peace of Paris and dispute over the unsettled Old Northwest served as another source of tension between the United States and Great Britain for 60 years. The Jay Treaty of 1794 provided for the British surrender of northwestern posts in American territory along the Great Lakes occupied since the end of the Revolution. The British handed over the forts in 1796, and a decade of relative quiet followed. Increased tension in the Old Northwest around 1806 corresponded with renewed fighting in Europe. The rise of the Shawnee chief Tecumseh and his brother the spiritual leader Tenskwatawa (the Prophet) galvanized Western support for an invasion of Canada. The Indiana territorial governor William Henry Harrison led militia troops against the Shawnee in 1811. The successful outcome of the Battle of Tippecanoe meant that as the War Hawks, pro-war western and southern Republicans led by Kentucky Congressman Henry Clay, came to power in the Twelfth Congress, they had a solid rallying point to advocate a transition from a defensive posture in the west to more offensive action. While there was a change in tone, the primacy of dealing with commercial transgressions remained. However, there was a growing solidification of popular support once the invasion of Canada was determined to be the only means for confronting Great Britain.

On June 1, 1812, President Madison sent the U.S. Congress a war message. After two close votes in both the House (79–49) and the Senate (19–13), Congress voted for a declaration of war. Madison made the announcement on June 18, 1812. In spite of emphasis on maritime grievances, Madison and his military advisors, including William Eustis, the secretary of war, believed that Great Britain would be most vulnerable to economic pressure by an American invasion of Canada.

The War

Although it initiated the war, the United States was ill prepared for military action. In the first campaign of the war, the Michigan territorial governor

William Hull attempted an invasion of Canada from Detroit to secure Upper Canada. Stiff resistance from Major General Isaac Brock, the president and administrator of Upper Canada and commander of the troops there, resulted in the surrender of Detroit. Additionally, attempts to invade Canada along the Niagara frontier, led by Stephen van Rensselaer and later General Alexander Smyth, also failed. In the northeast, difficulties mustering New England militias stalled the U.S. brigadier general Henry Dearborn's proposed campaign against Montreal.

In spite of leadership changes, American campaigns in 1813 proved as ineffective as those of 1812. Major Generals James Wilkinson and Wade Hampton replaced Dearborn, whose May offensive across the Niagara River at Fort George resulted in no gain. American campaign plans to invade Montreal failed because of rivalry and lack of cooperation between the two generals. On Lake Erie, Oliver Hazard Perry's fleet destroyed an entire British squadron in September 1813, which facilitated William Henry Harrison's recapture of Detroit and American success against the British major general Henry Proctor and Native American allies at the Battle of the Thames. Additionally, Tecumseh's death during the battle ended effective Native American resistance in the region.

American fortunes improved somewhat in 1814, especially with the promotion of effective generals like Andrew Jackson, Jacob Brown, and Winfield Scott. Jackson's success against the Creeks at the Battle of Horseshoe Bend in March 1814 nearly destroyed the Red Stick Creek faction in the Old Southwest, preventing their alliance with the British in the Gulf of Mexico. In preparation for a July invasion of Canada across the Niagara River, Brown first captured Fort Erie and then moved toward Lake Ontario to coordinate maneuvers with the navy. In support of the campaign, U.S. general Winfield Scott defeated British forces opposing the invasion at the Battle of Chippewa, which highlighted the effectiveness of American regulars. Eventually, Brown's advancement stalled, and he withdrew back to Fort Erie, fighting the British lieutenant general Gordon Drummond and brigadier general Phineas Riall at the costly Battle of Lundy's Lane during his withdrawal.

Later in the year, the Americans suffered Major General Robert Ross's August raid into the Chesapeake and the burning of Washington, D.C. However, in September, American forces repulsed British advances against Baltimore, where the naval

bombardment of Fort McHenry inspired Francis Scott Key to pen “The Star Spangled Banner.” Also in September, Lieutenant General Sir George Prevost led British forces south along Lake Champlain into New York. Subsequent American land and naval victories at the Battle of Plattsburgh and Plattsburgh Bay forced the British retreat to Canada.

Naval War on the High Seas

American naval victories in the summer and fall of 1812 proved a welcome contrast to the year’s faltering land campaigns. Because the British navy outnumbered and outgunned the U.S. fleet, the American Navy adopted a strategy of single-ship engagement and attacking British commerce. This strategy yielded stunning success in the early part of the war. In addition to providing an important boost to morale, it forced the British navy to turn its efforts toward defending its merchant fleet.

The streak of American success began when the American frigate *Constitution*, commanded by Captain Isaac Hull, defeated the British frigate *Guerriere* on August 19, 1812, to claim the first American naval victory of the war. When the crew returned to Boston, they were feted with a 500-guest celebration at Faneuil Hall, in spite of New England’s antiwar leanings. In late October, Stephen Decatur’s frigate *United States* captured the British frigate *Macedonian*. In December, the *Constitution*, now commanded by William Bainbridge, earned a second victory over Britain’s *Java* off the coast of Brazil. In addition to these single-ship engagements, the frigate *Essex*, commanded by David Porter, reported an eventful month of cruising, during which the ship captured eight enemy merchant ships and a sloop of war, with more than 400 prisoners and property worth approximately \$300,000 captured or destroyed. These successes reinforced the American strategy of targeting individual ships and British commerce.

To further carry out its naval strategy, the United States turned to privateers to augment its undersized navy. Privateers, romanticized as “militia of the sea,” were privately armed vessels commissioned by the president and authorized by Congress to raid enemy ships in exchange for prize money. More than 500 ships served as privateers compared with the 23-ship U.S. Navy. Motivated by patriotism and profit, privateers took 1,345 British prizes and inflicted an estimated \$45.5 million of damage

on British commerce over the course of the war. By November 1812 alone, American privateers operating off Canada captured 150 merchant vessels. Although the British blockade of the American coast increased the risks and danger for privateers, they continued to operate through the end of the war.

The initial American naval victories stunned the British. To cope with the American strategy, the British increased their presence in American waters and blockaded ports and began sailing commerce vessels in convoys and naval vessels in squadrons. The Admiralty went so far as to order ship captains to avoid single-ship combat. In February 1813, the British navy began a blockade of American ports and harbors on the Chesapeake Bay and Delaware River. Over the course of the year, British vessels bottled up the entrances to New York and Boston and gradually extended a blockade to Charleston, Port Royal, Savannah, and the Mississippi. The blockade proved effective not only in limiting American naval activity by making it difficult for American ships to enter or leave port but also in putting economic pressure on the United States by restricting the free flow of goods.

Additionally, British naval dominance and their effective blockade gave them freedom to send raiding parties against coastal cities. Most of the operations took place in the Chesapeake Bay along the coasts of Maryland and Virginia, where the British launched incursions against various port cities in the summer of 1813. British control over coastal waters facilitated the August 1814 landing of a flotilla of no fewer than four ships of the line, seven frigates, and other vessels carrying Major General Ross’s force of 4,500 that invaded Washington, D.C., on August 24. The British navy’s subsequent attack on Baltimore was motivated by the city’s status as a key port for American privateers. Although slow to exploit their naval strength in the early months of the war, by the war’s end, the British had reasserted their accustomed naval dominance. The efforts of the U.S. Navy, however, had earned the respect of the British and American sailors, and commercial interests at sea would be free of European interference.

Antiwar Sentiment

Congressional Federalists voted against the war, and members of the Federalist Party, particularly in New England, expressed and acted on antiwar sentiment throughout the course of the war. Antiwar



The U.S. frigate *United States* capturing the H.B.M. frigate *Macedonian*, October 25, 1812.

Source: Currier & Ives. Courtesy of the Library of Congress.

feelings manifested themselves in various ways over the course of the war. The New England Militia Controversy was precipitated by Congress's April 1812 authorization of 100,000 militia men for federal service. In August, after the declaration of war, the governors of Massachusetts, Connecticut, and Rhode Island refused the requisition orders. The governor of Massachusetts appealed to the state's Supreme Court, whose ruling provided the underlying justification for the state's refusal to provide militia troops. The court ruled that national government had the right to activate militia troops only in the event of suppressing insurrections, maintaining domestic tranquility, and repelling foreign invasions. In their estimation, none of those conditions existed. Additionally, the militia was commanded by state officers, except when the president of the United States assumed command. Moreover, the court

did not recognize the president's right to delegate command to military subordinates. These reasons further justified the state's refusal to place militia troops under the command of the First U.S. Military District. The governor of Rhode Island claimed the prerogative to determine if grounds for committing the militia existed and ultimately refused his troops based on his belief that the conditions did not warrant their activation. The governor of Connecticut, supported by the state legislature, similarly refused to commit troops based on the fear that state troops would be used for offensive purposes, namely, the invasion of Canada. The failure of New England states to support the war contributed to the U.S. failures in the northern campaigns. Issues of militia service under regular officers and the authority to call up the militia remained unresolved throughout the course of the war.

In addition to the New England controversy, there were several instances of the militia's refusal to cross into Canada. In the October 1812 Battle of Queenston, New York, militia refused to cross the Niagara River to reinforce American troops pinned down by British fire. Their refusal contributed to the American defeat, a loss that effectively ended the 1812 campaign. The Queenston incident stands out because militia insubordination directly affected the outcome of the battle. It was not, however, the only time the militia refused to cross into Canada. In July 1812, 200 Ohio militia accompanying General Hull refused to cross the Detroit River into British territory. They claimed that they could not serve outside American territory. As General William Henry Harrison's forces pursued British forces in September 1813, 150 Pennsylvania militia refused to cross into Canada. In October, nearly 1,000 militia accompanying General Hampton's attempted invasion of Montreal also refused to cross the border.

Antiwar sentiment also negatively affected financial support for the war. The government's attempt to sell war bonds to finance the war met with limited success. Just half of the March 1812 bond issue was taken by investors. A lack of military success in 1812 as well as New England opposition toward the war foreshadowed meager results for the 1813 bond sales as well. After selling only one third of the bonds, the treasury turned to a syndicate of bankers to underwrite the remainder of the issuance. Ultimately, the government financed approximately \$60 million of its wartime debt through the direct sale of national securities to U.S. investors. However, New England financiers' opposition to the war significantly hampered the U.S. war effort. Of the \$40 million borrowed by the U.S. government by the end of 1814, less than \$3 million came from New England, then the country's richest section.

Federalist antiwar sentiment is most associated with the Hartford Convention. From December 15, 1814, to January 5, 1815, members of the Federalist Party met in closed sessions to discuss dissatisfaction with the federal government's deployment and control of the militia, general frustration with the war, and the party's concern about southern Republican's dominance in national politics. After secret deliberations, the delegates issued a final report and proposed seven constitutional amendments. Delegates from two of the states proceeded to Washington,

D.C., to present their recommendations. Before their arrival, news of Andrew Jackson's victory in New Orleans and the Treaty of Ghent became public. Although the Federalist proposals were mostly moderate, the timing and circumstances of the Hartford Convention caused it to appear disloyal and treasonous. The notoriety of the convention contributed to the Federalist Party's rapid decline following the war.

Ending the War

Peace negotiations began almost in concert with the beginning of the war. Despite Russian attempts to broker a peace deal, it was British war weariness and setbacks at Baltimore and Lake Champlain that convinced the British government to accept the status quo ante as the basis for peace. Importantly, the British dropped demands for changes to the Canadian border and the establishment of a Native American state in the Northwest. Similarly, American peace commissioners, including John Quincy Adams, Henry Clay, and the former secretary of treasury Albert Gallatin, dropped demands for ending impressments and agreed to honor Native American territorial claims.

Peace commissioners signed the Treaty of Ghent on December 24, 1814. Although the treaty restored the status quo ante bellum, it did not meet any of the U.S. wartime objectives. Andrew Jackson's January 1815 victory at the Battle of New Orleans over the British major general Edward Pakenham helped establish the outcome of the war as a victory in the memory of Americans. Additionally, the end of the war neutralized the Native American presence in the Old Northwest and opened large tracts of land to American expansion in the South. American feelings of victory were furthered by the ensuing period of consensus, national pride, and expansion of federal powers, the so-called Era of Good Feelings. Canadians also viewed the outcome as a victory as they repulsed the American invasion, retained their connection to Great Britain, and nursed a burgeoning nationalism. Great Britain also could claim victory as it successfully retained Canada and ceded no commercial claims. Native American participants made few claims of victory as American settlers continued to push them westward in spite of treaty provisions designed to protect prewar territorial possessions. Both the United States and Great Britain benefited from the

arbitration clause of the treaty, designed to facilitate peaceful resolutions of border conflicts.

Statistical Data

More than half a million Americans served during the War of 1812. The historian Donald Hickey estimates the total number of troops to be 528,000: 57,000 regulars, 10,000 volunteers, 3,000 rangers, and 458,000 militia; an additional 20,000 served in the navy and marines. Native American allies numbered about 1,800 in the North at the start of the war, although that number likely grew after the American victory at the Battle of the Thames in 1813. In the South, approximately 2,000 Native Americans allied with the United States against the Red Stick Creeks. For the United States, official battle casualties numbered 2,260 killed and 4,505 wounded. Historians estimate that another 17,000 soldiers suffered nonbattle military deaths. The estimated cost of the war is \$158 million.

When war was declared, historians estimate that the British had some 5,600 regulars in Canada and 86,000 militia on the roles. The only permanent fortress was at Quebec with 2,300 men. By late 1814, British regulars in North America peaked at 48,000, with an additional 4,000 provincials in service; the total number of naval personnel is unknown. Historians calculate that 2,733 British soldiers perished in combat, accident, or disease between 1812 and 1814 in Upper and Lower Canada. Estimates for naval personnel and combatants in other theaters put total British deaths as a direct result of the war at around 10,000. In addition, some 11,000 Native Americans fought with the British in the north. The Grand River Iroquois played a more active role, especially in Upper Canada. In the south, approximately 4,000 Native Americans opposed the United States in the Creek War. For the Native American participants as a whole, an estimated 10,000 men, women, and children died from war-related causes.

Lessons Learned

Following the war, reform-minded politicians tentatively acknowledged the importance of an organized, trained, and equipped regular army to meet the security demands of the nation and to match the fighting prowess of European armies. Although there were no fundamental changes in manpower policy or the militia system, substantial reorganization of the federal administrative system took place, including

establishment of an army general staff, the formation of a board of navy commissioners, and the reform of the system of accountability for the army and navy. Although these reforms set the stage for the further development of a professional staff, the nation largely remained committed to the ideals of the citizen-soldier and the militia.

By 1820, the House of Representatives called for reductions to the regular army. Secretary of War John C. Calhoun argued that the events of the war proved that the regular army, and not the citizens' militia, was the most effective instrument for waging war. To achieve the desired force reduction and center military efforts on a regular force, Calhoun proposed a plan for an expandable regular army. Under his proposal, the peacetime army would be a skeleton force in which all wartime formations would already exist. During wartime, recruits would be absorbed directly into existing units so that recruits would benefit from the skill and guidance of regular troops. Calhoun's proposal met numerical reduction requirements; however, it called for the retention of a disproportionate number of officers. Additionally, it implicitly reduced the militia to auxiliary roles. As a result, Congress rejected the plan. Calhoun's proposed plan was a turning point for the nation's understanding of the value of militia versus the regular army. He was the first responsible statesman to repudiate the militia tradition. In various forms, the concept of an expansible army influenced advocates of the regular army as the focus of war planning through the late 19th and 20th centuries.

Wartime experiences also led the expansion of coastal fortifications. The British navy's ability to enter harbors caused renewed interest in coastal fortifications. Many attributed the presence of Fort McHenry to Baltimore's ability to hold out against British attack. In 1816, Congress appropriated more than \$800,000 for fortifications. From 1817 to 1824, the Corps of Engineers supervised the building of more than \$3 million worth in coastal fortifications. Additionally, the army changed West Point curriculum to promote engineering in response to the need for a system of fortifications. By the mid-1820s, as memories of the war receded, the pace of construction slowed.

Historical Interpretations

Although interpreting the history of the War of 1812 typically generates fewer controversies than studies of other wars, scholars of the war continue to debate key points and expand the literature in ways that

mirror trends in the wider field of military history. In one of the earliest relevant studies, *The War of 1812* (1965), Harry L. Coles summarized the various causes of war that historians have suggested. His list of causes included maritime concerns and the British practice of impressment, the expansionist aims of Western and Southern states, economic depression, national pride, and the use of Canada as a lever to force Great Britain to concede on maritime and commercial interests. Coles himself argued that a combination of factors caused the war, although he advanced the maritime and commercial interests above the others. Several decades later, in *The War of 1812: A Forgotten Conflict* (1989), Donald J. Hickey added the Republican Party's desire to promote party unity as an additional motivation for the war. His inclusion of the internal political dynamics of the nation during the war to commercial and economic interests informed his analysis of the nation's decision to declare war, the conduct of the war, and the terms of peace. Likewise, in *Mr. Madison's War* (1983), J. C. A. Stagg suggested that war against England was the next natural step following Madison's failed diplomatic attempts to secure American maritime rights. However, divisive internal politics and local interests compromised the administration's ability to coordinate war efforts.

Most historians advance some combination of factors as causes for the war, but Alan Taylor's *The Civil War of 1812* (2010) moved past traditional notions of causation and describes the war as a civil war with four overlapping dimensions. Those dimensions included the following: first, a conflict between Loyalists and U.S. republicans; second, a partisan struggle between Jeffersonian Republicans and Federalists in the United States; third, a struggle in Britain with Irish republicans that spilled over into North America; and fourth, different Native American groups divided among themselves as they chose allies in the struggle against American expansion. Taylor's expansive view of the war reflected the trend of placing the war in a wider social and cultural context and including Native Americans as active participants in the war. Sandy Antal (1997) has explored the role of Native Americans in a specific campaign, while Gregory Dowd (1992) and John Sugden (1986) have examined intertribal diplomacy and alliance building as part of the prelude to Native American participation in the war. Additionally, scholars have investigated Native Americans' participation in the war as an agent of social and cultural change.

New scholarship on the war in the Old Southwest has animated debate over Andrew Jackson's conduct during the Creek Wars. In *Old Hickory's War* (1996), historians Jeanne and David Heidler criticized Jackson's leadership and decision making during his military career between 1813 and 1819. In their analysis, he was a self-serving agent of American expansion motivated by his hatred for Native Americans and a personal quest for military glory and political power. In contrast, in *Andrew Jackson and His Indian Wars* (2001), Robert V. Remini, a noted biographer of Jackson, defended Jackson as a wartime leader and as an advocate of Indian removal. Jackson's commitment to Indian removal, Remini asserted, stemmed from Jackson's belief that only geographic separation between Native Americans could prevent ongoing warfare. Although these works offered differing assessment of Jackson's actions, both situate the history of the War of 1812 within the larger literature of American expansion and Native American policy.

As historians continue to expand the scope of their studies, they will necessarily reexamine the war's impact and its meaning for the different participants. New interpretations will certainly shape the ability of historians to determine who won the war. While few support a sure victory for any of the parties, perhaps the most useful model to determine "who won" is offered by Donald Hickey in *Don't Give Up the Ship!* (2006). He suggests that the question can only be answered by considering five distinct groups: (1) The United States; (2) Great Britain; (3) Britain's North American colony, that is, Canada; (4) Native Americans living in the United States; and (5) Native Americans living in Canada. A separate appraisal of each group's goals and achievements as well as an overall assessment of the impact of the war is needed to determine if the group "won" or "lost" the war. While scholars debate the nature of the victory for the United States, they generally agree that the war was solely detrimental to the future of native peoples.

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See also American Revolution; Indian Wars; Peace Movements; President as Commander in Chief

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WAR POWERS ACT

The War Powers Act, also known as the War Powers Resolution, was a joint resolution of Congress passed in 1973 that placed statutory restraints on the president's ability to use military force. It was passed during a period of congressional assertiveness in the wake of the unpopular Vietnam War and the emerging Watergate scandal. Notably, the act was passed

over the veto of President Richard M. Nixon, and each subsequent administration has declared it to be unconstitutional. While the passage of the act was a symbolic victory for Congress over the presidency, it has had only marginal effect on the ability of the legislative branch to take back war-making powers that have been assumed by the executive branch during the 20th century.

The purpose of the War Powers Act is to curtail the war-making powers of the president and return a portion of the ability to influence national security policy to Congress. It is a simple piece of legislation that places three major obligations on the president regarding the use of military force: (1) the act requires the president to notify Congress of potential military deployments as early and as often as possible and to accept congressional consult; (2) it requires the president to notify the leaders of Congress of a deployment of the armed forces within 48 hours of action; (3) it requires the president to withdraw deployed troops within 60 days unless Congress votes to authorize an extended deployment or declares war; the president may take a one-time 30-day extension without a congressional vote. While there is no built-in mechanism for enforcement of this law, Congress has grounds for impeachment of the president if he chooses to violate it.

The creation and maintenance of the War Powers Act highlights decades of tension between the president and Congress regarding foreign and defense policy making. Beginning with Franklin Delano Roosevelt's leadership during World War II and intensifying with each subsequent president's management of foreign affairs during the Cold War, the institution of the presidency took a greater role in making foreign and defense policy at the expense of congressional influence. There are several competing explanations for this shift. There is general agreement, however, that the elevated position of the United States in world affairs and the expansion of American grand strategic goals required the federal government to be able to make quick and effective decisions regarding foreign and defense policy. In addition to this thesis, Richard Neustadt (1960) argues that assertive presidential leadership during periods of compliant or submissive congressional leadership intensified this trend.

According to Article I, Section 8 of the Constitution, Congress alone reserves the power and responsibility to declare war against a foreign

country. Congress has done so only five times during its history, despite the fact that the United States has been involved in dozens of military conflicts and hundreds of foreign military deployments since the founding of the Republic. The device of declaring war, therefore, is only one means of war making available to the federal government. The other ways in which the United States can make war rest in the hands of the president, who is also regarded as the commander in chief of the armed forces according to Article II, Section 2 of the Constitution. It has long been clear that the president has been the primary agent of war making in the federal government, yet there is also a long and broad history of the president working with Congress. A tradition of consultation and mutual consent largely came to an end with the changing dynamics in international relations in the mid-20th century; for example, the advent of nuclear weapons, the Cold War, and the possibility of surprise attacks on U.S. territory.

The War Powers Act was a product of three distinct short-term developments in American politics. First, the public's increasing dissatisfaction with the Vietnam War in the early 1970s was a leading contributing factor. Congressional leaders felt that they were misled by the president at the onset of the Gulf of Tonkin crisis and that the conflict, never declared by the Congress formally, was beyond Congress's ability to retract. A second factor contributing to the passage of the act was the overwhelming notion that the presidency had become "imperial" (in the words of Arthur M. Schlesinger Jr.) and was exceeding its constitutional mandate. Finally, the Nixon administration's involvement in the Watergate scandal placed the institution of the presidency in a uniquely weak and unpopular position relative to Congress. The confluence of these three factors created an environment in which the Congress sought to reclaim war-making powers from the presidency.

The matter of the constitutionality of the War Powers Act is contentious and unresolved. Congressional proponents argue that the Constitution gives Congress the power to limit presidential war powers by the Elastic Clause found in Article I, Section 8. Also, the Framers of the Constitution wrote "declaration of war" as way to include all armed conflicts. A common argument for the unconstitutionality of the act is that it violates the Separation of Powers principle; federal courts and the Supreme Court have weighed in on the issue, although they

have not considered any direct legal challenge to the law by a sitting president. In 1983, the Supreme Court ruled in *INS v. Chadha* that a legislative veto, meaning a congressional act that countermands a lawful presidential action, is unconstitutional. Subsequent administrations and critics of the War Powers Act have cited *INS v. Chadha* as a precedent that renders the act null and void.

Richard Nixon vetoed the War Powers Act precisely because he claimed that it was unconstitutional and that the ability to make war was implied under the designation of the president as the commander in chief of the armed forces (although it was not an explicitly enumerated power of the president pursuant to Article II of the Constitution). Congress passed the act over his veto, and the Nixon administration did not have an opportunity to challenge the law before the president resigned in 1974.

President Gerald R. Ford was the most compliant among the post-1973 presidents, partly due to his lack of popularity following his pardoning of Richard Nixon as well as Congress's assertiveness in many dimensions of federal policy making and administration. Ford, however, did have one opportunity to challenge the War Powers Act in 1975. After elements of the Cambodian Khmer Rouge hijacked the American freighter *Mayaguez*, Ford authorized the use of military force to reclaim the ship and its crew without consulting Congress. This military action was limited in duration and did not require congressional approval because it was less than 60 days long, but the president's hesitancy to inform Congress of his intentions prior to his deployment of the marines to Cambodia was a challenge to the act and set a precedent that all subsequent administrations would follow.

Ronald Reagan's administration was perhaps the most vocal critic and strongest challenger of the War Powers Act. Reagan irked the Democratic congressional leadership by notifying them of the 1983 invasion of Grenada after the fact; they had been unaware of the urgency of the crisis and did not know of the president's actions before the public knew. Three years later, Reagan would again use force without consulting Congress when he authorized air strikes against Libya. Ronald Reagan did more to nullify practical applications of the War Powers Act than any other president. By 1986, however, the tables were turned as Congress investigated alleged improprieties in Reagan's handling

of national security policy. The exposure of the Iran-Contra scandal and the critical report filed by the Tower Commission damaged the sitting president's approval rating and ability to pursue his foreign policy agenda during the latter half of his second term. Reagan's violations of the War Powers Act, however, were not addressed by Congress.

President George H. W. Bush deviated from Reagan's approach to war-making by seeking congressional consent for the Persian Gulf War in 1990. After the Iraqi invasion of Kuwait in August 1990, the Bush administration deployed a large contingent of American forces to Saudi Arabia for defensive and potentially coercive purposes and then asked for congressional approval to initiate an armed conflict with Iraq. What is remarkable about Bush's request to Congress is that, once granted, the administration claimed the War Powers Act to be unconstitutional and denied the necessity of congressional approval for the deployment of the armed forces to the Middle East and for the forceful liberation of Kuwait. The Bush administration maintained that the request was necessary due to the divisive nature of the war itself and the need to build a national consensus, not due to the obligations of the War Powers Act.

The Clinton administration continued the practice established by the preceding administration by seeking congressional approval for the use of military force while claiming that it was unnecessary for presidential action. Congressional skepticism regarding a potential U.S. invasion of Haiti in 1994 led it to pass a provision in an appropriations bill that required the president to seek congressional consent before any potential deployment. Although the Haitian crisis did not lead to an American invasion, the Clinton administration sent peacekeeping troops in the same year and notified Congress in a way that was compliant with the spirit of the congressional resolution. It was careful to note that it was acting in good faith and was not complying with the recent resolution or the War Powers Act. Overall, Clinton made a practice of seeking congressional approval while asserting the lack of necessity to do so during subsequent crises in the former Yugoslavia later in his administration. Congress did not take affirmative action against Clinton's possible violations of the act, thus further reducing its legitimacy.

George W. Bush faced the most grave national security crises of the United States in the post-Cold

War era and continued to assert that unilateral presidential war making was fully constitutional. After 9/11, the Bush administration did not seek Congressional approval to use military force to ensure homeland security. Considering the unexpected and urgent nature of the crisis, Congress acquiesced. Bush's pursuit of war against Iraq in 2002 and 2003, however, brought him to Capitol Hill to gain congressional approval. In October 2002, Congress passed a joint resolution that authorized the Bush administration to use force against Iraq at an unspecified date for the purposes of enforcing previous UN Security Council resolutions regarding Iraq. This action further eroded the likelihood that the act would have any bearing on a congressional reclamation of war powers.

President Barack Obama currently continues the tradition held by previous presidents by maintaining that the War Powers Act is unconstitutional. His administration pursued two wars in the Middle East inherited from the previous administration and made substantial efforts to consult Congress. Obama has not, however, explicitly complied with the act. One example of this behavior is seen in Obama's escalation of operations in Afghanistan in 2010, despite hesitancy and disapproval among the Democratic congressional leadership.

The issue of the War Powers Act resurfaced during congressional criticism of the Obama administration's handling of Operation Odyssey Dawn, the air campaign to support UN Security Council Resolution 1973 in the spring of 2011. In June, House Speaker John Boehner sent the president a letter asking for a legal explanation for not requesting congressional consent 60 days after the initial deployment. The Obama administration responded by claiming that the operation did not fall under the purview of the act because the campaign, which consisted of mostly strategic bombing and tactical air support, did not involve sustained fighting or put American troops at significant risk.

The War Powers Act is relevant to defense policy today in the sense that it resembles a desire by Congress to regain some of the war-making powers it retained prior to the mid-20th century. The reasons for the president's accumulation of those powers after 1945 are the same factors that influence the executive branch's ability to ignore elements of the act after 1973 and are likely to continue future presidents' noncompliance.

Furthermore, there are reasons to believe that rapid changes in the nature of war and international relations will make presidential compliance with the War Powers Act even less probable in future decades. These include the necessity of a quick decision-making environment and the prevalence of ambiguous and nonstate actors in current threat assessments.

Passage of the War Powers Act was a significant moment in presidential-congressional relations, but it has not fulfilled its potential to define them. The practice of presidential war making in the face of the act has weakened congressional ability and resolve to take further measures to reclaim war powers and highlights the preponderance of the chief executive in foreign affairs and national security matters.

David Bell Mislán

See also Congress, U.S.; Constitution, U.S.; Iran-Contra Scandal; President as Commander in Chief; Vietnam War

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WARFARE, AMPHIBIOUS

Amphibious warfare involves military operations that are launched from the sea by an amphibious force embarked in ships or craft. The primary purpose of these operations is the introduction of a landing force ashore. This landing force can be offensive, defensive, or humanitarian in nature. The ultimate goal of amphibious warfare is to contribute substantially to the attainment of those national strategic objectives that require the ability to project combat power onto a landmass from the sea. Modern major amphibious operations are complex

and require extensive specialized sea- and air-based logistical support. As such, they can be undertaken and sustained only by nations with well-developed land and sea combat capabilities.

Historical Background and Development of American Doctrine

Projecting combat power ashore has been a part of military and naval operations since antiquity. Some historical examples of landing operations include Greek landings against the Persians at Mycale in September 479 BCE; the Norman invasion of England in 1066; the Japanese invasion of Korea during the 16th century; the British and French attempts to land at Gallipoli in what is now Turkey between February and December 1915; numerous American landings in the South, Southwest, Central, and Western Pacific, 1942–1945; and the amphibious demonstrations and rehearsals leading up to the opening of the ground war in Operation Desert Storm in Iraq, in January and February 1991. Military leaders exercising overall command of both land and sea forces undertook the earliest of these actions. Dividing the command of the naval and landing forces between admirals and generals, respectively, an innovation introduced in modern times, created many planning and force coordination problems that proved very difficult to solve. One of the most significant aspects of the history of modern amphibious warfare, therefore, is how military leaders analyzed these problems and eventually overcame them.

Three nations, in particular, developed solutions for the problems associated with landing operations by the beginning of World War II. The British failed to maintain an amphibious capability during the 1920s and 1930s. This failure was due to several reasons. First, they were stung by their failure at Gallipoli. Second, they viewed amphibious operations to be of doubtful importance in any war that could be foreseen. Third, they were financially hamstrung during the interwar period. The impetus of World War II finally made them look at landing operations seriously in 1940. By that time, however, they were far behind both the Japanese and the Americans and had to play rapid catch-up. The doctrine they developed placed great emphasis on surprise, landing troops where the enemy's defenses were weakest or, preferably, nonexistent.

The Japanese, on the other hand, viewed amphibious landing capability to be of the utmost importance, especially in a war with the United States. Such a war seemed more and more inevitable as the years passed. To prepare for it, they developed during the 1920s and 1930s a doctrine of amphibious assault that emphasized landing troops in the teeth of an enemy's defenses. The Japanese army took the lead in developing this doctrine. The Imperial Navy contributed to the development of naval gunfire support, the movement of troops from ships to the shore, and other areas of a purely naval nature, but it was the army that dominated the process.

The United States, like Japan, undertook during the interwar period the development of a doctrine for moving troops ashore against determined opposition. Unlike Japan, however, the two American sea services, the U.S. Navy and the Marine Corps, were principally responsible for this development. In 1934, the Marine Corps Schools (MCS) were given the task of writing doctrine for the type of war envisioned by War Plan Orange, the American plan for a war against Japan. The Americans decided to study closely the British and French failure in the Dardanelles. The problem at Gallipoli, to their minds, was not in the concept of assaulting a defended beach but in the lack on the part of the British and French of a doctrine for doing so. Taking action based on this conclusion, the Marine Corps Schools stopped holding classes for several weeks beginning in November 1933 to develop a set of effective guidelines.

The instructors and students of MCS eventually completed the *Tentative Landing Operations Manual* in 1935. The navy adopted the manual 3 years later, retitling it *Fleet Training Publication [FTP] 167: Landing Operations Doctrine, U.S. Navy 1938* and giving it wide distribution within both of the sea services. This document, with modifications, provided the foundation for navy and Marine Corps amphibious operations from the landings at Guadalcanal in August 1942 to those at Okinawa in April 1945. It broke landing operations down into six components:

1. Command relations within the amphibious task force
2. Naval gunfire support of landings
3. Air support of landings
4. The movement of troops from transport ships to the shore
5. The securing of the beachhead once the troops had landed
6. The logistical support of the operation

At the heart of this doctrine was an emphasis on meticulous planning and diligent training.

The U.S. Army adopted *FTP 167* in 1941, putting it in army covers and retitling it *Field Manual 31-5: Landing Operations on Hostile Shores*. In Europe, Dwight D. Eisenhower oversaw an amalgamation of British and American doctrine, ultimately producing the plan for the invasion of Normandy in June 1944. This plan, relative to *FTP 167*, placed too much emphasis on air support and did not allow for enough naval gunfire support of the landings. In the Southwest Pacific, because of the size of many of the islands in that area, Douglas MacArthur did not have to land troops in the teeth of Japanese defenses as often as was necessary in the Central Pacific. Also, landings in the Southwest Pacific had to take place within range of Japanese land-based air power, a situation that was very dangerous for the supporting naval assets. MacArthur's amphibious commanders, therefore, developed a doctrine that emphasized putting troops ashore quickly where the Japanese were weak or not present and then withdrawing the majority of supporting ships from the area. The best examples of these types of landings were the operations undertaken as MacArthur's forces made their way along the northern coast of New Guinea from January 1943 until December 1944.

The U.S. Army's modifications in Europe and the Southwest Pacific of the basic doctrine contained in *FTP 167*, it has been argued, constituted the creation of two additional doctrinal traditions. The basis for all three, however, was the sixfold division of landing operations that had been developed during the 1930s. Lessons learned during World War II were incorporated into this basic doctrine, the one promulgated as *FTP 167*, and the improved version provided guidance for U.S. landings at Inchon in September 1950, Lebanon in July 1958, Da Nang in March 1965, and all along the coast of South Vietnam during the balance of the Vietnam War. By the late 1970s, however, weapons technology had developed to the point where the landing of troops in the teeth of an enemy's defenses seemed problematic at best. The British experience in the Falklands in 1982 showed just how lethal some of these new weapons could be. A new doctrine was called for.



American assault troops in a landing craft huddle behind the protective front of the craft as it nears a beachhead on the northern coast of France. Smoke in the background is naval gunfire supporting the landing (June 6, 1944).

Source: U.S. Army Center of Military History.

Modern American Doctrine

The two most significant modifications of the old doctrine occurred during the 1990s and early 2000s. They are evidence of the growing importance of littoral operations in the minds of American naval planners after the end of the Cold War. The littoral is the area from the open ocean to the shore as well as the area inland from the shore that can be supported and defended directly from the sea. The conflicts of the post-Cold War world appeared to require a different naval emphasis than did the Blue Water world of the United States versus the USSR, and thinking had to evolve accordingly.

The first modification was introduced in three U.S. Navy and Marine Corps publications: *From the Sea, Forward . . . From the Sea*, and *Operational Maneuver From the Sea* (OMFTS). The most substantial change presented in these publications was the idea that establishing a beachhead was unnecessary. The power to move the landing force beyond the shore would be developed from the transporting ships themselves. The troops did not have to collect supplies and gather strength on a beach in order to then proceed inland. Movement from ships to points of enemy strength beyond the shore would be seamless, rapid, and violent. Also, the transporting



The build-up of Omaha Beach: Reinforcements of men and equipment moving inland.

Source: U.S. Army Center of Military History.

ships would launch the operation from over the horizon, staying as far away from an enemy's defensive guns and missiles as possible. New technologies such as the Landing Craft, Air Cushion, and the V-22 Osprey would allow this doctrine to be implemented. The second significant modification of the 1940s-era doctrine was the incorporation of amphibious capability within the concept of joint operations. This recasting of amphibious warfare doctrine is promulgated in *Joint Publication 3-02: Joint Doctrine for Amphibious Operations*. One can still discern remnants of *FTP 167* in the new document, but the level of services integration called for in *JP 3-02* stands in marked contrast to that foreseen

and allowed for in 1938, as does *JP 3-02*'s emphasis on nonmilitary uses of amphibious assets.

The doctrine put forward in *JP 3-02* can be described succinctly. The principal phases of an amphibious operation are planning, embarkation, rehearsal, movement, and action. The purpose of an amphibious operation will vary depending on the mission that it must accomplish. It can be used to strike swiftly at an enemy's critical vulnerabilities and decisive points, thereby defeating operational and tactical centers of gravity and achieving overall campaign objectives on its own. It can also be used as the first phase of a campaign or major operation, establishing a military lodgment ashore that can then

serve to support further action against an enemy. Amphibious forces can also be used to deny the use of an area or of particular facilities to an enemy or to divert enemy attention from the main effort of a campaign. Finally, amphibious forces can be used to support Military Operations Other Than War in order to accomplish such missions as the deterrence of war, the resolution of conflict, the promotion of peace and stability, or the support of civil authorities during severe domestic crises.

The new doctrine recognizes four key characteristics of modern amphibious operations. First, there must be a close integration between the navy and the landing force. Second, combat power must be rapidly built up from the sea to the shore. This characteristic takes into account the concept of operational maneuver from the sea. Third, amphibious forces must be organized according to the mission to be carried out. Organizational decisions must be made early on. No time can be wasted once an amphibious task force arrives at the point of insertion. Fourth, there must be an exceptional degree of unity of effort and operational coherence. The highly complex nature of amphibious operations and the extreme vulnerability of the forces engaged in putting a landing force ashore call for rapid deployment and rapid exploitation. Everyone must work together to complete the mission with dispatch. The result of this combination of key characteristics is rapid movement ashore with enough combat power to maintain the speed of operations well inland.

Though there have been numerous examples of landings from the sea since World War II, no nation has been involved in a conflict that has required the full implementation of amphibious warfare doctrine since the Korean War of 1950–1953. The United States used the threat of a full-scale amphibious landing during the 1991 Persian Gulf War to distract and confuse Saddam Hussein's commanders in Kuwait and Iraq, but that landing did not occur, and U.S. Marines were used in that conflict, as well as in the wars in Afghanistan and Iraq that began in 2003, as ground rather than amphibious troops. It has been in the area of Military Operations Other Than War that amphibious forces have been most active in the post–Cold War world. The United States, in particular, has been heavily involved in these type operations. U.S. naval and amphibious assets were used to provide relief in the aftermath of catastrophes

such as the 2004 Indian Ocean tsunami, Hurricane Katrina in 2005, and the 2010 earthquake in Haiti.

Conclusion

In a word, modern amphibious warfare equipment and techniques are adaptable. The present American doctrine allows for both military and nonmilitary uses of amphibious assets. An amphibious task force can be used either to attack an enemy or to support a friend in time of dire need. Modern weapons of war make the types of landings undertaken during World War II unlikely in the future, but the development of amphibious operations is not limited by their connections to the past.

Donald Mitchener

See also Combined Arms; Marine Corps, U.S.; Navy, U.S.; Strategy, Naval; World War II

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WARFARE, BIOLOGICAL

The classic definition of biological warfare is the deliberate employment of disease agents to inflict casualties among military and/or civilian human populations, animals used for food or transport, or food crops. Because of the randomness and relative efficacy of some diseases, such as smallpox or anthrax, biological warfare has acquired a sinister reputation as a weapon of mass destruction. It is worth considering, however, that biological warfare may also encompass the use of disease-carrying insect or animal vectors as the means by which to spread disease. Likewise the use of specific refined natural toxins—for example, paralyzing agents such as curare or botulinum toxin, or life-threatening toxins such as ricin, derived from castor beans—may be rightly considered forms of biological warfare.

Biowarfare From Antiquity to the Early Modern

Since the first cities appeared in human history, sometime around 3000 BCE, the threat of infectious disease was real. Human settlements—especially walled cities and towns—created breeding grounds for a variety of diseases, many of them cross-species infections acquired through close interaction with newly domesticated animals. Three key developments grew out of the new urban environment. First, the acquired immunity of a population to disease. Prolonged exposure to even the most chronic infections conveyed advantage as communities built up resistance to debilitating or even lethal diseases. This also translated into a distinct military advantage in ancient warfare, when disease could be leveraged as a force multiplier by a community against its enemy. As communities recognized disease as an external influence that brought on misery and despair, if not outright death, infected animal and human carcasses themselves were used as weapons, either to poison wells or as projectiles intended to spread disease within a walled city. If the targeted community had little recent exposure to the specific disease, all the better, as it would be more virulent. Ancient texts describe how a mysterious animal plague accompanied Hittite armies throughout the Fertile Crescent. Recent investigations by historians and microbiologists have linked these reports to

tularemia, or “rabbit fever”—a deadly cross-species disease with a high (15%) mortality rate among humans. Accordingly, rather than attack cities outright, Hittite armies would leave infected rams and sheep behind for the targeted city. After bringing the diseased animals within their walls, an outbreak of “Hittite fever” would soon appear, weakening the defenders and making their conquest easier.

Biological warfare in the ancient world was not limited to the ballistic use of diseased carcasses and animals. In her study of the ancient world’s attitude toward biological weapons, Adrienne Mayor points out that Greek and Roman myths and histories are filled with accounts of their use. Between mythic representations and actual accounts portraying the deliberate use of disease and organic poisons by the Scythians, Persians, Greeks, and Romans, one can only conclude that the ancients shared a perspective on the morality of such agents far removed from the current day’s recalcitrance.

Limited and random use during the Middle Ages (1100–1450) and early Modern Era (1450–1700) outside of the New World offers a mixed perspective on the intentions and utility of biological warfare. Crusader and Arab chronicles both describe the spoiling of wells and cisterns across Cilicia and Armenia, generally with animal carcasses, to deny water to the enemy. This deliberate poisoning of water supplies is the most commonly described activity that could be considered as a form of biological warfare. Other incidents that are less clear in their intention include the practice of catapulting dead bodies and animal carcasses into besieged towns and castles. Different chronicles and accounts offer different justifications for the practice, ranging from spreading fear and terror to deliberate attempts to introduce plague or other disease among the defending garrison. In either case, results were uneven; not every incident achieved its intended goal. More often than not, outbreaks did not occur, simply because the biological agent was not strong enough or was incapable of being transferred from dead tissue to living individuals on its own. This is not to rule out success, however. Several cases of an unidentified gastrointestinal infection—likely typhoid fever—being introduced by catapult loads of infected feces exist. And in the case of the bubonic plague, some historians do believe that the first pandemic to strike Europe in the 14th century can be traced back to the Mongol siege of the Genoese trade port of Caffa

along the Black Sea, where plague-ridden corpses were catapulted over the town's walls.

Biowarfare From the Age of Exploration to the Age of Revolutions

The 200 years following the discovery and settlement of the New World stand out as clear case studies of the efficacy of biological warfare. While unintended, the 1518 decimation of the Aztec and Inca peoples by smallpox guaranteed their conquest and subjugation by much smaller Spanish expeditions. Both cases were examples of misfortune and the negative implications of the so-called Columbian Exchange. There is no indication of Spanish forces deliberately introducing smallpox as a weapon; however, the Spanish were well acquainted with its effects and exploited every advantage produced by the outbreaks. Indeed, the impact of Old World diseases—not only smallpox, but also measles, diphtheria, whooping cough, and tuberculosis—exact a cruel toll throughout the New World, killing by some estimates no less than 90% of the pre-1490 population. Presented with such devastation, there is little wonder that Europeans enjoyed such success in their colonization efforts.

White Europeans also became victims of the force multiplying effect of disease in wartime. Insect vectored fevers like malaria and yellow fever were introduced into the Caribbean and Central America through the importation of African slaves. Within decades, both diseases were well established throughout the Caribbean, South and Central America, as well as gaining footholds in English and Spanish North America. The presence of these lethal fevers, combined with other factors, imbued the entire region with a reputation of being a “green hell,” a locale lush with vegetation and flora and fauna but also deadly to White Europeans who ventured there for prolonged periods. Nothing quite helped build this reputation like the 1762 Siege of Havana. Occurring at the tail of the Seven Years’ War, a combined British and American naval and infantry force—more than 30,000 strong—landed outside the Spanish provincial port capital at Havana to complete the conquest of Cuba proper. Over the next 2 months, the Spanish defenders—themselves much reduced by fever—waited for the effects of yellow fever and malaria to make themselves felt. Even though the Spanish garrison was compelled to

surrender the city, disease wracked the British and Colonial forces undertaking the siege, with nearly 5,000 dead from fever. The reputation of Havana, along with the daily toll of disease among Whites and Blacks alike in the Caribbean and Central America, limited military adventures in the area for nearly a century.

The most controversial incident relating to biological warfare centers on a 1763 exchange of letters between General Jeffrey Amherst and Colonel Henry Bouquet. Amherst wrote his subordinate on the eve of his leading a relief column to Fort Pitt in the midst of Pontiac’s Rebellion, asking if there were any means to introduce smallpox among the Indians there. Bouquet agreed, suggesting the use of smallpox-infected blankets—a tactic that had already been attempted at Fort Pitt on June 24. Amherst’s assent (“You will do well to inoculate the Indians by means of blankets, as well as every other method that can serve to extirpate this execrable race.”) has been taken as evidence of a policy of deliberate biological warfare on the part of the British. However, the actual incident involving a junior officer, Captain Simeon Ecuyer, took place before Amherst’s first letter to Bouquet on the subject. Bouquet never had the chance to carry out Amherst’s order, since between June 24 and his arrival in the area the Indians surrounding Fort Pitt had departed. Historians have since been divided on the effectiveness of Ecuyer’s action, split between those who felt the infected blankets served their purpose that winter and those who find no evidence to indicate success or failure. Nevertheless, Amherst’s initial inquiry survives as the first formal request to employ biological agents in wartime in English North America.

Biowarfare in the 19th Century

The issue of biological warfare receded during the 19th century. During the American Civil War, Confederate political and military leaders counted on fever to delay or confound Union offensives along the coastal periphery. Yet while medical officers on both sides of the conflict were concerned about the possible impact of infectious diseases, such as yellow fever, malaria, or cholera, they were fortunate to avoid the worse-case scenario of a full-blown outbreak during a campaign. Nevertheless, disease created a serious dilemma for Union and Confederate armies, as camp diseases such as typhoid and

dysentery vied with measles and influenza as the chief agent of mortality. No less problematic was the issue of staph infections, such as erysipelas or necrotizing fasciitis, and gas gangrene, all resulting from the treatment of combat-related injuries in filthy conditions. Yet despite the loss of more than 400,000 lives to disease in the Civil War, there is no indication of a deliberate employment of biological agents in the conflict.

Biowarfare and the World Wars

During the First World War, Germany dabbled with biological agents briefly, targeting livestock and horses in neutral countries from 1915 until the end of the war. These attempts at organic espionage were rather amateurish, however. In Romania, German agents tried to infect livestock and horses for sale to Russia with anthrax and glanders. Similar covert efforts were attempted in France, with little real effect, while secret attempts to infect animal feed in the United States by German agents were foiled, not by federal intervention but by bad luck. Attempts to bring live cultures into the United States via U-boat failed when the samples of glanders died en route. As early as 1914, German agents attempted to raise sufficient quantities of anthrax and glanders in a secret home laboratory in Maryland. Horses bound for France and England were inoculated by German agents in Baltimore, but the program was later abandoned when a cold snap killed off the bacterial cultures. During the interwar years, the issue of biological warfare was considered in Geneva, resulting in a 1925 protocol restricting their use. Research, development, and production were not covered in the ban, however, which was seen as allowing for defensive or retaliatory use.

Each of the major powers sought to harness biological agents during the Second World War to varying effect. Perhaps the least interested combatant was Nazi Germany. Despite the regime's avowed ideological position on eugenics and racial exceptionalism, it was remarkably reticent toward developing or employing biological weapons. No doubt the prior war's poor results played into this position, but the more influential reason was the Fuehrer's own principled aversion to biological weapons. Only after 1942, when news of the British program reached Germany, did Adolf Hitler authorize testing with a variety of agents. Responsibility for

these tests—which were intended to identify defensive measures against biological warfare for the German population—was distributed among several agencies, including the Reich Health Ministry, the *Heer*, and the SS. Several lethal agents, including bubonic plague, hepatitis A, anthrax, and malaria, were tested on concentration camp inmates through 1945. After the war, several participants, including Reichsgesundheitsfuhrer Kurt Blome, were spared the death penalty by cooperating with American and British biological warfare programs.

The Soviet Union's policy toward biological warfare was well established by the start of Operation Barbarossa in June 1941. During the 1930s, Joseph Stalin approved the creation of the Scientific Research Institute of Microbiology, a Red Army research facility dedicated to biological weapons, and continuing work begun by the Military Chemical Agency in the 1920s. During the Stalingrad campaign of 1942, the Soviet Red Army allegedly introduced tularemia, a highly infectious bacterial disease common among rodents and small livestock, against German forces. The chief evidence offered in support is the dramatic increase in cases among panzer and panzergrenadier forces, spiking at 100,000 cases for all of 1942, compared with 10,000 cases in 1941 and 1943. Additionally, the majority of the 1942 cases were pulmonary infections, an extremely rare form of the disease generally associated with aerosol distribution. British and American research into biological warfare was generally cooperative. In 1942, the British army initiated testing of delivery systems for distributing anthrax in Scotland, poisoning the testing area for the next 50 years. American research began in 1941, following reports of Japanese field use of biological weapons in China. Based at Fort Detrick, Maryland, the Army's Biological Warfare Committee conducted its work under the aegis of the Chemical Warfare Service. By 1944, the base was producing anthrax, brucellosis, and psittacosis in sufficient quantities for field testing; in the meantime, a delivery system—the SPD Mk. I bomb, a 4-pound hollow bomblet—was developed and given the green light for production. One million bomb canisters were ordered in 1944 (and were cancelled at the war's end). The actual use of biological agents at the end of the war is highly unlikely. During planning for the 1945 and 1946 assault landings on the Japanese Home Islands, the first use of both biological and chemical weapons was ruled out by planners

acting under the express direction of President Harry S. Truman. The World War II American development of biological weapons, therefore, appears to have been for use as a retaliatory weapon in the event of a Japanese escalation.

The issue of possible Japanese employment of biological weapons was taken seriously in 1945 largely because of their profligate use in their war with China (1937–1945). The Imperial Japanese Army used typhus, bubonic plague, and cholera regularly against Chinese military targets and civilian population centers. Indeed, in some cases, such as the 1941 attack on the city of Changteh, Japanese bioattacks backfired. On this occasion, more than 10,000 cases of cholera, and an additional 1,700 deaths, were reported among Japanese forces after the microbes were released over the city. The Imperial Japanese Army established the now infamous Unit 731 to develop and test biological weapons. Based in the Manchurian city of Harbin, the organization employed more than 3,000 scientific personnel. Shigella dysentery, cholera, and bubonic plague were tested on Chinese civilians and captured Allied military personnel, frequently culminating in vivisections to establish the diseases' effects on the body. Field trials were conducted on at least 12 cities, according to postwar testimony, including the use of "flea bombs"—canisters containing thousands of plague-infected fleas bred in Unit 731. Postwar justice for these actions was denied to the Chinese people and government, however. Many key personnel associated with Unit 731, including the organization's commanding officer from 1932 to 1942, Colonel Shiro Ishii, and his successor, Kitano Misaji, were co-opted by the Soviet and American militaries and provided information about their wartime research to their former enemies.

Biowarfare and the Cold War

North Korea and the People's Republic of China both accused UN forces of dropping bombs laden with disease-infected insects during 1952. The evidence presented in support of these claims is at best sketchy: the "bomb shards" were made of ceramic, a material used by the Japanese Unit 731, not the U.S. Army's Chemical Warfare Service. Likewise, the use of an insect vector is a legacy of Japanese biowar protocol; in the late 1940s and early 1950s, American biological warfare was focused on

aerosol dispersal of brucellosis. Efforts to weaponize anthrax were still under way at Fort Detrick in 1951. The wartime (and post-Cold War) claims were further debunked by the release of Soviet documents indicating the false nature of all charges levied against the United States. Charges of biowar again were levied during the Vietnam War, this time by both sides. Americans decried the rudimentary use of feces-covered bamboo stakes ("punji sticks") by the National Liberation Forces in South Vietnam. The purpose of the stakes was to incapacitate unsuspecting soldiers and thus overwhelm the American medical support network with the ensuing infection cases. Meanwhile the American use of chemical defoliants was linked to purported use of fungal or microbial agents targeting livestock and agriculture in the region. Ironically, these charges were made during the period when the American biological warfare effort was de-escalating and redirecting its attention toward defensive measures.

During the Cold War, weaponized biological agents continued to attract secret support in the United States and the Soviet Union. The American effort was disseminated from Fort Detrick to bases and facilities across the country, including Pine Bluff Arsenal, Arkansas; Plum Island, New York; and Dugway Proving Grounds, Utah. The most favored American agent was anthrax, though testing was conducted on a number of other diseases. In 1959, for example, Fort Detrick undertook a crash program in breeding *Aedes aegypti* mosquitoes—the chief vector for yellow fever—after successful testing on the viability of the disease as a combined lethal/incapacitating agent. By the year's end, millions of mosquitoes were ready for use if called on. Other, more conventional, delivery systems were developed as well, including specialized warheads for 155-millimeter howitzers, Honest John rocket systems, and aerial delivery canister bombs. Many of these devices were tested at the Dugway Proving Grounds. These tests were in turn linked to covert scientific tests of airborne particle distribution, disease communicability in urban environments, and the role of interstate commerce and travel in disease distribution. News reports about these projects, combined with public unease over the Vietnam War and the public spectacle of dead livestock following a flawed nerve agent test in March 1968 at Dugway Proving Grounds, all contributed to the Nixon administration's decision to abandon

offensive biological weapons testing, development, and stockpiling in 1969. Three years later, the United States signed the United Nations Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological and Toxic Weapons and on their Destruction. All operations at Fort Detrick were redirected to the U.S. Army Medical Research Institute for Infectious Diseases (USAMRIID), where unclassified research on biological warfare and national response policy continues.

The Soviet Union embraced a vigorous biological warfare program during the Cold War, one that, if former participants are to be taken at face value, far surpassed that of the United States in scope and output. Soviet researchers pursued many of the same disease agents that interested American specialists: Anthrax, brucellosis, and tularemia in particular were weaponized in the 1950s and 1960s. Unlike the American program, however, the Soviet Union continued to pursue offensive biological warfare research after signing the 1972 UN Convention. Under the new *Biopreparat* organization, the different Soviet research programs were united under a single institutional framework, greatly increasing efficiency and production output. New emphasis was placed on delivery systems and new biological agents, including ebola and smallpox; while new variants on existing diseases were pursued through recombinant DNA research. Even the accidental release of anthrax in a 1972 explosion at a Sverdlovsk production plant did not slow research or production. The 1991 collapse of the Soviet Union not only stalled the entire biological warfare program, it created a new set of problems with the collapse of the secrecy and security networks that protected the *Biopreparat* from the outside world. The overall safety of former Soviet test sites and production and storage facilities remains a concern, as such sites, the personnel employed there, and the special knowledge they hold are ripe targets for international criminals and terrorist organizations.

Biowarfare in Afghanistan and Iraq

Between the 1979 Soviet invasion of Afghanistan and the 2003 American invasion of Iraq, the Middle East and Central Asia have been saddled with the unenviable distinction of being at the center of recent claims regarding biological warfare. In 1982, the Central Intelligence Agency observed a

poisonous “yellow rain” in Laos and Afghanistan that poisoned plants, animals, and people who came into contact with it. Accordingly, physical samples of residue collected from sites in Southeast and Central Asia indicated the presence of tricothecene (T-2) mycotoxin. Eyewitness accounts all described a fly-over by a low-level helicopter or fixed-wing aircraft, from which a “yellow rain-like material” was sprayed over crops and villages. While some alleged victims were reported to have died after coming into contact with the mysterious substance, more often than not individuals suffered from bouts of abdominal pain, without the hemorrhaging associated with mycotoxin poisoning. The lack of hard evidence outside of the collected samples and the odd Soviet chemical warfare filter impregnated with mycotoxin spores, and the more prevalent use of chemical agents by Soviet forces and their clients in Laos, Kampuchea, and Afghanistan created enough reasonable doubt to put the claims into question. The reports were further compromised when biologists linked the “yellow rain” to bee excrement; experiments and observations indicated that bee colonies in flight would excrete waste to cool off.

The most cited case of misinformation and poor intelligence regarding biological weapons and other weapons of mass destruction is the pre-2003 campaign to uncover proof of Iraqi malfeasance by the administration of the U.S. president George W. Bush. While the administration’s claims of an existing program proved baseless, there was a historical precedent of an Iraqi biowarfare program. During the 1980–1988, Iran-Iraq War, the Iraqi leader Saddam Hussein’s regime attempted to weaponize anthrax and botulinum cultures as a last-ditch weapon in the event of any Iranian breakthrough. As early as 1981, the Iraqis entered into contracts with German and French firms to acquire equipment that would facilitate the large-scale manufacture of weaponized botulinum and mycotoxin. By 1995, Iraqi production facilities were making large quantities of more than 17 different biological agents, including anthrax, botulinum, gas gangrene, T-2 mycotoxin, and aflatoxin, a highly carcinogenic form of mycotoxin that targeted the liver, causing massive hepatic necrosis. The greatest challenge to the Iraqis was the lack of a reliable delivery system. Only at the end of the war did the Iraqi military settle on artillery shells as the primary delivery vehicle, followed by

al'Hussein ballistic missiles (modified Soviet SS-1 Scud tactical ballistic missiles).

Peace came before the Iraqis could introduce their biological weapons, however. At the onset of the 1991 UN-authorized coalition attacks against Iraq in response to its invasion of Kuwait, the possibility of an Iraqi biochemical first strike was taken seriously enough to compel the widespread distribution and use of protective gear and protocol by coalition forces. Meanwhile, more than 150,000 doses of anthrax antitoxin and 8,000 doses of a new experimental botulinum toxin were given to American forces. Despite reports of a medical reaction to the vaccines, the Department of Defense considered the prophylactic vaccination program a success—even though no biological or chemical weapons were employed by Iraqi forces. This nonuse has been linked to several factors, most notably the realization on Hussein's part that they would trigger massive retaliation. Regardless, postinvasion inspections identified stockpiles for destruction, including more than 175 artillery shells and al'Hussein warheads that had the potential to deliver biological weapons.

Between the 1990s and 2003, there were reports about Iraq's purported use of biological and chemical agents against Kurd and Shi'a communities. Unsubstantiated reports of biological weapons use alongside actual chemical weapons use fueled suspicions of an ongoing biological warfare research program throughout the 1990s. These rumors were seized on by the administration of President George W. Bush to justify the 2003 invasion of Iraq. Curiously, the Hussein regime did nothing to refute American claims in the year leading up to war, leading some to conclude that Baathist Iraq embraced the rumors as a deterrent to Iranian influence in the region. If so, then deterrence came at a terrible price for Saddam Hussein and his regime, as the alleged biological warfare research constituted the Bush administration's primary justification for invasion, along with claims of nuclear weapons research that also were unsubstantiated. As events subsequently proved after 2003, there was no biological warfare program in Iraq, nor had there been since the early 1990s.

Bioterror

The post-Cold War advent of nongovernmental actors motivated by extremist ideologies—be they nihilist, racist, or religious in context—has coincided

with a growing sense of dread at the prospect of a biological terror attack. Indeed biological toxins and microbial agents offer tremendous potential as a leveling factor for any committed group. Unlike nuclear weapons programs, which require massive commitments of national wealth and policy, biological weapons may be obtained cheaply by any individual or organization with access to money and talent. Indeed, since the September 11, 2001, terrorist attacks, the prospect of their use by any committed nongovernmental organization has given rise to a new term—*bioterror*—in the security lexicon. If one were to consider the use of poisons and drugs, it is possible to trace bioterror as a method of war or politics back to the ancient world. Indeed, some of the incidents discussed in the opening of this entry are equally deserving of being labeled as terror acts as much as organized warfare. For the purpose of this entry, however, the focus on bioterror will be limited to post-1972 activities conducted by nongovernmental organizations or individual actors with the purpose of introducing fear in the general population to compel submission or compliance.

Early attempts at developing biological agents for the purpose of spreading fear date back to the 1970s. In 1972, during the cultural tumult surrounding the waning Vietnam War, two college students were arrested for planning to introduce live typhoid cultures into the Chicago water supply. While on bail, the two fled the United States, leaving their plan unfulfilled. In 1984, a more successful use of biological agents against an unwitting civilian population was conducted by the followers of Bhagwan Shree Rajneesh in rural Oregon. In the face of local resistance to the cult's growing influence in and around The Dalles, Oregon, area, fanatical members sprayed a salmonella-laced solution on salad bars in area restaurants. The attack was not lethal, though more than 750 persons were sickened. A joint investigation by the state of Oregon, the Centers for Disease Control (now the Centers for Disease Control and Prevention), and the Federal Bureau of Investigation discovered evidence linking the Bhagwan's followers directly to the outbreak. In the end, two followers were indicted and pled no contest to charges associated with the plot; the Bhagwan himself was never charged for the crime, though he was fined and deported for immigration violations.

On March 20, 1995, several canisters of liquid sarin gas were released in a coordinated attack on

the Tokyo metro system. Twelve persons died and more than a thousand were injured by the attack. Subsequent raids on *Aum Shinrikyo* properties revealed a home-made arsenal of sarin nerve gas and crudely weaponized anthrax and ebola cultures. Over the next month, a wave of murders targeting police leaders and former cult members swept across Japan until Shoko Asahara's arrest on May 16, 1995.

Anthrax

In the weeks after September 11, 2001, a series of letters containing weaponized anthrax were mailed from post offices across suburban New Jersey to news organizations and the offices of Senators Tom

Daschle and Patrick Leahy. Twenty-two persons came down with anthrax, five of whom died. The anthrax culture itself proved to be a highly refined strain of the disease, known as the Ames Strain (for where it was first discovered in 1981 at Ames, Iowa). It was widely reported at the time that the medium was given a silicon coating to maximize its effectiveness as a lethal agent, a claim that was later disproven. After identifying Steven Hatfill, a researcher at Science Applications International Corporation, as a "person of interest" in the crime, the Federal Bureau of Investigation finally settled on Bruce Ivins, a senior researcher at the USAMRIID, as the primary suspect in 2008. Ivins committed suicide before his arrest, leaving behind claims supported by evidence but no conviction to close the



In this handout from the Japanese Defense Agency, personnel of the Self-Defense Agency are seen clearing sarin off platforms after the 1995 sarin gas attack on Tokyo's subways.

Source: Japanese Defence Agency/Getty Images.

case. Regardless of the outcome, the anthrax attacks continue to linger in the public's memory both for the terror they fostered and for the appropriation of the method by mailing threats laced with harmless "white powder" that was mistakenly taken as anthrax.

Biowarfare in the Current Day

Despite the 1969 convention's strictures, many industrial and developing nations continue to maintain biological warfare research programs. Often, countries state that all research is done for defensive reasons, which appears to be true in some instances. However, roughly a dozen nations are believed to have pursued or maintain an offensive capability with regard to biological weapons (BW). These nations include Algeria, Russia, the People's Republic of China, Cuba, Syria, Taiwan, India, Israel, Pakistan, North Korea, and Iran. Other programs may exist, as a 2005 Congressional Research Service report noted, "Because much of the material and equipment used to produce BW has legitimate medical, agricultural, or industrial purposes, and because BW could be produced covertly in a relatively small facility, other countries or groups may have undetected BW programs."

For its part, the United States continues to perform defensive research with regard to biological warfare. As a signatory to the 1969 convention, the United States destroyed its stockpile of biological weapons by 1975. Small cultures of lethal diseases, including anthrax, bubonic plague, ebola, and smallpox, are believed to be held in cold storage at undisclosed locations associated with the USAMRIID. According to USAMRIID, all American research centers on countermeasures and detection.

Conclusion

The invasion of Iraq and the 2001 anthrax episode highlight how the prospect of biological warfare has replaced nuclear war as the chief fear among numerous Western security and defense analysts. And as it turns out, research and production are still less essential for the potential terror actor than one might think, as the former Soviet Union's stockpiles and knowledge base remain under light supervision, if any at all. And as recent fictional accounts highlight, many analysts believe that the best delivery system is not a missile or a bomb but a single infected person

with the sniffles on an international commuter flight. This is the "nightmare scenario" cited by Centers for Disease Control, U.S. Army Medical Department, and World Health Organization experts—the deliberate infection of several persons with a high morbidity/high mortality disease, who subsequently enter the public sphere with the intention of spreading the disease as randomly as possible. Exacerbating this is the poor state of public health readiness for major disease outbreaks. The world is well equipped with research teams in the form of the World Health Organization and individual national organizations such as the U.S. Centers for Disease Control and Prevention. There is no question that a terror-related outbreak would be readily identified and research into a response would be vigorous. The weak link lies in direct prevention, isolation and quarantine enforcement, and immediate patient care. There are also questions about whether government services would continue to function and public order would be maintained in the face of a human-made outbreak. In the end, what makes biological weapons so effective is not their direct ability to infect a population. It is the fear and chaos they unleash among a society at risk that makes biological warfare and terror attacks so effective. The best prevention, therefore, may lie not in identifying the threat before it strikes but in bolstering civic infrastructures so that society itself may survive it.

Bobby A. Wintermute

See also Iraq War (2003); Laws of War; Terrorism; World War I

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WARFARE, ELECTRONIC

Electronic warfare is the employment of the electromagnetic spectrum for defensive and offensive military purposes. Electronic warfare is practiced by ground, sea, and air forces. It consists of three main subdivisions: (1) electronic attack, (2) electronic protection, and (3) electronic warfare support.

Electronic Attack

Electronic attack employs directed energy weapons to attack military and civilian equipment and installations. Directed energy weapons use electromagnetic and laser radiation.

Electromagnetic-Directed Energy Weapons

Electromagnetic radiation is employed to directly attack electronic circuitry. The use of electromagnetic radiation for this purpose exploits a scientific phenomenon known as the electromagnetic pulse (EMP).

The EMP was observed as an effect resulting from the first detonation of an atomic weapon during the Trinity test by the United States on July 16, 1945. The EMP had been anticipated, and was observed, by the Italian American physicist Enrico Fermi who, along with the physicist Julius Robert Oppenheimer, was a leading member of the wartime Manhattan Project to develop atomic weapons. The Trinity test was a key part of the Manhattan Project.

During an atomic explosion, gamma radiation ionizes the atmosphere, and it can also create similar damage in electronic circuits to the effect of those circuits being struck by lightning. During the Cold War, the military potential of harnessing the EMP to destroy electronic circuitry in military and civilian equipment, such as radar, radios, aircraft avionics, and telephone communications, was recognized; although the EMP can affect any equipment possessing electronic circuitry. Some resistance to EMP effects is possible through the employment of a technique known as hardening. Hardening physically shields circuits with special materials to act as a barrier against EMP radiation, or via software programming to enable electronic equipment to detect and correct data processed by its circuits that may have been corrupted by EMP radiation.

The combat potential of the employment of the EMP has been noted by several military practitioners. Lieutenant Colonel Thomas C. Riddle of the U.S. Army stated that the detonation of a nuclear weapon at an altitude of 269 nautical miles (500 kilometers) above the continental United States could have the effect of causing serious disruption to unshielded electronic circuits and electronic equipment in the United States and parts of Canada and Mexico. Riddle's assertion underlines the electronically destructive effect of such a detonation when

one considers the sheer quantity of civilian critical infrastructure dependent on computer systems for their functioning, such as power stations, hospitals, public transport networks, telephone systems, broadcasting, emergency service first responders, public health systems, and food supply chains.

Although the chief method by which an EMP could be created during the Cold War was by an atomic or nuclear explosion, contemporary electronic systems can be disrupted by high-power radio frequency (HPRF) weapons. HPRF weapons employ microwaves to disable and destroy unshielded electronic systems. Research is ongoing in the development of such weaponry. In 2010, the U.S. Air Force awarded a contract to the defense contractor Lockheed Martin to explore the development of a weapon that can cause effects similar to the EMP but without requiring a nuclear or atomic explosion as part of the air force's Non-Kinetic Counter Electronics Capability initiative.

The rationale of the Non-Kinetic Counter Electronics Capability program is to develop an HPRF weapon that can be carried by an aircraft and used to attack targets such as enemy radar systems. Any HPRF weapon developed as a result of the Non-Kinetic Counter Electronics Capability program would lack the effective range of an atomic- or nuclear-explosion-induced EMP as it would not have the equivalent energy of such a detonation. Nevertheless, the HPRF's relative lack of power could provide it with the advantage of precision, as it may be possible to direct the HPRF's emitted microwave energy in such a fashion as to disable the circuitry of a military radar but leave nearby civilian critical infrastructure unaffected.

Laser-Directed Energy Weapons

Electronic attack also encompasses the use of laser radiation weapons. Laser radiation produces intense heat when applied to particular materials, hence its use for cutting cloth, engraving, and welding. When employed as a directed energy weapon, these characteristics are employed to damage and destroy military equipment.

Laser radiation has been utilized for ballistic missile defense applications, notably as part of the U.S. Air Force's Airborne Laser Program. The Airborne Laser Program used a Boeing 747 aircraft equipped with a chemical oxygen iodine laser designed to

destroy tactical ballistic missiles during the boost phase directly after launch before the missile reaches an altitude of around 650,000 feet (200,000 meters). The airborne laser would destroy ballistic missiles by initially detecting these weapons and calculating the missiles' trajectory and speed using a low-powered laser fired from the aircraft. Laser light reflected from the missile would allow the airborne laser's integral fire control system to calculate the missile's position in the sky. These coordinates would then be used to provide an aiming point for the aircraft's main chemical oxygen iodine laser.

The main laser is then fired at the missile for between 3 and 5 seconds. It heats a particular point on the missile that progressively weakens its structure until the missile's airframe fails, causing a catastrophic loss of control. Although the prototype airborne laser was used to destroy simulated missile targets in a number of tests, the U.S. Department of Defense formally cancelled the program in December 2011.

Electronic Protection

Alongside electronic attack, the second major branch of electronic warfare is electronic protection. Electronic protection exploits the electromagnetic spectrum to safeguard aircraft, ships, and ground vehicles from detection and attack. Electronic protection uses both active and passive techniques.

Active Electronic Protection

Active electronic protection utilizes the electromagnetic spectrum to attack radar and radar-guided weapons. Active electronic protection systems emit either electronic or physical countermeasures to render radar and radar-guided weapons inoperable.

Active electronic protection systems have many different designs. Systems designed to render radar or radar-guided weapons inoperable are typically carried by combat aircraft and warships. One example of a radar-active electronic protection system is the AN/ALQ-99 electronic warfare equipment, which outfits U.S. Navy and U.S. Marine Corps combat aircraft. The AN/ALQ-99 monitors the electromagnetic spectrum for radar transmissions, analyzes these transmissions to determine their point of origin, and then transmits high-energy electronic signals designed to disrupt the radar's performance or to destroy it outright.

As noted above, active electronic protection systems can utilize physical countermeasures to render radar or radar-guided weapons inoperable. One such countermeasure is known colloquially as “chaff.” Chaff was developed by British and American scientists during the Second World War, and it remains in use today. Essentially, chaff is a generic term for any strips of aluminum, plastic, or glass fiber coated with a metallic surface. These strips are typically cut to exactly one half of the wavelength of the radar that they are intended to disrupt. For instance, when chaff was developed during the Second World War, aluminum strips were cut to a length of 27 centimeters. This was half the 54-cm wavelength used by the *Luftwaffe* (German air force) Würzburg fire control radar used for directing anti-aircraft guns firing at Royal Air Force and U.S. Army Air Forces bombers flying over Germany and occupied Europe.

The use of chaff is relatively straightforward. When the radar warning receiver on a ship or an aircraft detects that it has been illuminated by a radar, chaff is dispersed into the surrounding air. The chaff then blooms into a large cloud. Transmitted radar waves hit this cloud and are reflected back to the radar. Each piece of chaff creates its own radar reflection, with the effect that the radar operator's screen is soon filled with thousands of reflections. The aircraft or ship dispersing this chaff is then camouflaged within this image.

Passive Electronic Protection

While active electronic protection systems provide a mechanism by which a radar or radar-guided weapons can be rendered inoperable through the use of transmitted energy or the dispersal of physical countermeasures, passive electronic protection is used to alert an aircraft, a ship, or a vehicle that it has been targeted by a radar, laser, or missile.

This detecting is performed by electronic systems known as RWRs (radar-warning receivers), LWRs (laser-warning receivers), and MAWSs (missile approach warning systems). RWRs tend to be used by ships and aircraft to monitor the electromagnetic spectrum to detect radar transmissions. Once a transmission is detected, an RWR can alert a pilot or a ship's crew that they are being illuminated by a radar, the type of radar performing the illumination, and the radar's possible position. The RWR performs this task by comparing the radar

transmissions it detects with an internal library of known radar types and their transmission characteristics, while the use of direction-finding techniques determine the radar's position.

An LWR works in a fashion similar to an RWR, although LWRs often outfit ground vehicles as well as ships and aircraft. An LWR detects laser light and then alerts the personnel onboard a vehicle, an aircraft, or a ship that they are being targeted by a laser detection system or by a laser-guided weapon. Finally, missile approach warning systems tend to be used by aircraft, and utilize electromagnetic sensors to detect the heat plume of a missile launch, or a missile in flight. Alternatively, a missile approach warning system can also use radar to detect the missile launch or use a combination of these two systems. Once detected, the location and flight profile of the missile can be presented to the crew on a cockpit display.

One crucial difference between active and passive electronic protection is that military equipment in the former category primarily provides a warning that an aircraft, a ship, or a vehicle has been targeted by a radar along with countermeasures that can be employed against such threats. Passive electronic protection systems, on the other hand, do not typically include countermeasures.

Electronic Warfare Support

The final branch of electronic warfare is the application of electronic warfare support. Electronic warfare support primarily focuses on the gathering of electronic intelligence (ELINT) and communications intelligence (COMINT). The collection of ELINT and COMINT is achieved by monitoring the section of the electromagnetic spectrum used by radar and communications systems.

Electronic Intelligence

The collection of ELINT uses Electronic Support Measures (ESMs) to monitor the electromagnetic spectrum for radar activity and then to classify and locate any radar systems detected.

Military and civilian radar systems operate in a series of bands positioned between 1 and 40 gigahertz (GHz) in the electromagnetic spectrum. Similar to an RWR, an ESM will monitor this frequency range to detect radar systems and then classify the radar type and locate its position. While RWRs

arguably have a tactical mission, in that they are intended to provide an individual ship or an aircraft with protection, ESMs can be used to support higher levels of war.

Typically, ESMs are used to draft the “electronic order of battle” of an opponent: primarily the radar systems used by an adversary and where these radars are located. Such information will then allow military planners to devise air routes beyond the range of these radars to and from particular targets. Determining the physical location of a radar via the gathering of the electronic order of battle also allows military planners to nominate hostile radar for destruction using either active electronic protection systems or conventional weapons. At sea, the collection of the electronic order of battle allows a ship to determine which vessels in its vicinity may be hostile, friendly, or neutral based on the radar emissions of those ships.

Communications Intelligence

Much as ELINT collection focuses on the detection, classification, and location of radar emissions, the collection of COMINT fulfills a similar purpose regarding hostile military communications systems.

While radar operates in the 1 to 40 GHz part of the electromagnetic spectrum, military high frequency, very high frequency, and ultra high frequency communications operate across a frequency range of 3 megahertz (MHz) to 1 GHz. COMINT systems can monitor this part of the spectrum for communications traffic to ascertain whether such communications are encrypted, the location of communications transmitting equipment, the regularity of transmissions, hostile radio frequencies, and the recipients of particular transmissions.

When such information is obtained, it is then possible to draft a communications order of battle. This allows military planners to target an enemy’s communications network for attack with conventional weapons or via electronic attack to disrupt the network. The collection of COMINT is also an important part of the execution of psychological warfare as, once the communications order of battle is drafted, military planners are able to determine which parts of a hostile communications network can be targeted by misleading or false traffic and propaganda.

Thomas Withington

See also Bombs, Nuclear; Cyberwar; Internet; Radar; Warfare, Unconventional

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WARFARE, SUBMARINE

Contemporary submarine warfare involves the varied missions of intelligence, surveillance, and reconnaissance (ISR); peacetime engagement; special operations; battle space preparation; precision strike; sea denial; sea control; support of land battle; and strategic deterrence. Contemporary submarine warfare involves the application of multimission submarines with strengths in stealth, endurance, and firepower. There has been a notable shift in submarine warfare from its origins of open-ocean anti-surface warfare in World Wars I and II to strategic deterrence during the Cold War, and more recently to support land forces through the use of cruise missiles and deployment of Special Operations Forces (SOF). As mission requirements change in the future, undoubtedly submarine warfare will continue to transform as well. This entry details the types of submarines in use today, outlines a brief history of submarine warfare, describes the usage of submarines in contemporary conflicts, and discusses the direction of future development of submarine warfare both tactically and strategically.

Types of Submarines

There are three main types of submarines: attack submarines, fleet ballistic missile submarines, and guided missile submarines.

Attack Submarines

U.S. attack submarines are designated SSN, with SS standing for submarine or “submersible ship,” and N for nuclear. The primary functions of attack submarines are to destroy enemy submarines and surface ships, project power ashore through the use of cruise missiles and SOF personnel, conduct ISR, and engage in mine warfare. There are currently three classes of attack submarines in service with the U.S. Navy. The most common is the *Los Angeles* class (SSN 688). There are 43 *Los Angeles*-class submarines currently in service. The most advanced attack submarine is the *Seawolf* class (SSN 21). There are currently only three *Seawolf*-class submarines in service in the U.S. Navy. The third class of attack submarines is the *Virginia* class (SSN 774). Many U.S. Navy officials view the *Virginia* class as the next-generation attack submarine. The *Virginia* class is focused on successfully operating in the littorals, defined as the area on or near the seashore, and increasingly utilizing and supporting SOF personnel. The *Virginia*-class attack submarines are developed with modular construction, allowing for mission-specific tailoring as well as enhanced service life. Attack submarines utilize a broad array of weapons. They are armed with Tomahawk Land Attack Missiles (TLAMs), MK 48 heavyweight torpedoes, and MK 48 Advanced Capability heavyweight torpedoes. They also have the ability to deploy SOF personnel.

Fleet Ballistic Missile Submarines

The second type of submarine is the fleet ballistic missile submarine. Also known as Trident submarines or “boomers,” this type of submarine is designated SSBN. There is only one class of fleet ballistic missile submarine in service with the U.S. Navy—the *Ohio* class (SSBN 726). There are currently 14 *Ohio*-class submarines in service. Fleet ballistic missile submarines carry Trident II (D5) submarine-launched intercontinental ballistic missiles as well as MK 48 heavyweight torpedoes. Known as a submarine-launched ballistic missile, the Trident II (D5) missile is the backbone of the U.S. strategic deterrent arsenal. It has been deployed since 1990 and will continue to be deployed until at least 2020. The Trident II (D5) has a range of more than 4,000 nautical miles and carries a warhead composed of nuclear multiple independently targeted re-entry vehicles (MIRVs). These weapons are capable of

separating into several nuclear warheads, each with a distinct target. Fleet ballistic missile submarines are virtually invulnerable to retaliation due to their mobility, stealth, and endurance.

Guided Missile Submarine

The third type of submarine is the guided missile submarine. U.S. guided missile submarines are designated SSGN. Guided missile submarines are *Ohio*-class fleet ballistic missile submarines that have been converted from a strategic deterrence platform into a conventional land attack and SOF platform. There are currently four *Ohio*-class guided missile submarines in service. Instead of Trident II (D5) submarine-launched ballistic missiles, these *Ohio*-class guided missile submarines carry up to 154 Tomahawk or Tactical Tomahawk Land Attack Missiles in addition to their MK 48 heavyweight torpedoes. They can house up to 66 SOF personnel at a time and contain a swimmer lock-out shelter and Advanced SEAL Delivery System. More than 40 countries worldwide operate submarines, with the United States, Britain, France, Russia, and China operating strategic deterrent submarines as well.

History

The first American submarine was built in 1775 by David Bushnell. Named the *Turtle*, this vessel attempted three times during 1776 to break the British blockade of New York harbor by attaching a torpedo to the British ship HMS *Eagle*. All three attempts were unsuccessful. On July 3, 1801, Robert Fulton’s submarine the *Nautilus* conducted a 1-hour underwater dive at a depth of 25 feet. On February 17, 1864, the Confederate submarine *H. L. Hunley* became the first submarine to sink another vessel when it attacked the USS *Housatonic* in the waters off Charleston, South Carolina. The blast also sank the *H. L. Hunley*. On April 11, 1900, the U.S. Navy officially acquired a submarine force when it purchased the *Holland VI*, John P. Holland’s internal combustion gas-powered submarine. Shortly thereafter, on October 12, 1900, the U.S. Navy commissioned the USS *Holland* (SS 1), making it the first U.S. submarine.

On February 14, 1914, the USS *Skipjack* (SS 24) was commissioned. It was the first U.S. submarine to run on diesel engines. Two years later in 1916, it became the first U.S. submarine to cross the Atlantic Ocean under its own power. On June 19, 1916, the

U.S. Navy established the Submarine Force U.S. Atlantic Fleet, and on June 28, 1917, the U.S. Navy established the Submarine Force U.S. Pacific Fleet. During World War I, the German navy utilized unrestricted submarine warfare to prey on the weakness of surface vessels vis-à-vis submarines. During World War II, the U.S. Navy conducted a highly successful campaign against both Japanese navy and Japanese commercial shipping, severely crippling Japanese logistics. Submarines during World War II added the capability to conduct antisubmarine warfare as well. On January 27, 1942, the USS *Cudgeon* (SS 211) became the first U.S. submarine to sink another submarine when it sank the Japanese submarine IJN I-173.

Submarine warfare experienced a revolution during the 1950s. As a result, the primary focus of submarine warfare shifted to strategic deterrence. On September 30, 1954, the USS *Nautilus* (SSN 571) was commissioned. It was the first nuclear-powered submarine. Nuclear power fundamentally transformed both the capabilities and the missions of submarines. Nuclear submarines had far superior endurance because they rarely needed to surface to refuel. As a result, the endurance of nuclear submarines became limited only by the need of the crew for provisions. In December, 1959, the USS *George Washington* (SSBN 598) entered service. This event marked the transition of submarines to active use as a strategic deterrent.

The current submarine force first entered service in the 1970s. On November 13, 1976, the USS *Los Angeles* (SSN 688) was commissioned. It was followed by the USS *Ohio* (SSBN 726) on November 11, 1981. In the 1990s, submarine warfare began to shift again. Submarines took an active role in combat operations on land, primarily through precision strike. On January 19, 1991, the USS *Louisville* (SSN 724) became the first submarine to launch a TLAM against an enemy target in support of Operation Desert Storm. Submarine capabilities reached a new milestone in the late 1990s. On July 19, 1997, the USS *Seawolf* (SSN 21) was commissioned after a little more than a year of sea trials. It was the most advanced submarine ever built. However, the cost was also extremely high.

Contemporary Conflicts

The end of the Cold War fundamentally altered submarine warfare. The role of strategic deterrence

remained but in diminished form. More important, exclusively naval missions transformed to new joint roles, especially for attack submarines. As a result, submarines became directly involved in a number of contemporary regional conflicts. The two primary usages of submarines in contemporary conflicts have been ISR and precision strike. The stealth of the submarine allowed positioning prior to hostilities in order to conduct ISR. If hostilities erupted, then the submarine engaged in precision strike predominately in support of land battle. Importantly, precision strike was a new mission in submarine warfare.

Operation Desert Shield/Desert Storm in 1990–1991 was the first major conflict after the end of the Cold War. During this conflict, more than a dozen submarines were deployed to the area of operations in the Persian Gulf and surrounding waters primarily conducting surveillance. However, soon after the transition to combat operations, the submarines USS *Louisville* (SSN 724) and USS *Pittsburgh* (SSN 720) launched TLAMs against enemy targets within Iraq. Operation Desert Shield/Desert Storm heralded the introduction of smart weapons, capable of accuracy potentials previously unreached. Even so, the usage of submarines to conduct precision strikes was still nascent and unrefined.

By the end of the decade, the use of submarines to conduct precision strikes had been much refined. In 1998, submarines launched attacks against land targets in both Sudan and Afghanistan in response to the terrorist bombings of the U.S. embassies in Kenya and Tanzania. Later that same year, the USS *Columbus* (SSN 762) launched attacks against land targets in Iraq in support of Operation Desert Fox. By the spring of 1999, submarines had attacked key targets in Kosovo in all weather conditions in support of Operation Allied Force.

Following the terrorist attacks on America on September 11, 2001, the usage of submarines in contemporary conflicts focused heavily on ISR and precision strike. When Operation Enduring Freedom began on October 7, 2001, with attacks into Afghanistan, the USS *Providence* (SSN 719) was primarily a precision strike platform. Beginning on March 19, 2003, Operation Iraqi Freedom illustrated the significant transformation of submarine warfare in the contemporary period to precision strike. Whereas in Operation Desert Shield/Desert Storm, only a fraction of the submarines in the area of operations conducted precision strikes,

accounting for less than 5% of the total TLAMs fired, in Operation Iraqi Freedom, all 12 submarines in the area of operations launched TLAMs, accounting for roughly a third of all TLAMs fired. Accuracy rates also improved dramatically. The related missions of ISR and precision strike had become a staple usage of submarines in contemporary conflicts.

Future Development

Twenty-first-century submarine warfare will increasingly focus on battle space preparation, command of the seas, and land attack. Future development in submarines will aim at maintaining their versatility while also minimizing their cost and thereby maximizing their return on investment. Cost-effective platforms such as midget subs and unmanned undersea vehicles will play an increasingly important role. Other examples of improving the cost-effectiveness of submarines include utilizing increased standardization in construction that also maximizes flexibility. Future submarines will employ increasingly modular designs where a standard submarine hull can be customized with various modules designed for specific missions. Such an approach will enable greater flexibility and adaptability, as the modules will be capable of repeated change and multiple combinations based on mission requirements. In addition, repairing and upgrading modular construction will be less costly and more efficient.

Increasing stealth will also be a critical requirement in the future development of submarines. Submarines that are electric, and thereby quiet, will become more valuable. The conversion of the *Virginia* class to an all-electric platform is one example of this trend. As detection technology has become more advanced, less expensive, and therefore more accessible, the risk to nonstealthy platforms will increase dramatically. Future tactical utilizations will require more versatility and multimission employment. Examples include increased roles in mine warfare, increased deployment of both unmanned undersea vehicles and unmanned aerial vehicles, an increased role in supporting SOF through the use of the Advanced SEAL Delivery System, and a more active role in intelligence gathering through the use of advanced sensor technology.

The possibility of future developments in the strategic utilization of submarines points toward greater emphasis on efforts to ensure access to

strategic regions. This emphasis will increasingly focus on the littorals. In an asymmetric effort to counter sea control and power projection capabilities of large powers, regional and small powers will likely pursue sea-denial and access-denial strategies. As technology such as missiles and mines improves and proliferates, these weapons will become more lethal and less expensive. Regional and smaller powers will likely utilize inexpensive and asymmetric weapons to prevent access to strategic areas. Examples of anti-access platforms include diesel submarines, mines, antiship cruise missiles, and chemical and biological weapons of mass destruction. Slow and easily detectable platforms will be especially vulnerable. With their combination of stealth, endurance, and firepower, submarines will play a key role in combating such strategies and ensuring access to strategic regions and protection of less stealthy platforms. As with all forms of warfare, submarine warfare will continue to change as future threats develop and future technologies improve.

William A. Taylor

See also Antisubmarine Warfare; Navy, U.S.; Submarines; Torpedoes

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WARFARE, SURFACE

Within the umbrella of surface warfare, warships perform several specific missions: interdiction, convoy escort, amphibious warfare, naval gunfire support, and local area air defense. Interdiction involves intercepting enemy warships at sea, with the intent to engage and sink the opposing warship in a surface combat.

Surface combat involves opposing warships engaging one another in combat for the purpose of damaging or sinking the enemy. As implied by its title, surface warfare takes place on the surface of the water and is distinguished from aerial or sub-sea combat. Most often, surface warfare takes place between navies of opposing nations, though other ships can be involved such as merchant ships and other privately owned craft. This entry describes the types of warships and the weapon systems involved in surface warfare.

Types of Warships

Warships are grouped in categories for classification purposes, though the definition of each individual category may have changed throughout the 20th century. Aircraft carriers are among the largest of naval warships, carrying 10 to 70 aircraft or helicopters that operate from a flight deck. As the center of naval battle groups, carriers are capital ships, warships used to gauge the relative strength of navies, and a component of a nation's international naval image.

Cruisers are large, multipurpose warships designed to operate at sea against a multitude of threats. Cruisers often carry surface-to-air missiles,

antiship missiles, torpedoes, guns, and one or more helicopters. Some cruisers carry land-attack missiles capable of attacking targets several hundred miles from the sea. These warships are capable of operating independently or as part of a larger task force, often serving as escorts for aircraft carriers. The U.S. Navy operates more cruisers than any other navy, all of them belonging to the *Ticonderoga* class of missile cruisers.

Destroyers primarily escort larger warships, though they can be detached from task forces for independent operations. Historically, destroyers served as escorts for larger warships and were considered too lightly armed to operate without support. As destroyers have grown in armament, their capacity for independent operation has increased. These vessels are equipped with weapons similar to those installed on cruisers, though some destroyers do not have a helicopter. The growth in destroyer capabilities has blurred the line between cruisers and destroyers.

Frigates and corvettes are also escorts by design, equipped with similar, though fewer, weapons than destroyers. In larger navies, frigates are most often found in an escort role, while in smaller navies frigates may be the largest warship in service. Frigates and corvettes are not typically equipped with a helicopter, though surface-to-air missiles, antiship missiles, guns, and torpedoes are common.

Patrol craft are warships smaller than frigates and corvettes used for coastal operations and patrolling. Equipped with machine guns, small caliber guns, and antiship missiles, patrol craft typically lack the defensive armament of larger warships. Due to their smaller size, patrol craft travel at higher speeds than frigates and destroyers, enabling them to rapidly close with their targets. Patrol craft are vulnerable to damage and lack the armor or damage control facilities to continue operations after repeated hits from guns or missiles.

Surface Combat

The first stage in a classic surface engagement is detecting and identifying the enemy. Then the opposing ships maneuver, seeking an advantageous position. Maneuvering continues while each side uses its weapons to injure and destroy opposing vessels. At some point, the combat ends with one of three results: sinking, surrender, or disengaging. After



British frigate HMS *Cornwall* (F 99) transits through the Persian Gulf. *Nimitz*-class aircraft carrier USS *John C. Stennis* (CVN 74) is nearby. The *John C. Stennis* Carrier Strike Group was conducting operations in support of the Global War on Terrorism.

Source: U.S. Navy photo by Mass Communication Specialist 2nd Class Ron Reeves (released).

surface combat, warship crews typically perform postcombat operations such as search and rescue of survivors and repairing damage caused by combat.

The initial phase of surface combat involves identifying and detecting the enemy. Historically, warships relied on visual sighting or reports from other friendly warships to accomplish this task. Modern navies still use friendly units, such as aircraft and submarines, to locate enemy ships and relay the sighting report to nearby warships. Radar and passive sonar allow warships to locate enemy ships beyond visual range, enhancing the ability of warships to detect their opponents.

Warships use a variety of weapons systems to engage enemy warships, including missiles, guns, torpedoes, and mines. Guided missiles are the most common type of antiship weapon employed by modern navies. These weapons are housed in prepackaged launchers and locate their target using an internal guidance system, such as radar or an infra-red sensor. Guided missiles typically skim the surface of the water while approaching the target and

sometimes perform a “pop-up” maneuver just prior to striking the target. This maneuver is designed to throw off the aim of any defensive antimissile systems the target is using. Given the widespread deployment of sophisticated antimissile systems, antiship missiles are often fired in salvos consisting of multiple missiles to maximize the odds of a single missile penetrating the ship’s defenses. The relative lack of armor on modern warships allows a small number of guided missile hits to render a warship incapable of combat operations. Guided missiles commonly have blast or fragmentation warheads designed to damage electronics, weapons, and other key systems. Antiship missiles range in size from small helicopter-launched weapons, such as the Penguin, to heavier missiles, such as the Tomahawk, that have ranges of several hundred miles.

Guided missiles are also the primary weapon used by warships to engage hostile aircraft and missiles. Modern radar systems allow warships to detect and engage aircraft and missiles far outside of visual range. Larger warships such as cruisers and



Aviation Electrician's Mate 2nd Class John Rowand stands half-bore security watch on the port boat sponson of USS *Harry S. Truman* (CVN 75). Currently, aircraft from Carrier Air Wing (CVW) 3 embarked on *Harry S. Truman* are providing close air support and conducting intelligence, surveillance, and reconnaissance (ISR) missions in ongoing operations. The USS *Harry S. Truman* Carrier Strike Group and CVW 3 are currently on a regularly scheduled deployment in support of the Global War on Terrorism.

Source: U.S. Navy photo by Photographer's Mate Airman Gregory A. Pierot (released).

destroyers often carry two types of anti-air missiles, a longer range missile for engaging aircraft and a shorter range weapon for engaging incoming missiles. The range and sizes of these defensive missiles vary considerably based on the size of the warship and the assumed threat environment. For example, many American cruisers and destroyers carry large batteries of standard missiles that were originally designed to defeat massed anti-ship missile attacks by Soviet aircraft and submarines. Short-range missiles designed to intercept against anti-ship missiles are often paired with an anti-missile gun system, such as the Phalanx. These gun platforms fire several thousand rounds per minute and are automatically

aimed and fired once activated. This automation is necessary to counter the high speed at which anti-ship missiles travel. The defensive missile and gun systems of modern warships are most effective against attacking aircraft and missiles when paired with friendly fighters flying a combat air patrol.

Guns remain a common weapon for engaging targets of all types. While less frequent than has been the case historically, modern warships often carry one or more large caliber weapons, such as 3-inch or a 5-inch gun. Advances in gun technology have steadily increased the range and firepower of these weapons, providing navies with significant capabilities to engage targets far from the coast.

Recent Surface Warfare

Since the end of the Cold War, surface engagements between opposing warships have been rare. In recent conflicts, warships have been used as escorts and fire support platforms to assist ground operations. During the Persian Gulf War, warships from numerous Western navies supported ground operations against Iraqi forces using missiles and naval gunfire support. Helicopters operating from warships in the Persian Gulf sank several Iraqi patrol boats using air-to-surface missiles early in the conflict. Minefields near the Iraqi coast were cleared, an operation that resulted in damage to an American cruiser and a landing ship. Amphibious warships threatened landings on the Kuwaiti coast in an effort to divert Iraqi attention from the attack across the Saudi-Iraqi border.

Operation Deliberate Force in 1995 saw warships performing escort and search and rescue functions for aircraft operating against targets in Kosovo and Bosnia. Operations in Afghanistan have depended heavily on naval aviation, with the resulting need for escorts and support craft for aircraft carriers. To counter the threat of Somali pirates operating in the Indian Ocean, warships from many nations have cooperated to secure sea lines of communication used by merchant shipping. These operations utilize surface warships, helicopters, and aerial reconnaissance to protect maritime shipping. In the summer of 2011, American and Western navies assisted efforts by rebel forces to overthrow Colonel Muammar Qaddafi's government in Libya. These navies played an important role in the initial phase of the campaign by attacking Libyan air defense sites and command and control facilities with long-range land-attack missiles. Warships operated helicopters and fixed-wing aircraft to provide ground support for rebel troops.

Corbin Williamson

See also Aircraft Carriers; Cruisers, Naval; Destroyers; Frigates; Mines, Naval; Strategy, Naval; Tactics, Naval

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WARFARE, UNCONVENTIONAL

Unconventional warfare (UW) is the use of military force in ways that are typically unexpected and non-traditional. Often, governments consider it advantageous to execute military actions in a manner that is deniable or that can achieve strategic effects without requiring full-scale, conventional warfare. This is the role of UW. UW options have become more prevalent in a world that is increasingly more interconnected through media, electronic communications, economic systems, and reliable intercontinental air travel. Typically, the more limited collateral damage of UW options can assuage wider conflict.

Background

Unconventional warfare is a relatively modern institution, though its origins can be traced back centuries. Perhaps one of the earliest recorded uses of UW was in the ancient Greek tale of the Trojan horse, wherein the walls of Troy were overcome not through direct attack but rather through an unconventional method: concealing Greek soldiers in the belly of a wooden horse that the Trojans took to be a gift. While the exact details of this story continue to be debated by scholars, the concept of incorporating atypical methods of surprise into a battle plan, achieved through unconventional means, would be institutionalized centuries later as UW, as a means for overcoming an enemy through nontraditional means.

American UW operations in the post-World War II era have been, by many accounts, relatively successful. The true record of these operations may never be known, owing largely to issues of security classification. What is clear is the growth in the development of UW forces—an indicator of the success of past operations and the degree of faith that some policymakers have invested in the future of UW. As a result, the United States has become the most prolific and successful state employer of UW,

and the remaining part of this entry will focus on the American military program of UW.

Types of Operations

UW doctrine includes the application of covert/ clandestine operations, direct action, internal defense, and reconnaissance efforts to achieve what are often sensitive mission objectives.

Covert/clandestine missions are those that are designed to be kept from public knowledge and are conducted under a cloak of secrecy, with the objectives of these missions often remaining classified.

Direct-action missions are those situations requiring a force to be inserted by sea, air, or land to directly attack, destroy, degrade, or capture a high-value objective.

Internal defense missions are training efforts designed to strengthen the organic ability of an allied government (e.g. South Vietnam, Iraq) to defend itself and its people against insurgents and other internal threats.

Reconnaissance missions provide information about a locale or situation that would not be obtainable through passive means, typically without making their presence known to those being observed.

The organization responsible for the coordination and oversight of American military UW operations is U.S. Special Operations Command (SOCOM). SOCOM is headquartered at MacDill Air Force Base, Florida, alongside U.S. Central Command. Supporting and providing forces to SOCOM are four service component commands.

U.S. Army Special Operations Command (USASOC), Fort Bragg, North Carolina

Air Force Special Operations Command (AFSOC), Hurlburt Field, Florida

Navy Special Warfare Command (NSW), Naval Base Coronado, California

Marine Corps Forces Special Operations Command (MARSOC), Camp Lejeune, North Carolina

Ground Employment

For the United States, ground employment of UW is largely the domain of the U.S. Army. For its part, the

army has developed a robust capability for engaging in UW operations in nearly any corner of the globe that is covered by land. In particular, the army has developed a particular strength in the use of UW forces to train and advise internal defense forces, with the intent of endowing indigenous forces with the ability to defeat threats that, if left unaddressed, might lead to wider conflict.

Most notable among the army's UW forces are the Green Berets. The Green Berets are formally divided into Special Forces Groups that develop an expertise in a particular portion of the world, cultivating specialized language and cultural skills among the members. The Green Berets are trained in the spectrum of UW doctrine and tactics and are considered among the most effective practitioners of UW in the world; they are best known for their prowess in the field of internal defense. Though the war was not a victory for the United States, the employment of Green Berets in Vietnam is one of the best examples of UW employment prior to the recent wars in Iraq and Afghanistan.

Along with the Green Berets, the army has established an aviation unit to support the actions of UW operators. This unit, the 160th Special Operations Aviation Regiment (SOAR), is stationed at Fort Campbell, Kentucky, and provides the facility to conduct UW aviation operations at night. This unit has been involved in UW operations ranging from Somalia in the early 1990s to Afghanistan and Iraq in the post-9/11 era.

Aerial Employment

Within the American defense establishment, perhaps the most unrecognized UW operations have been those undertaken through the air. The primary purpose of airborne UW forces is to surgically engage targets on the ground, insert forces and supplies into contested areas, and provide airborne platforms for refueling or other special missions.

The U.S. Air Force's (USAF) UW forces are almost entirely apportioned to AFSOC. With units stationed at two bases in the United States, and one each in Europe and Asia, AFSOC is able to move forces to any point on the globe within a matter of hours, which is itself an inherent strength for many UW forces and operations. Despite its somewhat limited basing infrastructure, AFSOC trains for operations across a broad range of training locations.

Some of the more notable aircraft currently assigned to AFSOC are turboprop, rotary, and tilt-rotor airframes, in contrast to much of the rest of the USAF. Specifically, AFSOC's inventory includes AC-130 gunships, MC-130 transports and aerial refuelers, and CV-22 tiltrotor transports. In fact, AFSOC counts almost no traditional jet aircraft among its primary fleet.

The heart of AFSOC's UW capability resides in its airmen. While its pilots, navigators, and enlisted aircrew perform as part of nearly every operational mission, the airmen that most differentiate AFSOC from the rest of the USAF are its specially trained Pararescuemen and Combat Controllers, who provide personnel recovery (rescue of downed aircrews) and directive support to combat aircraft, respectively. In the years after 9/11, AFSOC has been developing further capabilities to participate in counterinsurgent and low-intensity conflicts.

Naval Employment

Like the USAF, the U.S. Navy is platform dependent for many of its global operations, though the U.S. Navy's signature UW force is the notable exception to this rule. The well regarded and popularly celebrated SEALs (Sea, Air, and Land) are best known not for their nautical feats but rather for their successes on land. The surprise raid that resulted in the killing of Osama bin Laden in 2011 became a signature moment in naval history and for the SEALs but was an event that took place many miles from the ocean. This reflects the cross-dimensional nature of the SEAL operations.

The SEALs are trained at the Naval Amphibious Base in Coronado, California, and the regimen of this training is considered among the most difficult the military offers. After completing training, the SEALs are assigned to one of several teams and remain ready to deploy and take action, worldwide, in support of American policy objectives. The SEALs are trained in a variety of missions, but they have developed a strong reputation for direct action. In addition to the SEALs, the U.S. Navy has developed a force of armed, small, fast boats and associated operators that support the SEALs.

For its part, the U.S. Marine Corps has developed its own organization for UW missions, though until relatively recently they were not typically considered a formal part of the UW community—despite

their excellent reputation. Known as Force Reconnaissance, this group represents the U.S. Marine Corps's capability for executing UW doctrine. In the post-9/11 era, the U.S. Marine Corps has begun to reorganize its UW forces and establish them more firmly as a full partner in the UW community, most noticeably with the establishment of MARSOC in 2006.

Recent Operations

In the years following the end of the Vietnam War, the American military and policymakers recognized the value of UW forces and set about to institutionalize their existence and application. As a result, when subsequent conflicts emerged, the use of UW forces figured prominently.

Desert One (Operation Eagle Claw)

The first major employment of UW forces in the post-Vietnam era took place in 1980 and ended in disaster for the American forces carrying out the operation. In what was intended to be a rescue mission of American hostages taken during the storming of the American embassy in Tehran, American UW forces were sent into Iran aboard low-flying aircraft. The mission went awry after mechanical failures and the collision of a helicopter with a C-130 transport during a rendezvous in the Iranian desert, killing several UW operators. The mission was aborted.

Grenada

During the 1983 invasion of Grenada, American UW forces were utilized to capture an airfield and secure critical objectives. American UW forces, while encountering difficulties, took part in the first successful major operation since Vietnam.

Desert Storm

While several independent UW operations took place as part of Operation Desert Storm, one in particular stands out: Task Force Normandy. Task Force Normandy was given the objective of destroying critical Iraqi radar assets immediately ahead of incoming coalition aircraft bound for the first targets in Iraq. They successfully destroyed their targets with the use of U.S. Army Apache attack helicopters, having been led to their target by AFSOC helicopters.

Post-9/11

The wars in Iraq and Afghanistan have provided ample opportunity for the American UW community to validate the post-Vietnam investment made on it; thus far, the results suggest the investment made was a wise one. In particular, the application of UW forces, in conjunction with American air forces and Afghan allies, to defeat Taliban and al Qaeda forces in the first year of the war in Afghanistan serves as a strong example of the utility and efficacy of UW doctrine and forces. Additionally, the success of these efforts highlighted the ability of American UW forces to quickly achieve a strategic victory through tactical proficiency, at a cost—in both lives and treasure—that was presumably far lower than would have resulted from the application of conventional military forces. Also of note was the 2011 killing of the al Qaeda leader Osama bin Laden by a combined team of Navy SEALs and the army's 160th Special Operations Aviation Regiment. Despite the unexpected crash of one of the helicopters dropping the SEALs at the bin Laden compound, the joint team successfully completed their mission and accomplished one of the primary aims of the American fight against al Qaeda. In so doing, the forces involved firmly established the primacy of UW doctrine and operations in the post-9/11 era.

Urban Warfare

A major subset of UW is the conduct of operations in urban terrain, a doctrine and subset of operations typically referred to as urban warfare. Although urban warfare, as a concept, spans the spectrum from small unit operations in urban landscapes to, as has been suggested by some, area bombing of cities by air forces, it is typically associated with small unit operations on the ground. In the post-9/11 era, urban warfare is likely to become an increasingly important and regular aspect of military operations, given the locations and nature of the current wars and likely future conflicts. As this has become evident to the U.S. military and, in particular, to the UW community, new tactics, training, and weapons have been developed to meet the challenge.

The Future

The success of American UW forces in achieving what can be fairly described as stunning victories

against enemies and objectives, despite strong odds against them, has led policymakers to demand an increase in size and use of these forces. While the expense and time needed to train UW operators often exceeds the costs and time requirements to train conventional military forces, the ability of UW forces to quickly achieve challenging objectives, while limiting collateral damage, has nonetheless made them an attractive option. The success and popularity of UW forces, and the growth the community is experiencing as a result, has not been universally applauded, however. As the war in Iraq has come to an end and the conflict in Afghanistan slowly winds down, some have called for refocusing American forces away from UW options and UW-centric conflicts, like counterinsurgencies, back to what are seen as more traditional threats. However this debate may be decided, it is clear that UW has become a critical aspect of future conflicts, and the outcome of these yet to be decided military engagements will, at least in part, be determined by the highly effective and professional members of the American UW community.

Trevor D. Albertson

See also Covert Actions, Military; Force Reconnaissance, Marine; SEALs, Navy; Special Forces, Air Force; Special Forces, Army; U.S. Special Operations Command; War in Afghanistan

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WARRIOR CULTURE

In the final days of his tenure as army chief of staff in June 2003, General Eric Shinseki sent a memo to the U.S. Army's senior leadership outlining the

need to reemphasize the “warrior ethos” throughout the army as it transformed itself from peace to war. His successor, General Peter J. Schoomaker, adopted Shinseki’s strategy for transforming army culture, making it a top priority. Both generals believed that the army’s focus on the technical skills of a soldier’s military specialty had led soldiers to identify with their job to the detriment of their identity as a combatant and their basic combat skills.

The unpredictable and violent nature of the asymmetrical wars the army faced in Iraq and Afghanistan increased the likelihood that all soldiers would suddenly be faced with combat situations. An early example of the army’s new focus was Schoomaker’s public assertion that all soldiers were riflemen first. Schoomaker’s emphasis on marksmanship and other combat skills is a key component of a larger plan for the army to adopt a common warrior ethos.

To promote adoption of the warrior ethos throughout the army, Schoomaker and other leaders worked to alter army institutions. The most obvious example was the adoption of a new Soldier’s Creed embodying the values Shinseki and Schoomaker identified as key to the warrior ethos: placing the mission first, not giving up, and never leaving fallen Americans behind. The Soldier’s Creed appears in toto or in part on posters and wallet cards, in training documents and videos, and in training exercises and competitions.

In addition to public statements and distribution of the Soldier’s Creed, the army added formal training oriented toward developing the warrior ethos in initial training for both officers and enlisted personnel. In addition to an expanded focus on the warrior ethos throughout initial training, the army updated its basic combat course to include 5 hours of training on the warrior ethos. By the end of initial entry training, soldiers must verbally demonstrate an



A photo of a dog tag with the warrior ethos stamped on it at Camp Liberty in Baghdad, Iraq, April 15, 2010.

Source: U.S. Army photo by Sergeant 1st Class Roger M. Dey (released).

understanding of the warrior ethos by reciting and explaining the tenets of the Soldier's Creed.

To enhance and continue training in the warrior ethos, the army introduced a Warrior Ethos Training Support Package to assist leaders in embedding the warrior ethos in the regular training regime. The army renamed its Primary Leadership Development Course the Warrior Leader Course when it redesigned the curriculum to focus on the warrior ethos and combat skills in 2005 to demonstrate its goal of preparing junior noncommissioned officers for deployments. The Drill Sergeant School, which teaches noncommissioned officers to train new recruits, also added an emphasis on both living and teaching the warrior ethos to help drill sergeants better prepare new soldiers.

The army also mandated additional unit-level training focusing on the warrior ethos and combat skills. Hand-to-hand combat skills now form a key component in unit-level training and in individual and unit competitions. The goal of both hand-to-hand combat training and increased competitions based on endurance, will, and combat skills is to build mental and physical toughness among serving soldiers before they deploy.

Rewards and recognition are part of the army's efforts to emphasize the warrior ethos in the ranks. Honor graduates from Initial Entry Training receive awards for demonstrating both the skills and the mind-set of the warrior ethos, showing their peers the importance of the values and actions described by the warrior ethos. The army's highest decorations are awarded for service exemplifying the warrior ethos, a connection that the army now consciously makes. In 2004, army leaders added the warrior ethos as part of the promotion process, selecting for promotion those officers and noncommissioned officers who exemplified the warrior ethos. Local promotion boards included components requiring personnel to recite the warrior ethos and the Soldiers Creed or even requiring soldiers to deliver short speeches discussing these concepts.

Each of the branches of the U.S. military placed greater focus on its own interpretations of the warrior ethos after 2001. The Marine Corps, long noted for indoctrinating recruits in the values and skills of the marines' warrior ethos during basic training, increased its emphasis on combat skills and the warrior ethos after 2001. The most visible component of the Marine Corps's new effort is the Marine Corps Martial Arts Program, in which all marines receive

formal martial arts training designed to make them more effective in combat and enhance social cohesion.

The U.S. Navy and the U.S. Air Force also embraced the need to adopt service-specific versions of the warrior ethos, promulgating a Sailor's Creed and an Airman's Creed to showcase their values. Of these two services, the air force has pushed harder to instill the warrior ethos in personnel through an extended Basic Military Training program that focuses on combat skills and by defining all airmen as warriors regardless of their flight status. Like the army, the air force relies on its history to illustrate the service's warrior ethos by arguing that more members of the Eighth Air Force were killed in combat over Europe than the total number of marines killed during World War II. Emulating the army's methods, the air force also began to emphasize military skills in unit training and competitions.

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See also Air Force, U.S.; Army, U.S.; Customs and Traditions; Marine Corps, U.S.; Morale; Navy, U.S.; Professionalism; Warrior Culture

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WEAPONS, ANTI-AIRCRAFT

For almost as long as aircraft have been in the air, there has been a need to shoot them down. Unlike ground forces, however, aircraft operate in the air and at high speeds. Because aircraft are capable of moving in all three dimensions, targeting them is extremely difficult. The first antiaircraft weapons

were guns fired into the air. As antiaircraft weapons developed, militaries developed smaller caliber guns with high rates of fire, and larger artillery guns designed to create airbursts to damage or destroy enemy planes with shrapnel. The development of guided missiles following the Second World War provided armies with the means to destroy jet-equipped aircraft, which could operate at higher altitudes and at much higher speeds.

Antiaircraft Guns During the World Wars

World War I saw the first major use of aircraft and the need for antiaircraft weaponry. The primary antiaircraft weapons at this time were repurposed lighter artillery guns aimed upward, with timed fuses to detonate near an enemy plane. However, the difficulty of guessing the target's trajectory and height, as well as the amount of time needed to compute those figures, rendered antiaircraft fire largely ineffective. To counter the mobility of aircraft and prepare for enemy air operations, armies used sound detection systems and searchlights, providing soldiers the time to man their antiaircraft positions and send their own fighters to attack the enemy.

World War II saw the use of more highly effective antiaircraft weaponry. Specifically, the development of radar and the radar-guided gun, coupled with the proximity fuse, led to a vast improvement in the lethality of antiaircraft weaponry. Shells no longer had to be timed to strike the target; they merely had to come close enough to set off the fuse. Naval antiaircraft guns armed with proximity fuses were used to great effect against Japanese kamikaze attacks.

The German anti-air defense system was extensive. The largest at the start of the Second World War, it proved remarkably effective against the Allied bombing campaigns. Possessing radar-guided guns but lacking the proximity fuse, the Germans relied on airbursts to destroy aircraft, increasing the size of the shards produced by the explosives to increase the lethality of their antiaircraft artillery. German antiaircraft guns were rendered less effective as the Allies developed countermeasures. The release of hundreds of small strips of metal swamped German radar with multiple potential targets and shifted focus from the bombers.

Antiaircraft weaponry played an important role during World War II air campaigns. Apart from weakening the enemy's air force, antiaircraft guns also provided the secondary benefit of distraction. Targeting an enemy position from the air was difficult enough at the time without having to dodge

enemy fighters or antiaircraft guns. Bombers were forced to climb ever higher to avoid enemy fire, resulting in greatly diminished accuracy. For Allied forces, antiaircraft guns were not to be taken lightly, causing casualties on a par with, or greater than, enemy fighters. Lacking any means to identify friends or foes in the air during this period, there were also a number of cases of fratricide, when antiaircraft guns accidentally opened fire on friendly units. The later development of identifying friend and foe systems would limit the number of such events in the future.

From Artillery to Missiles

The first primitive surface-to-air missile (SAM) was actually developed by the Germans during the Second World War, though few of the weapons were properly tested and none saw combat. The development of high-speed jet fighters and bombers rendered gun-based antiaircraft weaponry virtually ineffective.



Number 2 Gun Crew, Battery D, 208th CA AA, man their 3-inch AA gun at New Fighter Strip, Dobodura, New Guinea (May 17, 1943).

Source: Photo by Private First Class John A. Moore. Courtesy of the U.S. Army Center of Military History, Signal Corps Collection, National Archives.

Capable of acting at higher ceilings, this new breed of aircraft became even more difficult to target, and missiles were seen as the next generation of anti-aircraft weaponry. The first models were designed to target high-altitude bombers on a steady flight. Early missiles used radar to track an enemy aircraft's position and direct the missile to match. The American Ajax was the first guided SAM missile, deployed in 1954. It was replaced by the Hercules in 1958, which was used until development of the Patriot missile system, which is still in use in the present day. In addition to these larger static positions, the Hawk SAM system was designed as a mobile anti-air weapon.

The Soviet Union saw the importance of SAMs in the aftermath of the Second World War, realizing the limited effectiveness of previous anti-aircraft weaponry. Having acquired a number of German missiles, the Soviet Union built on this technology. The first Soviet missile, the SA-1, was a German missile with ground guidance. Its successor, the SA-2, was

deployed in 1957. It was the missile that shot down an American U-2 reconnaissance plane in the Soviet Union in 1960 and another over Cuba in 1962.

In addition to large, long-range missile, there was a need for infantry in the field to defend themselves from enemy aircraft. Deployed in 1967, the Redeye was the first Man-Portable Air Defense System (MANPADS). With a maximum range of approximately 5 kilometers, it gave soldiers a means for defending themselves. Using infrared homing, it was designed to track on enemy engine emissions to destroy enemy planes. Designed primarily to destroy enemy attack planes, it did not grant a one-shot, one-kill ratio, but it was sufficient to give enemy fighters pause. In 1981, it was replaced by the FIM-92 Stinger missile, which uses infrared and ultraviolet tracking. Redeyes and Stingers were given to the mujahideen in Afghanistan, destroying hundreds of Soviet helicopters, cargo planes, and even fighters.



Three batteries of (Soviet-made) Iraqi SA-6b Gainful, solid-fuel, low-altitude surface-to-air missiles, mounted on medium-track transporters.

Source: Photo by Staff Sergeant Cherie A. Thurlby, U.S. Air Force.

The first Soviet MANPADS was the SA-7, deployed in 1968, which suffered from issues with its infrared tracking system, often losing the target if other heat signatures were nearby. The SA-14 incorporated a more effective infrared scanner, serving until its replacement by the lighter and more effective IGLA-S.

Modern Antiaircraft Weaponry

Modern stealth aircraft—which are significantly more difficult to detect on radar—and the increasing use of long-range (and so-called stand-off) precision-guided aircraft weaponry present serious challenges to the effectiveness of contemporary antiaircraft systems. Modern Russian weaponry involves self-propelled antiaircraft guns, armed with missiles for longer range targets

and cannons for shorter range targets. Examples include the 2S6 Tunguska M1 and the PANSTIR-S. American antiaircraft weaponry favors missiles, with Bradley Infantry Fighting Vehicles and High Mobility Multipurpose Wheeled Vehicles (popularly known as Humvees) armed with Stinger missiles. Automatic cannons are still deployed on ships to defend primarily against enemy antiship missiles, but they are also capable of targeting enemy aircraft at closer ranges. However, given the shift to smaller reconnaissance and attack platforms in the form of unmanned aerial vehicles, guns may return to a prominent role in order to decrease the cost of antiaircraft weaponry.

MANPADS have emerged as the most dangerous threat to modern aircraft. Easily transportable and smuggled into combat operations, MANPADS are significantly cheaper than the targets they are



A U.S. Marine aims a man-portable air-defense system simulator at Marine Corps Air Station Yuma, Arizona, April 3, 2010. Naval Surface Warfare Center, Corona Division employees brought equipment to show marines and other service members attending Weapons and Tactics Instructor Course 2-10, hosted by Marine Aviation Weapons and Tactics Squadron.

Source: U.S. Marine Corps photo by Sergeant Benjamin R. Reynolds (released).

designed to destroy. They remain a threat to any conventional army operating against insurgents.

Radu Venter

See also Missiles, Conventional; Operations, Air; Radar

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WEAPONS, CHEMICAL

Chemical weapons are toxic substances that are usually released in a gaseous or vaporous format to produce lethal or incapacitating effects in humans or animals. Along with nuclear and biological weapons, chemical weapons are often described as weapons of mass destruction due to their potential for disproportionate destructiveness, the undue suffering they inflict, and the inability to use them to target combatants while not affecting noncombatants.

Types of Chemical Weapons

There are several varieties of chemical weapons, distinguished by the different physiological effects they produce. For example, choking agents (or lung-damaging agents) such as phosgene (North Atlantic Treaty Organization weapon designation: CG), diphosgene (DP), chlorine gas (CL), or chloropicrin (PS) produce severe irritation of the respiratory tract and/or pulmonary edema, or fluid buildup in the lungs. Nerve agents such as tabun (GA), sarin (GB), soman (GD), cyclosarin (GF), or methylphosphonothioic acid (VX) inhibit the neurotransmitter acetylcholinesterase, which can arrest the victim's respiratory functions within minutes. Vesicants, or blister agents, such as sulfur mustard (HD or Yperite), nitrogen mustard (HN1–3), lewisite (L), or phosgene burn their victims' skin, eyes, lungs, and other types of exposed flesh. While the injuries produced by vesicants are seldom immediately lethal, their treatment is lengthy and painful, and infection is a concern. Incapacitating agents such as tear gas (CS) cause severe lachrymation,

or watery eyes, and anticholinergics or nerve agents such as BZ cause temporary disorientation. Although the 1993 Chemical Weapons Convention (CWC) bans the use of incapacitating agents in warfare, they are not always considered chemical weapons due to their nonlethal effects. Defoliants such as Agent Orange have been used in warfare to clear vegetation and destroy crops and, therefore, are sometimes considered chemical weapons. Although both the 1925 Geneva Protocol and the 1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques may be interpreted as banning the use of these agents in warfare, the CWC does not explicitly ban the use of these weapons if they are used primarily to destroy plants. White phosphorus, which is frequently incorporated into tracer bullets and can be used to provide smoke-screens, is also occasionally described as a chemical weapon because it releases a noxious gas and causes chemical burns. Like defoliants, however, white phosphorus does not fall under the purview of the CWC and is considered a legal incendiary weapon.

History of Chemical Weapons Use

Although premodern warfare arguably saw the use of primitive types of chemical warfare—in the form of noxious smoke used to disorient an enemy—the large-scale use of chemical weapons began in the First World War. The French initiated the use of chemical weapons in August 1914 by using tear gas grenades against the Germans, who responded by using canisters of chlorine and phosgene to spread deadly gas on the battlefield. The British and French responded with artillery shells filled with phosgene and mustard. Although the use of gas was common in the early years of the war and initial casualties were staggering, both sides soon developed effective protective measures—such as filter respirators—that reduced later casualties. Indeed, although 100,000 metric tons of gas were used by the Germans, French, and British by the end of the war, only 91,198 battlefield deaths were caused by gas. Nevertheless, the injuries caused by chemical weapons—in the form of burns, eye injuries, and respiratory damage—were painful and crippling and required lengthy and costly treatment. It was the lingering health effects of chemical weapons on soldiers returning from the war that began to turn international public opinion against chemical warfare.

Given the widespread use of chemical weapons during World War I, it is understandable that

several states—including the United States, the United Kingdom, France, Italy, the Soviet Union, and Canada—assumed that chemical weapons would be used in later conflicts and invested heavily in the development and stockpiling of chemical agents in the interwar period. Lingering international dread of chemical warfare resulted in the creation of the 1925 Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, more commonly known as the Geneva Protocol. Parties to this treaty forswore the use in war of asphyxiating, poisonous, or other types of gases, as well as bacteriological weapons. However, the Geneva Protocol did not ban research or development of chemical weapons, and several signatories to the protocol submitted reservations allowing themselves to respond in kind if they were attacked with chemical weapons. These reservations reduced the Geneva Protocol to a “no first use” agreement, and international chemical weapons stockpiling efforts continued unabated.

The interwar period saw the limited use of chemical agents against groups that could not retaliate in kind. During its 1935 invasion of Abyssinia, Italy used mustard gas against Ethiopian forces and received much criticism from the League of Nations for blatantly breaking its commitment to the Geneva Protocol. Between 1937 and 1945, the Imperial Japanese Army carried out more than a thousand chemical weapons attacks during its occupation of China, using choking agents, vesicants, and incapacitating agents.

Even though both Axis and Allied states had accumulated large stockpiles of chemical agents, neither side utilized chemical weapons against the other’s militaries during the Second World War. This has been attributed both to an increasing global distaste for chemical weapons, and a commitment by world leaders to honor their Geneva Protocol obligations. Adolf Hitler himself had been injured in a mustard gas attack in October 1918, suffering temporary eye injuries as a result. It is often argued that this firsthand experience contributed to Hitler’s personal aversion to chemical warfare and decision to not use chemical weapons, to which Allied states responded in kind. The nonuse of chemical weapons during the Second World War and most major conflicts since has led scholars to argue that since the First World War, a widespread agreement has emerged among states that the use of chemical weapons violates international morality. Though this “chemical weapons taboo” has been severely tested by later uses of chemical weapons, the opprobrium

with which the international community continues to greet each use of suspected use of chemical weapons suggests that this norm is alive and strong.

During the Cold War, American chemical weapons research efforts focused on improving its supplies of sarin and VX and the development of means of dissemination, including rockets and artillery. Over the same period, the Soviet Union created the world’s largest arsenal of chemical weapons—approximately 40,000 metric tons compared with America’s 30,000-ton arsenal—which included several types of choking, nerve, and blister agents and delivery systems such as missiles, bomblets, and artillery shells. In 1969, public sentiment against chemical weapons caused the administration of Richard M. Nixon to halt production of chemical weapons and begin negotiations over chemical weapons disarmament. The Soviet Union doubted American sincerity about its plans to eventually discontinue its chemical weapons program and, therefore, continued developing and producing chemical weapons until about 1993. Despite its commitment to chemical disarmament, during the 1970s and 1980s, the United States considered replacing its deteriorating unitary stockpile with somewhat safer binary chemical weapons, which consist of two chambers filled with two less-deadly precursor chemicals, separated by a glass barrier. However, in 1990, after the U.S. chemical industry adamantly refused to produce precursors for the binary program, the army was not able to meet a congressionally mandated deadline for the production of a set volume of binary weapons. The binary modernization project was dropped, and the United States fully committed itself to pursuing chemical disarmament.

During the 1980–1988 Iran-Iraq War, Saddam Hussein regularly authorized the use of chemical weapons against Iranian troops, beginning with the use of tear gas in 1982 and progressing to mustard gas and tabun in 1983 and 1984, respectively. Initially, the Iraqis lacked expertise with chemical weapons, producing few casualties, but they soon learned how to use these weapons to produce greater casualties. However, because Iranian forces quickly adopted better protective equipment, Iraq failed to attain a decisive combat advantage from its use of chemical weapons. In March 1988, Saddam Hussein launched a 3-day mustard and nerve gas offensive against the Iranian-occupied city of Halabja, killing 5,000 to 8,000 people, most of whom were Kurdish civilians. Though these actions failed to elicit a forceful response from the international community,

they served to heighten awareness among developed countries that their civilian chemical exports could be used to make weapons, for Iraq had reportedly obtained precursor chemicals and equipment through legitimate trade with American and Western European businesses. In response to this dual-use problem, chemical-exporting countries created an informal international organization called the Australia Group in 1984 to promote the harmonization of chemical export regulations and, thereby, prevent future chemical proliferators from obtaining chemical precursors through legal trade.

In August 1990, Iraqi forces invaded Kuwait. Given Iraq's recent history with chemical weapons, the coalition that formed to attack Iraq in January 1991 in response to the Kuwait invasion expected that Iraqi forces would respond with chemical weapons. However, Saddam Hussein never used chemical weapons against coalition forces even though Iraq maintained an extensive chemical weapons program. The terms of Iraq's surrender, as overseen by the UN Special Commission (UNSCOM), required it to dismantle its chemical weapons programs and destroy its chemical weapons stockpiles. Iraq was frequently criticized for refusing to cooperate with UNSCOM inspectors. Nevertheless, when UNSCOM left Iraq in 1998, it was reasonably confident that the vast majority of Iraq's chemical weapons program had been dismantled. During Operation Desert Fox in 1998, the United States bombed several remaining suspected sites. However, given Iraq's recalcitrance in dealing with UNSCOM, some governments—in particular the United States—were uncertain whether Iraq's chemical weapons programs were completely defunct. Despite a lack of evidence, suspicions that Iraq maintained a secret chemical weapons program figured prominently in the George W. Bush administration's justification for attacking Iraq in March 2003. Invading forces searched intensively for Saddam's alleged chemical weapons labs and scientists, but only a small number of corroded chemical weapons munitions in various stages of assembly were reportedly ever found and not the vast, secret programs given as one justification for a preemptive war.

On March 20, 1995, a large and well-funded Japanese doomsday cult called Aum Shinrikyo led by guru Shoko Asahara released sarin gas into five trains in the Tokyo subway system, killing 12 and injuring as many as 5,000. Police investigations into Aum's activities prior to the attack, including previous attempts to disseminate anthrax, sarin, and

botulinum toxin, revealed that even highly motivated and well-funded terrorist groups face several obstacles to making and using chemical weapons. For example, producing chemical weapons on a large scale required the use of extensive facilities and specialized equipment and materials, which, despite the protection offered Aum by its status as "religious legal entity," had not gone undetected by law enforcement or suppliers. Furthermore, even though it was adept at recruiting well-educated scientists and engineers, Aum faced continued difficulties in both purifying the chemical weapons it produced and in devising means to disperse the weapons to allow for maximum casualties. Finally, a previous attempt to release botulinum toxin in Kasumagaseki Station failed when the cult member tasked with carrying out the attack purposely loaded the briefcase sprayers with water instead of the toxin, evidently due to a belated aversion to mass murder. Thus, though the Aum Shinrikyo attack raised international fears of weapons of mass destruction terrorism, and resulted in the creation of numerous domestic programs to better prevent and respond to weapons of mass destruction terrorist attacks and greater international antiterrorist cooperation, Aum's history arguably highlights the technical and psychological barriers still faced by nonstate actors in using chemical weapons.

On October 23, 2002, Chechen terrorists seized a packed Moscow theater, taking all 850 to 900 occupants hostage. After a 2-day standoff, Russian Spetsnaz forces released an as-yet unknown chemical agent into the ventilation system to neutralize the rebels, prior to recapturing the theater. Thirty-nine rebels and at least 127 hostages were killed by the gas. After much mystery over precisely what type of chemical had been employed during the crisis, the Russian health minister identified the agent as a powerful incapacitating fentanyl derivative called Kolokol-1.

The Chemical Weapons Convention

Negotiations over a multilateral chemical disarmament treaty began in 1972. The CWC was finally opened for signature in 1993 and entered into force in 1997. The CWC is remarkable both for its extensive verification protocol, allowing international inspectors representing the Organisation for the Prohibition of Chemical Weapons to conduct regular inspections of known or suspected chemical weapons facilities in signatory states with very little notice, and for its massive schedule of banned

chemical weapons and controlled chemical precursors. Under the terms of the CWC, member states were expected to make yearly declarations of their current and former chemical weapons activities and stockpiles and destroy these stockpiles by April 2012, but this deadline was not met by all signatories. As of mid-2013, 188 states, representing 98% of the world's population and chemical industry, were parties to the CWC and were working to dismantle their chemical weapons programs and stockpiles. Only five states—Angola, the Democratic People's Republic of Korea (North Korea), Egypt, Somalia, and Syria—have neither signed nor ratified the CWC, and two others—Israel and Myanmar—have signed but not yet ratified the treaty. The Organisation for the Prohibition of Chemical Weapons estimates that as of November 30, 2011, 50,619 metric tons or 71.1% of the world's declared stockpile of 71,195 metric tons of chemical weapons have been verifiably destroyed since the CWC's entry into force.

Although most CWC member states have succeeded in destroying their chemical weapons stockpiles and programs, some states, in particular Libya, the United States, and Russia, are taking longer to fully eliminate their chemical weapons, and this task will not be completed until about 2027. In the case of the United States and Russia, this failure to meet the CWC-mandated deadline is due less to a weak commitment to disarmament and more to the vastness of both states' chemical stockpiles and, in the case of Russia, irregular and insufficient funding for the destruction project. In the case of Libya, delays in disarmament stem largely from a malfunction in its neutralization unit, which forced the suspension of its destruction process in February 2011. Protests against the Qaddafi government, and later its overthrow, delayed the repair of the malfunctioning unit. Anti-Qaddafi forces revealed toward the end of the Libyan civil war that Qaddafi may have maintained secret chemical stockpiles, which called into question Qaddafi's commitment to chemical disarmament. However, the government that took over after Qaddafi's overthrow indicated its willingness to cooperate with the Organisation for the Prohibition of Chemical Weapons to complete the destruction process in a timely fashion.

A few states are suspected of maintaining illicit chemical weapon programs and stockpiles. North Korea, not a party to the CWC, is suspected of possessing chemical weapons research and production facilities capable of producing 5,000 metric tons of

mustard gas and nerve agents annually. The United States has indicated that it suspects that China, a party to the CWC, has maintained an advanced chemical weapons program, capable of producing a variety of agents. Egypt, another nonsignatory, is likewise suspected of maintaining a program capable of producing phosgene, mustard gas, sarin, and VX, though there is little conclusive evidence of this. It is possible that Syria, another nonsignatory, possesses a small program focusing on sarin, mustard gas, and VX. It is also possible that Ethiopia (a CWC member state), Israel, Myanmar, and Taiwan have undeclared rudimentary chemical weapons programs. Nonetheless, the few basic programs known or suspected to exist are a far cry from the dozens of known or suspected chemical weapons programs that existed in the 1980s and 1990s and are an indication of the diminishing relevance of chemical weapons, which can be attributed to several factors including technical and psychological obstacles faced by both states and nonstate actors, the continued effectiveness of protective equipment, the efficacy of current chemical disarmament treaties, and the increasing significance of the chemical weapons taboo.

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See also Agent Orange; Gulf War Syndrome; Iraq War (2003); Laws of War; Persian Gulf War; Warfare, Biological; World War I

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WEAPONS, NONLETHAL

Nonlethal weapons are devices intended to incapacitate personnel while minimizing physical harm to the group or individual with relatively reversible effects. These weapons have been developed independently and in concert with lethal weapons. Some of the devices have unique capabilities that require specific training, while others are simple in design and employment. There are a range of effects that are gained by the employment of nonlethal weapons, ranging from irritating to incapacitating. Additionally, the development of nonlethal weapons has extended to disabling equipment without employing lethal means. While there has been debate over defining nonlethal weapons, there has also been debate over the term *nonlethal* because nonlethal weapons can have lethal effects. The military has defined nonlethal weapons in Joint Publication 1-02 as follows:

Weapons that are explicitly designed and primarily employed so as to incapacitate personnel or material, while minimizing fatalities, permanent injury to personnel, and undesired damage to property and the environment. a. Unlike conventional lethal weapons that destroy their targets through blast, penetration, and fragmentation, non-lethal weapons employ means other than gross physical destruction to prevent the target from functioning. b. Non-lethal weapons are intended to have one, or both, of the following characteristics: (1) They have relatively reversible effects on personnel or materiel. (2) They affect objects differently within their area of influence.

The development of nonlethal weapons has illuminated the need for policy in this area. As commanders identify the need to employ less lethal weapons, a strategy and ultimately a national policy regarding the use of the weapons are needed. Prior to the end of the Cold War, the enemy was easily identifiable, and engagements with the enemy were more clearly defined. Subsequent to the Cold War, the enemies the United States faced were not always uniformed, and engagements with the enemy were defined not by victory but by measures of success or stability. The employment of lethal weapons does not always result in stability—thus the need for a less lethal option.

Background

Historically, nonlethal weapons have been developed and employed by military forces, but not on an

equitable scale of the post-Cold War era. The dawn of nonlethal weapons came in the 1960s. During this time, an increase in demonstrations and riots was accompanied by pressure for national policies to restrict the use of lethal force. The 1967 report of the President's Crime Commission on Law Enforcement and the Administration of Justice recommended that research and scientific study be utilized in solving the problems of law enforcement. This gave rise to a commercial industry, albeit small in the beginning, devoted to the research, development, and production of nonlethal weapons. The first reaction was to turn to the military and their capabilities. Irritant chemical weapons, developed by the military, were the most mature and developed technology and, therefore, the most widely adopted. Following this, a technological explosion occurred in the late 1960s and 1970s, which produced an array of weapons that ranged from a variety of irritant gases to kinetic weapons that produced blunt force trauma. Some of the weapons studied produced unacceptable levels of injury, while others were easily defeated. There was a need for balance and the ability to produce scalable effects.

The military gave little attention to nonlethal weapons prior to the end of the Cold War. During the Somalia intervention, the Task Force Commander of United Shield, Lieutenant General Anthony Zinni, made the decision to use nonlethal weapons to cover the extraction of UN peacekeepers. Because nonlethal weapons had not been a serious consideration in the past, the marines had to use existing technology and train on the use of force and scalable effects, equipment to which they had not previously been exposed. Meanwhile, policymakers were grappling with political and legal ramifications of the use of these weapons. This was not their first use, but it was their first large-scale employment. Nonlethal weapons were more frequently utilized during subsequent operations in Haiti, Bosnia, and Kosovo.

Categories and Types

Within nonlethal weapons, there are two broad categories: (1) point weapons, designed to target an individual person or single piece of equipment that is being targeted, and (2) area weapons, designed to target a group of individuals or cluster of equipment. Determinations of the target need to be made when there is a need for the employment of a nonlethal weapon. In a crowd, an individual who is the instigator or possesses a weapon may be the point target. Another scenario may entail

that the entire crowd needs to be dispersed to afford stability to the situation.

Within the categories are two overarching types, kinetic and nonkinetic. Kinetic provides contact with a physical object and typically gives blunt force trauma. Examples of this would be a projectile fired from a weapon (point) or a grenade that disperses rubber balls (area). Nonkinetic are those weapons that offer no contact, yet still produce pain or discomfort. An example of this would be a noise-producing device. While these categories and types define many nonlethal weapons, there are those that policymakers have to categorize based on the employment and desired effects. These can include gases, sprays (pepper), and potentially directed energy weapons.

Employment and Effects

The employment of nonlethal weapons enables a commander to obtain a desired outcome without the effects of lethal weapons. The challenge in employing nonlethal options is to balance the desire for a certain outcome with the use of the least amount of force necessary. To ensure success, a commander cannot completely rely on nonlethal weapons but must have lethal options as a standby in case the situation merits their use. The other side of balance is the overuse of nonlethal weapons. A person is less apprehensive to employ a weapon when he or she knows that it will not kill or maim an individual. The military strategist Carl Von Clausewitz stated, "The political objective will determine the military objective to be reached and the amount of effort it requires." The employment of nonlethal weapons may not have the desired effort or effects that the military objective warrants.

While many nonlethal weapons have been generated to produce a specific effect, the future of nonlethal weapons is to produce scalable effects. Most nonlethal weapons have been researched and developed to produce a singular effect on a point or area target, and this target is not defined within a military objective. In other words, when commanders are planning for missions and want to incorporate nonlethal weapons, there has not been significant production of these systems specifically for use on military objectives. This is where scalable effects enter. A military commander who has an objective to seize a building may not want the collateral damage associated with conventional weapons. This is where the nonlethal weapons with scalable effects designed for military operations have a role.

Nonlethal Weapons Systems

Nonlethal Bursting Hand Grenades. These are designed for crowd dispersal. After a 3-second delay, a one-million candle power flash and 150-decibel bang will accompany the release of the 100 rubber pellets in a 360° direction.

The 40-Millimeter Sponge Grenade and Crowd-Dispersal Cartridge. It is a point target munition with a range of 10 to 50 meters. It has a single projectile made of hard plastic and foam rubber. The crowd-dispersal cartridge consists of 48 small rubber balls and is an area target munition with a range of 10 to 30 meters. Both rounds are fired from the M203 grenade launcher.

The Active Denial System. It uses millimeter-wave energy to stop, deter, and turn back an advancing adversary at relatively long ranges (publicly released to 750 meters). The active denial system transmits a narrow beam of energy at the speed of light. The energy penetrates 1/64 inch into the skin, quickly heating the skin's surface. Within seconds, an individual feels an intense heating sensation.

Oleoresin Capsicum or Pepper Spray. It is designed for point or area targets depending on method of delivery. It can be delivered in a spray stream or aerosol. The effects vary based on an individual's tolerance; however, having no reaction is an extremely rare occurrence and oleoresin capsicum has proven to be a very effective nonlethal weapon.

Vehicle Arresting Barriers. These are designed to stop vehicles. There are several different devices used for this purpose. Caltraps are four-pronged metal pieces, approximately 2 inches tall, that puncture tires. There are also mechanical vehicle arresting barriers that have proven to stop 7,500-pound vehicles at 45 miles per hour. Additionally, there are the traditional spikes that puncture and deflate tires.

The Long-Range Acoustic Device. It is designed for deterrence. The noise generated by the long-range acoustic device produces discomfort that is intended to deter a person or persons from achieving their goals.

Other types of nonlethal weapons are arresting foams, chemical irritants, various rubber bullets, batons, water cannons, and electrical shock devices (e.g., Taser). Some of these are not used as extensively because of their potential for producing lethal effects and the liability associated with their use.

Nonlethal Options and Future Capabilities

The future of nonlethal weapons will be determined by need, as with any weapon system. During the Cold War, the United States built nuclear arsenals and divisions of heavy armored vehicles, tanks. These weapons were built to combat an adversary that was building similar munitions stores. The post-Cold War era has given rise to small-scale, low-intensity conflicts in which traditional weapon systems and tanks are not as effective and are vulnerable to low-tech, improvised devices and explosives. The large-scale fight against a uniformed force has given way



U.S. Navy Master-at-Arms 1st Class Rudolph Antiporda trains Master-at-Arms 2nd Class Adam Harris and Information Systems Technician 3rd Class Suzanna Wong how to use a component of the Long Range Acoustic Device (LRAD) perimeter protection system aboard the aircraft carrier USS *Ronald Reagan* (CVN 76) while the ship is under way in the Pacific Ocean, March 7, 2011. LRAD is designed to deter unauthorized small vessels from coming within the safety perimeter surrounding the ship.

Source: U.S. Navy photo by Mass Communication Specialist 2nd Class Jim Verton (released).

to decentralized, nonuniformed and often nonstate actors. Such adversaries pose a different problem. The soldier on the ground is forced to decide whether to employ his or her individual weapon system because the adversary is not in a uniform. As the United States has provided humanitarian aid and disaster relief and intervened in failing states that sponsor international terrorism, the nonlethal weapon option has been valuable. It will continue to be a viable resource and alternative for future conflicts as well as in humanitarian and disaster relief missions.

As nonlethal weapons are developed and used increasingly in the military, there will be options for soldiers, sailors, airmen, and marines to employ a weapon system that allows the de-escalation of an event without the collateral damage. Currently, members of the military are trained on and issued individual weapon systems that provide for deadly force. Issuing nonlethal weapons is situation and mission dependent, and not all members of the military are trained on the use of nonlethal weapons. Issuing nonlethal weapons and training members of the military in their use will drastically change the rules of engagement. Nonlethal weapons will give members an option for self-defense that will not have deadly effects. It will also give them the opportunity to shoot in a situation where they would otherwise not shoot. Possessing this option gives the military a more robust capability and the ability to work closer with populations.

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See also Civil Defense; Civil Disorder; Clausewitz, Carl von; Somalia Intervention; Warfare, Biological; Weapons, Chemical

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WEAPONS, NUCLEAR

The discovery of radioactivity by the French physicist Henri Becquerel in 1896 led within 49 years to the detonation of the first atomic device on July 16, 1945, at Alamogordo, New Mexico. Within 5 years, a nuclear arms race between the United States and the Soviet Union had begun as both sides prepared for a long Cold War. This entry traces the intersection of global nuclear weapons development with political policies and charts the U.S. stockpile from early experimentation to a height of 32,000 warheads in 1966 to the 2012 level of approximately 5,000 warheads both deployed and in storage. In 2012, the U.S. nuclear force level consisted of approximately 4,340 strategic and 760 tactical warheads derived from 16 different warhead types, with deployed warheads arrayed on four types of strategic and two tactical weapons platforms. The U.S. military views tactical weapons as those deployed in a theater as part of operations, and strategic weapons as those deployed independently of any theater campaign. These definitions can have overlapping areas and differ in other nuclear nations. Strategic weapons platforms include intercontinental ballistic missiles (ICBM) based in silos, air-launched cruise missiles (ALCM), and air-dropped gravity bombs deployed by the air force, and submarine-launched ballistic missiles (SLBM) deployed by the navy. Tactical nuclear weapons are currently deployed by the air force as air-dropped gravity bombs and by the navy as sea-launched cruise missiles, though the latter are currently being retired.

Early Atomic History

The discovery of radioactivity soon coincided with Albert Einstein's insights into the nature of mass and energy. Physicists hypothesized that the atom had the potential to release enormous amounts of energy if its atomic structure could be altered. Neutron particles radiated into neighboring atoms could "fission" or "split" an atom. If this fission resulted in the release of more neutrons, a sustained chain reaction could turn more and more mass into energy. Certain elements such as uranium and plutonium had the properties necessary to be manipulated—enriched—into providing this chain reaction resulting in a bomb of fantastic power.

By the 1930s, physicists in many countries had made great strides in understanding nuclear forces. During the same period, the Western powers deemed Adolf Hitler's Germany a dangerous security threat, and the international scientific community understood that research into the most advanced nuclear physics took place inside Nazi Germany. By 1939, Albert Einstein sent a letter to President Franklin D. Roosevelt warning of the possibility of a German atomic bomb. Roosevelt set in motion the program that became the U.S. Army's Manhattan Project even before the United States entered World War II. He gave the final go-ahead for the program on October 9, 1941, as Europe, except for Britain, lay dominated by Hitler while the Soviet Union appeared to be on the brink of defeat.

The first test of the atomic bomb in July 1945 came 2 months after the defeat of Germany. Japan, however, continued to fight. After the battles of Iwo Jima and Okinawa, the prospect of a very costly U.S. invasion of Japan loomed large for the new president, Harry Truman. He ordered the atomic bombing of Japan to bring about the soonest possible surrender. The attacks on Hiroshima on August 6 (13 kilotons) and Nagasaki on August 9 (17 kilotons) instantly killed 70,000 and 40,000, respectively, with tens of thousands more succumbing in the next few months to radiation poisoning. The two bombings, plus the Soviet declaration of war, brought Japan's surrender on August 14, 1945.

Early Cold War, 1946–1970

The successful use of an atomic bomb in war soon convinced many policymakers and world leaders that nuclear weapons were not simply larger weapons. The new weapons appeared to offer immense power and prestige and the possibility of disrupting all old notions about the balance of power. The U.S. monopoly on atomic weapons, and the very early signs of what would become the Cold War, spurred the Soviet Union under Joseph Stalin to step up efforts to construct its own bomb.

In 1946, however, the United States began negotiations with the USSR through the new UN organization to put all nuclear weapons and research under international control. This effort stemmed from the belief that uncontrolled development could destabilize international relations and result in a future catastrophic atomic war. The negotiations failed due to disagreement over details of disarmament and

ultimately mistrust between the United States and the Soviet Union as the Cold War took shape.

The Soviet Union ended the U.S. atomic monopoly with the explosion of its first atomic bomb in 1949, which convinced Truman to authorize the development of a thermonuclear (fusion) weapon—the hydrogen bomb—in order to maintain U.S. nuclear supremacy. The process of using the heat of a fission reaction to fuse atoms of the element hydrogen into helium releases many times more energy than a fission reaction alone. This achievement came in 1952, but the Soviet Union followed months, not years, later in 1953. Thermonuclear weapons produced megaton yields and potentially vastly more casualties.

The Korean War (1950–1953) and the prospect of war in Europe between North Atlantic Treaty Organization and Warsaw Pact forces, combined with warhead miniaturization, brought about the development of battlefield nuclear weapons during the 1950s. These “baby bombs” became generally associated with “tactical” nuclear weapons, while the larger warheads were reserved for “strategic” missions.

Tactical nuclear weapons development in the 1950s and 1960s brought a varied array of weapons platforms. For the army, these included battlefield weapons such as nuclear artillery shells, short-range unguided rockets and guided missiles, and pre-positioned warheads called atomic demolition munitions. The army also deployed nuclear surface-to-air missiles. Navy tactical weapons included air-dropped gravity bombs, artillery shells for battleship guns, nuclear surface-to-air missiles, nuclear torpedoes, and nuclear antisubmarine warfare weapons such as nuclear depth charges and antisubmarine rockets. The Marine Corps fielded nuclear artillery and gravity bombs. The air force inventory included gravity bombs, surface-launched cruise missiles, and surface-to-air missiles. Cruise missiles are unmanned subsonic jet-powered aircraft. The Soviet Union also fielded a large mix of tactical nuclear weapons.

Development of strategic nuclear weapons during the 1950s and 1960s included army intermediate-range ballistic missiles (IRBMs), air force long-range bombers that deployed gravity bombs, ALCMs, and short-range attack missiles (air launched). The short-range attack missiles differ from ALCMs by having supersonic speed and solid rocket fuel. The air force also deployed long-range ICBMs that increasingly replaced bombers into the 1960s. The navy developed sea-launched cruise missiles and then SLBMs.

By the late 1960s, both the United States and the Soviet Union relied on a “nuclear triad” of strategic forces consisting primarily of long-range bombers, ICBMs, and SLBMs.

With such devastating firepower being constructed, the prevailing strategy for both sides developed into deterrence by threat of mutually assured destruction. A first strike would invite a massive retaliatory response. Any political crisis between the two nuclear superpowers threatened worldwide devastation.

The first major nuclear crisis was the Cuban Missile Crisis of October 1962. President John F. Kennedy deemed unacceptable the Soviet deployment of nuclear IRBMs to its ally Cuba. The United States demanded withdrawal of the missiles and blockaded the island. The threat of an American invasion loomed, and many around the world feared the onset of a nuclear World War III. However, after 13 days, Kennedy and the Soviet leader Nikita Khrushchev agreed that Soviet missiles would be removed if American IRBMs were also removed from Turkey with a U.S. pledge not to invade Cuba.

The danger of the Cuban Missile Crisis convinced both powers to begin the process of seeking ways to prevent nuclear catastrophe. One such way involved banning the above-ground testing of nuclear weapons. Atmospheric testing had already been the focus of concern by scientists for its effects on the atmosphere. Negotiations resulted in Washington, Moscow, and London signing the Nuclear Test Ban treaty in 1963.

Great Britain achieved its first nuclear detonation in 1952, and France in 1960, primarily to have an independent deterrent so as not to have to rely on the United States. The People's Republic of China in 1964 became the fifth nuclear state, driven in part by a deterioration in relations with the USSR. In 1968, the Nuclear Non-Proliferation Treaty (NPT) came into effect with the goal of preventing the spread of nuclear weapons, though not civilian nuclear energy projects. The treaty acknowledged five “legitimate” nuclear states. All other signatories pledged to not develop nuclear weapons but could get assistance in developing civilian nuclear energy programs. The problem of states not signing and therefore not being bound by these limitations persists to the present.

Later Cold War, 1970–1985

India's (non-NPT signatory) position as a nonaligned power during the Cold War demanded independent

security from its powerful neighbors, and by 1974, India had become a nuclear state. Israel (non-NPT signatory) sought to guarantee its existence at a time when many states in the region questioned its right to exist at all. Though the exact date is uncertain, during the 1970s, Israel became a nuclear state.

By the early 1970s, the United States and the Soviet Union engaged in a period of *détente*, driven by U.S. fatigue in the Vietnam War and China's threat to the USSR. Emerging technologies such as the nuclear anti-ballistic missile (ABM), and multiple independently targetable re-entry vehicles (MIRV), threatened to make the nuclear arms race more dangerous. The USSR had achieved a rough equality with the United States in nuclear capabilities, and both sides saw a cap on further weapons in their interest, along with a desire to restrict ABM systems that could threaten the "delicate balance of terror" involved in mutual deterrence. The Strategic Arms Limitation Talks resulted in a 1972 accord with two parts. (1) The Interim Agreement limited the mix of strategic nuclear launch platforms but did not reduce warheads. (2) The ABM Treaty severely limited the deployment of ABMs. All certification of compliance centered on "national technical means" such as satellite reconnaissance and not on-site verification.

The era of *détente* remained strained and the Strategic Arms Limitation Talks II of the late 1970s did not result in further agreements, but floundered on the Soviet invasion of Afghanistan in 1979. This reinvigorated Cold War of the early 1980s saw the United States and USSR engage in a renewed buildup in nuclear arms. The other nuclear states deployed weapons in the tens or at most hundreds while the U.S. and the Soviet arsenals stood at nearly 20,000 each. The United States also began research into a multilayered partially space-based missile shield over the entire United States, dubbed "Star Wars" by the press. Emerging new "stealth" technology also sought to improve bomber penetration of Soviet air space.

The 1970s and 1980s saw concerns over the rise of international terrorism emanating from the Middle East turn to concerns about the prospect of nuclear terrorism. The development of smaller sized warheads and worries over lost, stolen, or loose nukes in the hands of terrorists brought about counterterrorism plans to find and prevent the smuggling of such weapons into a major city. In 1974,

the United States developed the Nuclear Emergency Search Team to be able to find and disable a nuclear device. The United States held counterterrorism exercises such as "Mighty Derringer" in 1986 that simulated an atomic terrorist threat to Indianapolis, Indiana.

Instability in the Middle East driven by the Israeli-Palestinian dispute, the ongoing Soviet War in Afghanistan, and the Iran-Iraq War, coupled with the suspected Israeli possession of nuclear arms, propelled concerns about nuclear proliferation in the region. Israel, in particular, strove to prevent its enemies from developing nuclear weapons and in 1981 successfully bombed an Iraqi facility engaged in nuclear weapons development.

End of the Cold War

The reduced tensions of the Cold War after 1985 set in motion a swift series of events as the U.S. president Ronald Reagan and the new Soviet leader Mikhail Gorbachev began negotiations to reduce, rather than limit, the number of nuclear weapons in their arsenals. Driven by the economic realities of an arms race the Soviet Union could no longer afford, and vowing to open and restructure Soviet society, Gorbachev, along with Reagan, sought to end the Cold War and reduce the nuclear burden and threat that had hung over the world for decades. The 1987 Intermediate-Range Nuclear Forces Treaty eliminated the IRBM class, and the first Strategic Arms Reduction Treaty (START I) signed in 1991 began the slow reduction by both sides of their nuclear arsenals. At the end of the Cold War, shortly before the Soviet Union broke apart, the U.S. arsenal stood at approximately 20,000 warheads with 12,000 classified as strategic, while the Soviet stockpile totaled approximately 30,000 warheads with a similar number viewed as strategic.

Soviet underground nuclear testing ended in 1990, followed by the United States in 1992. Other nuclear states continued, but the vast majority of all nuclear tests had been conducted by the two superpowers. Through the next two decades, the START II and START III treaties sought further reductions in strategic weapons but stalled due to tensions that continued beyond the end of the Cold War. Events such as the enlargement of the North Atlantic Treaty Organization into Eastern Europe, the wars in the former Yugoslavia, and the withdrawal of the

United States from the ABM treaty tested relations between the United States and the new Russian Federation. The Strategic Offensive Reduction Treaty went into effect in 2003 and was in force until February 2011, when it was superseded by the “New START” treaty, which had the goal of further reducing strategic stockpiles and weapons launch platforms. As of 2012, the U.S. stockpile stood at 5,000 total warheads broken down into 2,150 deployed warheads: 1,950 strategic and 200 tactical; in storage the United States had an additional 2,390 strategic and 560 tactical warheads. In addition to the reductions and on-site verifications, a joint U.S.-Russian program known as Megatons to Megawatts began in the early 1990s to financially help Russia turn old Soviet warheads into nuclear fuel for U.S. civilian power reactors. The 2012 Russian stockpile stood at 5,500 total warheads broken down into 2,500 deployed warheads: 1,492 strategic and approximately 1,000 tactical; in storage, they had approximately 2,000 strategic and 1,000 tactical warheads.

Since 1991, both sides, without treaty obligations, dramatically reduced their tactical nuclear weapons stockpiles as the prospect of a major land war in Europe faded. The Russian Federation has held on to more tactical nuclear forces than the United States under the claim that Russia has greater need because of its long border with China and the continuing North Atlantic Treaty Organization deployment of tactical nuclear weapons. Limitations on tactical warheads have never been a part of any nuclear arms control agreements, including New START.

U.S. strategic forces still maintain a nuclear triad launch platform of long-range bombers prepared to use ALCMs or gravity bombs, ICBMs, and SLBMs. The United States has, however, reduced its tactical nuclear platforms to gravity bombs and sea-launched cruise missiles in recent years. Soon, only the air force will possess tactical nuclear weapons.

As of 2012, the other three nuclear states (China, Britain, and France) have fewer than 300 warheads of all types, and the three non-NPT nuclear states (Israel, India, and Pakistan) have fewer than 200 warheads each. North Korea likely possesses several small warheads as well. Most of these warheads would be considered tactical by U.S. and Russian standards. Definitions of *tactical* and *strategic* have always been somewhat ambiguous for certain classes of nuclear launch platforms. Certainly, North Korea

believes that possession of any nuclear weapons will have strategic value for them.

The Arms Control Association provides data on the nuclear weapon capacity of the parties recognized as nuclear weapon states and of other states known to possess atomic weapons in its report *Nuclear Weapons: Who Has What at a Glance*.

Impact of September 11, 2001, Attacks

Concerns over a suspected Iraqi nuclear program led the victorious 1991 Persian Gulf War coalition to demand an end to the program along with Iraq’s chemical and biological weapons programs. An International Atomic Energy Agency (IAEA) inspection regime in Iraq continued through the 1990s. Pakistan (non-NPT signatory) joined the nuclear club in 1998 to deter and balance its traditional enemy India. Both Iraq and Pakistan caused ongoing concerns about proliferation. The 2001 terrorist attacks on the United States by al Qaeda Islamist radicals, however, strongly refocused American concerns over nuclear terrorism and proliferation in the Middle East, even as the threat of global nuclear war waned. Western intelligence networks centered attention on the rogue Pakistani nuclear scientist A. Q. Khan. Nuclear proliferation concerns propelled the reinvigorated post-Cold War UN IAEA to step up efforts to monitor suspected secret nuclear programs in Libya, Iraq, Iran, and North Korea. Iraq was invaded by the U.S.-led coalition in 2003 amid concerns of a continuing nuclear, chemical, and biological weapons programs. The unraveling of the A. Q. Khan network, also beginning in 2003, and its link to Libya and others, led to the Libyan decision to disband and turn over its nuclear program to the IAEA. In the pivotal year of 2003, the IAEA also reported that Iran had failed to meet many of its obligations under the NPT. Postinvasion inspections in Iraq revealed that the Iraqi nuclear program had been terminated by the 1991 Persian Gulf War and aftermath. IAEA efforts met with failure in North Korea as that nation withdrew from the NPT in 2003. North Korea joined the ranks of the nuclear states in 2006, possibly to deter U.S. action such as in Iraq.

During the War in Afghanistan that began in 2001, attacks by Taliban and al Qaeda forces that spilled over into the tribal areas of Pakistan have led to concerns over the security of Pakistan’s nuclear

stockpile of an estimated 90 to 110 warheads. Publicly, U.S. officials have repeatedly expressed concern but also satisfaction with Pakistan's efforts to upgrade its security measures.

The suspected Iranian nuclear program in particular continues to elicit scrutiny from the United States, other major powers, and the IAEA. Under extreme pressure from the United States and other Western powers, Iran defiantly maintains that its nuclear program is for civilian nuclear power generation, which all NPT signatories have a right to research and possess under monitoring by the IAEA. However, due to Iran's political history and its relationship to Western powers, and especially the United States, since the 1979 revolution, the question of trust became a key problem. At the heart of the issue is the process of producing nuclear fuel. A bomb must have high-grade enriched fuel that can provide the chain reaction necessary for an explosive reaction. Nuclear power generation need not have that high a grade of fuel. According to the IAEA, Iran has had a problem with full transparency of its nuclear research program. Backed by IAEA reports since 2006, the UN Security Council has demanded that Iran suspend its nuclear fuel processing until better monitoring, and ultimately trust, is reestablished. For the Western powers, this has been very difficult to assess, as Iran has refused to fully cooperate with the IAEA and, in the years since 2001, has built a dispersed and deep underground nuclear research program. Since 2001, U.S. officials have repeatedly stated that the United States will not accept a nuclear-armed Iran; Israel also uses similar language.

Whether or not Iran or any other state wishes to join the nuclear weapons club is a matter of contentious debate at present. Historically, the possession of nuclear weapons has never fully rewarded those states that sought them. All nuclear weapon-armed states saw a utility in possessing nuclear weapons. Security through deterrence is the primary reason, but issues of prestige, status as a world power, and greater diplomatic influence are also key factors. Possession of nuclear weapons did not prevent the end of the British and French empires and their decline as great powers. Possession of more than 30,000 nuclear weapons did not prevent the breakup of the Soviet Union. Status and prestige could appear fleeting, the much sought-after influence was never as powerful as imagined, and the

cost was staggering. The record of utility appears mixed. Even the perceived security of having nuclear weapons has always had to stand against the reality that, far from guaranteeing security, if deterrence failed, the state itself might be extinguished altogether.

David M. Walker

See also Bombs, Nuclear; Iran; Iraq; Missiles, Nuclear; Nuclear Proliferation; Pentomic Era; Strategic Air Command; Strategic Arms Limitation Treaties; Strategy, Nuclear; U.S. Strategic Command

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WEAPONS, SPACE

A space weapon is any destructive device aimed to either operate in or take effect in space, with space defined as beginning approximately 37 miles above sea level. Space weapons can be categorized into two groups according to their design: (1) kinetic energy weapons and (2) directed energy weapons (DEWs). Kinetic energy weapons draw their destructive energy from their momentum, ramming into their target. They can also be equipped with chemical explosives to heighten their destructive power. DEWs utilize beams to destroy a target, usually in the form of high-energy lasers, particle beam weapons, or high-power radio frequency. DEWs can be earth-based laser weapons, with mirrors in orbit to reflect the beam to its intended target. When

space based, DEWs are propelled by either chemical rockets or electromagnetic forces. Space weapons can also be categorized according to their purpose: (a) offensive antisatellite weapons and (b) defensive anti-ballistic missile weapons. The design of offensive and defensive missiles is technologically similar, with the existence of one fueling the other.

History of Space Weapons

The first space weapon experiment, an American test by the name Project Argus, began in August 1958. Three high-altitude nuclear explosions occurred above the south Atlantic in an attempt to discern if nuclear explosions on the edge of space could utilize the properties of the earth's magnetic field to produce an artificial shell of rapidly moving electrons around the planet that would stay in place for some time. While the experiment was a success, the model did not lead to a workable antisatellite or antimissile weapon. Project Argus did, however, encourage further space weapon research. In October 1959, the United States effectively launched an antisatellite missile from an aircraft toward an orbiting satellite. While the missile missed its target by almost 30 miles, that was close enough to destroy the target with the radiation from a 1 megaton nuclear warhead. The primary focus of space weapon research in the 1960s was antimissile weapons, which were missiles themselves, equipped with nuclear warheads like the ones they aimed to intercept.

In 1967, the United States and the Soviet Union signed the Outer Space Treaty, which stressed the peaceful uses of outer space. Despite this, space weapons quickly became a key focus of the Cold War arms race. That same year, President Lyndon Johnson's administration announced that an anti-ballistic missile system, named Sentinel, was to be deployed around 25 American cities to protect part of the country from attacks. The system lacked proof of scientific effectiveness and received only lukewarm political support. But it seems that after so many years and so much money spent on the development of space weapons, the impetus to deploy them was irresistible. Despite massive expenditures and years of research, experts remained in doubt about these systems' effectiveness. This doubt led the United States to sign an Antiballistic Missile Treaty in May 1972. By the mid-1970s, the navy, air force, and army were no longer experimenting with

most kinds of space weapons, with only antisatellite weapons still in development.

In March 1983, President Ronald Reagan introduced the Strategic Defense Initiative (SDI), a plan dubbed Star Wars. Star Wars, or SDI, was a research program designed to explore the feasibility of space-based defenses against ballistic missiles. While the technological advances never materialized to make SDI a functioning defensive space weapon, the Soviet Union took Reagan's claims seriously, fueling tensions between the two countries. Reagan's successors reduced, and eventually terminated, SDI. Leaders such as Reagan, who advocated the deployment of space weapons, claimed that their existence would make nuclear war less likely through deterrence.

In the 21st Century

From the 1990s on, many nations launched increasing numbers of satellites into space, increasingly focusing attention on space militarization, as opposed to the weaponization of space. Countries use their satellites for military purposes such as communication, reconnaissance, and positioning. This form of space militarization does not equal space weaponization, since it does not attempt to deny other countries equal access. However, all the satellites in space are fragile objects and are vulnerable to destruction simply from being hit by other satellites. Hence, any maneuverable space object has the potential to become a weapon against other satellites.

Currently, no known weapons are present in space, and there are only rare examples of destructive weapons being deployed in space. In January 2007, China launched a missile into space, destroying an old Chinese weather satellite. This revealed that if China chose to, it could build a large number of antisatellite weapons that would have the ability to destroy U.S. satellites in low-earth orbit. In February 2008, the United States launched a missile defense interceptor to destroy an American satellite threatening to make an uncontrolled atmospheric reentry while carrying more than 1,000 pounds of toxic fuel. While not the aim of the mission, the destruction of this satellite demonstrated the ability of the United States to destroy other nations' satellites.

Each of the previous three presidents established a coherent position on space weapons. In 1996, President Bill Clinton signed a directive that

emphasized the peaceful use of space and vetoed plans for potential space weapons. His position echoed almost unanimous global opinion. In a reversal of Clinton's stance, President George W. Bush signed a new national space policy in 2006, directing the secretary of defense to develop capabilities, plans, and options to guarantee American freedom of action in space and to develop the ability to deny such freedom of action to other countries. This directive was a green light for the development and use of satellite weapons, but little concrete action was taken to actually weaponize space. Following his inauguration, President Barack Obama—in a reversal of George W. Bush's focus on securing U.S. dominance in space—has followed a policy of emphasizing international cooperation in an effort to reduce tensions surrounding military space issues. As of 2012, his administration was working with the European Union and other spacefaring nations to develop an International Code of Conduct to regulate all space-based military activities.

Candice Quinn

See also Space; Strategy, Nuclear; Weapons, Nuclear

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WEINBERGER-POWELL DOCTRINE

The Weinberger-Powell Doctrine lays out a series of considerations to be weighed before the deployment of U.S. combat forces abroad. Six criteria were first delineated by the then secretary of defense Caspar W. Weinberger in a 1984 speech to the National Press Club:

1. U.S. force should be employed only in cases “vital to our national interest or that of our allies.”
2. Troops should be committed “wholeheartedly and with the clear intention of winning.”
3. There should be “clearly defined political and military objectives.”
4. There should be a proper, and continually reassessed, “relationship between our objectives and the forces we have committed—their size, composition, and disposition.”
5. There should be “some reasonable assurance we will have the support of the American people and their elected representatives in Congress.”
6. Use of force should “be a last resort.”

At the time of the Persian Gulf War in 1990–1991, Colin Powell, an adviser to Weinberger in 1984 who had subsequently risen to be chairman of the Joint Chiefs of Staff, reinforced Weinberger's points with a particular focus on having overwhelming U.S. forces to win quick and decisive victories. Powell also added the idea of having a clear exit strategy in mind before beginning a new conflict so as to avoid endless entanglements. The doctrine had major influence during the Reagan, George H. W. Bush, and Clinton administrations when policymakers considered the use of force in Central America, the Balkans, Somalia, Rwanda, and elsewhere. The doctrine always had critics who argued that it was too restrictive; in the later Clinton years, it gradually was set aside to allow for more humanitarian interventions. It was fully rejected by the then secretary of defense Donald Rumsfeld and others in the George W. Bush administration.

Many of the doctrine's ideas originated in the military's study of and perceived lessons from the Vietnam War. More immediately, following the October 1983 bombing of a marine barracks in Beirut, Secretary of State George Shultz spoke about the importance of avoiding paralyzing self-doubt and hesitation in the use of U.S. forces. In response, Weinberger's speech sought to publicly establish the military's belief that, while the use of force was still crucial in preserving modern U.S. interests, its indiscriminate and regular use without full domestic support was a threat to the fabric of society and to democratic consensus. Powell's views were also deeply shaped by the Vietnam War and by his time around civilian leaders in the Reagan White House. Consequently, in discussions leading to the Persian Gulf War, he insisted on employing Weinberger's criteria. This quick and domestically popular war

reinforced many military leaders' belief that they had learned the right lessons from the Vietnam War and other experiences.

Supporters of the doctrine argue that it allows the United States to use force where appropriate, but to avoid poorly defined missions and Vietnam-like quagmires. It also enhances the military's influence in the use of force in decision making and reminds civilian politicians of the gravity of their decisions. The military is thus recast as a hesitant, thoughtful defender of national interests, not as an aggressive institution pushing for war on every occasion. The focus on requiring public and congressional support is seen as reinforcing checks in the political process and thus reducing the excessive power of the "imperial presidency."

Critics of the doctrine include academics, some military analysts, and a number of prominent U.S. diplomats, such as secretaries of state Shultz and Madeleine Albright and secretaries of defense James Schlesinger and Les Aspin. They argue that the collective requirements are so restrictive that the doctrine leads the country to a policy of appeasement. It also reduces U.S. global influence by reinforcing the idea that, after Vietnam, the country has become a paper tiger unwilling to back its commitments or to accept its responsibilities for maintaining global order if there is a high risk of casualties. The critics also suggest that the doctrine's all-or-nothing approach and "war as a last resort" concepts would limit the diplomatic effectiveness of U.S. threats to employ force.

Concerns also are raised about a number of the specific criteria. The idea that force should only be used for vital interests is seen by some as overly flexible, since most presidents contemplating force would define their goals as being vital. On the other hand, limiting force to only vital interests might exclude times when the United States would want to use force early in a crisis or to demonstrate credibility. Depending on the definition of vital interest, it might also severely constrain humanitarian interventions, efforts to spread democracy, or other value-based uses of force. The concept of commitment to clear victory and pursuing defined goals could be constraining if goals shifted as events unfolded. The insistence on public support might exaggerate the degree of popular support necessary to sustain short operations and delay a timely response when swift action was needed. More important, it might put sometimes ill-informed public opinion above the

considered opinion of the president in determining when the use of force was necessary. The focus on overwhelming force is challenged by those who feel that technological changes have shifted the advantage to small, fast, and technologically advanced forces.

By the time the Iraq War began in 2003, the doctrine had been largely discarded, despite the fact that Powell was then serving as secretary of state. However, the duration and political and military complications of the wars in Iraq and Afghanistan may bring a revival of interest in the Weinberger-Powell Doctrine.

John W. Dietrich

See also Bosnia Intervention; Humanitarian Intervention, Foreign; Iraq War, Planning for; Persian Gulf War; Powell, Colin; President as Commander in Chief; Rumsfeld, Donald; Somalia Intervention; U.S. State Department

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WHISTLE-BLOWING

Whistle-blowing occurs when a member of an organization discloses information regarding immoral and often illegal practices taking place within the organization. Whistle-blowers may make reports to authorities either within the organization (internal whistle-blowing—e.g., to internal auditors) or to individuals or entities outside the organization (external whistle-blowing—e.g., to the media or auditing agencies). Whistle-blowing may be considered a form of prosocial or organizational citizenship behavior that ultimately benefits others as well as organizational integrity. However, whistle-blowers are often subject to acts of retaliation (e.g., employer/coworker reprisal, public criticism,

termination), which destroys reputations and careers, despite a patchwork of federal and state legislation that is meant to offer protection.

Research suggests that several demographic and personality variables are associated with whistle-blowing behavior. According to a recent meta-analysis by Jessica Mesmer-Magnus and Chockalingam Viswesvaran, the typical whistle-blower tends to be male, has a higher level of education, has good job performance, holds an upper level or supervisory position, and elicits higher scores on moral reasoning tests. Age and tenure do not appear to be associated with whistle-blowing behavior. In comparison with personality traits, contextual variables seem to be better predictors of whistle-blowing judgments. For example, when the threat of retaliation is low and when whistle-blowing is seen as a valued action within the job or organizational context, individuals are significantly more likely to report incidents of wrongdoing. Janet Near and Marcia Miceli have reported that other contextual data, like the perceived severity of the violation, the nature of the evidence for the transgression, likability of the violator(s), and whether the observer is personally affected by the wrongdoing, influence whistle-blowing decisions.

Instances of Whistle-Blowing Within the U.S. Government and Armed Forces

Dr. Frederic Whitehurst (1998)

The Federal Bureau of Investigation's crime lab underwent great scrutiny in the mid- to late 1990s when a Federal Bureau of Investigation chemist, Dr. Frederic Whitehurst, revealed serious flaws in lab investigation and reporting practices. At the time of his public disclosure, Whitehurst was considered the agency's top bomb residue expert, but he was subsequently transferred, or demoted, to another unit. Whitehurst later filed a suit for the losses he suffered as the result of an early resignation; a settlement was eventually reached in excess of \$1 million for illegal retaliation (a violation of the Whistleblower Protection Act [WPA]). Whitehurst won a second lawsuit filed under the Privacy Act for harm to his reputation and was awarded an additional \$300,000. Following the suit, Whitehurst became the executive director of the National Whistleblower Center's Forensic Justice Project, which reviews the scientific work and integrity of

multiple forensic labs, including that of the Federal Bureau of Investigation.

Sergeant Joseph Darby (2004)

In 2004, Army Specialist Sergeant Joseph Darby blew the whistle to military investigators regarding alleged instances of illegal abusive treatment and torture of prisoners by U.S. military personnel at the Abu Ghraib prison in Iraq. According to the 2004 Fay and Jones report, Darby provided undeniable evidence (in the form of compact discs of digital photographs and detailed information) of (a) intentional violent or sexual abuse and (b) abusive behavior that resulted from misconceptions regarding U.S. laws and international policies regarding the treatment of detainees. While Darby's information resulted in the prosecution and punishment of the involved military personnel, his confidentiality was breached. As a result, Darby faced extensive retaliation from the public, colleagues, and family members (i.e., accusations of treasons, death threats, condemnation), forcing him into protective custody.

Ceballos v. Garcetti (2002)

In the year 2000, Richard Ceballos, a deputy district attorney in the Los Angeles County district attorney's office, submitted a disposition memorandum in a criminal trial expressing concern for the validity of information included in an affidavit used to obtain a search warrant. He was subsequently demoted and filed allegations of retaliation, claiming that the memorandum was protected under the First Amendment. The case was eventually turned over to the Supreme Court, where it was ruled that because Ceballos was a government employee and was speaking in accordance with his professional obligations, not as a private citizen, the memo he gave was simply the voice of his employer and was therefore (a) not protected under the First Amendment's right to free speech and (b) not protected from acts of retaliation.

MacLean v. DHS (2008)

In 2003, the Department of Homeland Security's Transportation Security Administration (TSA) faced accusations from whistle-blower and former federal air marshal Robert MacLean. According to *MacLean v. DHS*, MacLean revealed to the media TSA's plan to terminate the use of federal air marshals during

prolonged flights not long after a heightened terror alert was issued. MacLean's disclosure resulted in extensive media and congressional investigation into the integrity of the TSA's decisions. In 2006, the TSA terminated MacLean on the basis of Sensitive Security Information disclosure. Maclean's petition for reinstatement under the WPA was denied under a ruling that said he did in fact leak Sensitive Security Information and that TSA's termination decision was not in violation of the act.

Without question, individuals who choose to expose negligence, fraud, or abuse within an organization often face risk of retaliation and reprisal. Sometimes, when anonymity is ensured, the negative consequences associated with whistle-blowing can be avoided. However, as seen in Darby's case, there is not always a guarantee of anonymity. Nationwide estimates suggest that approximately one third of U.S. employees have observed unethical and/or illegal practices within their organizations, but more than half of these instances go unreported. Undoubtedly, many of these observers consider the risk of blowing the whistle too great because of the potential damage to their reputation and career should their identities be revealed. Authors Joyce Rothschild and Terance Miethe explain that although internal whistle-blowing appears to elicit a lesser degree of organizational retaliation than does external whistle-blowing, regardless of the reporting avenue they select, whistle-blowers still face the potential for termination, forced resignation, poor performance evaluations, micromanagement, criticism and ostracism by coworkers, and tarnished reputations, as well as potential consequences in their personal lives, including depression, inability to trust, family and marital problems, financial loss, and decline in physical health. Research suggests that the potential for such negative outcomes is greater for lower level and nonmanagerial employees, minorities, and external reporters.

Whistle-Blower Protection Legislation

The False Claims Act

The False Claims Act, also known as the "Lincoln Law," was enacted in the late 1800s as a means of protecting the government against fraudulent contracting. This was the first federal law to permit private individuals to file suit on behalf of the U.S. government and was the first to promote

whistle-blowing behavior through the provision of monetary rewards. Whistle-blowers were granted up to 50% of damages/recovered money under this legislation, although a 1943 amendment to this act decreased the award maximum to 25%. A 1986 amendment to the False Claims Act increased penalties for fraudulent conduct and provided legal protection for whistle-blowers against retaliation from employers. In 2009, the False Claims Act was once more transformed by the Fraud Enforcement and Recovery Act, which deleted the prior requirement that reports of false claims must be made to a federal officer or employee.

Civil Service Reform Act

The Civil Service Reform Act of 1978 was the first piece of federal legislation to provide legal protection to government employees who blow the whistle on breaches in federal regulations and instances of corruption. The act established both the Office of Special Counsel and the U.S. Merit System Protection Board, the latter of which handles appeals of federal employees claiming employer retaliation after blowing the whistle. Cases involving retaliation against whistle-blowers could now be presented to the Merit System Protection Board through the Office of Special Counsel.

Whistleblower Protection Act

The WPA of 1989 was passed to strengthen laws protecting government-employed whistle-blowers. Under the WPA, reprisal against federal employees is specifically barred as long as whistle-blowers report transgressions they reasonably believe to be in violation of some federal regulation. Furthermore, this legislation extends to whistle-blowers reporting to external entities. Other provisions of this act include (a) less stringent requirements associated with the burden of proof placed on the whistle-blower during the appeals process and (b) no longer mandating whistle-blowers to solicit the Office of Special Counsel's help prior to filing an appeal with the Merit System Protection Board. Recently proposed revisions to the WPA (the Whistleblower Protection Enhancement Acts of 2007 and 2009) would extend protection to federal employees whose duties fall under matters of national security or whose disclosures are considered part of their professional obligations.

Military Whistleblower Protection Act

The Military Whistleblower Protection Act of 1988 prohibits retaliation against military whistle-blowers exposing government or defense-related wrongdoing to any member of Congress or the inspector general for the U.S. Department of Defense. This act was later amended to include protection for individuals who report such wrongdoings to Department of Defense officers, criminal investigators, auditors, and inspectors, and to prohibit the implementation of mental health evaluations during employee performance reviews as a means of reprisal.

Sarbanes-Oxley Act

The Sarbanes-Oxley Act of 2002 is one of the most well-known sets of laws offering protection to private sector whistle-blowers reporting accounts of federal fraud or breaches in securities regulations. The act was prompted by the Enron scandal in which executives used misleading financial reports to hide billions of dollars of debt. It was designed as a means of protecting investors in public companies and includes protection for whistle-blowers from employer retaliation on exposure of fraudulent and unethical behavior within a public company, particularly when the whistle-blower uncovers violations of Securities and Exchange Commission (SEC) regulations. In the event that an individual experiences retaliation under these circumstances, as determined by the court, an order for relief will be mandated that can include reinstatement with prior-held seniority status, back pay with interest, and compensation for other damages, including trial-related fees. The Sarbanes-Oxley Act requires public companies to provide safe avenues for employees to report fraudulent behavior and provides for both individual and corporate legal responsibility for acts of reprisal and increased criminal penalties under such circumstances.

Dodd-Frank Wall Street Reform and Consumer Protection Act

The 2010 Dodd-Frank Act extends the Sarbanes-Oxley Act to cover all employees, not just those of public companies. It expands the protection of whistle-blowers' confidentiality and guards against reprisal as a result of whistle-blowers' lawful actions, such as reporting violations of securities laws to the SEC and participating in investigative action related to transgressions by the request of the

SEC or a court. Also under this act, whistle-blowers are (a) permitted to take claims directly to their federal district court, rather than first making reports to intermediaries such as the Occupational Safety and Health Administration, and (b) offered financial incentive to blow the whistle on financial fraud against the government. (The SEC is now required to dole out 10% to 30% of any sanction assessed that exceeds \$1 million, provided that the whistle-blower contributed original information resulting in a settlement or recovered funds.)

Despite the strengthening of whistle-blower protection through recent legislation, there still remains a stigma associated with whistle-blowers. Authors Janet Near and Marcia Miceli maintain that although a whistle-blower offers an organization the opportunity to improve the ethicality and social responsibility of its practices and procedures, many still assume that the criticism of whistle-blowers is nothing more than "sour grapes" from employees with a grudge against their employer. Continued research is needed to understand how effective whistle-blowing might be promoted and appropriately responded to within organizations.

Erin D. Cooke and Jessica Mesmer-Magnus

See also Abu Ghraib; Ethics; Federal Bureau of Investigation; My Lai Massacre; Professionalism

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WHITE HOUSE MILITARY OFFICE

The White House Military Office (WHMO) is visible to the public when the president travels abroad, when foreign visitors come to the White House, and when Camp David is used as a retreat or for policy functions. These activities are carried out by what is known as the WHMO. Its role is to provide military support for White House functions, including food supervision, transportation, Marine One and Air Force One, medical support and emergency care, hospitality, and keeping the trigger of the strategic nuclear attack force with the president at all times. The director of WHMO is primarily responsible for military operations aboard Air Force One during presidential travel. The WHMO is an aggregate of functions that accrued over time, but there is no one clear mission statement.

History and Overview

The WHMO derives its legitimacy and range of functions from the relationship of a military aide-de-camp to the chief executive. This model encompasses all activities dealing with the direct protection and comfort of the president and his work as a military responsibility. From George Washington to Franklin D. Roosevelt, the needs of each executive were met in an improvised, varied, and ad hoc manner. Under Roosevelt, a number of previously

temporary needs coalesced into full-time functions for the White House Office.

WHMO's responsibilities have evolved over the past 70 years as duties increased from one or two military functions to serving the president's house-keeping needs, to an aggregation of services organized under the framework of presidential logistics, security, and protection. These functions range from military command issues to ceremonial duties and include military operations on Air Force One, transportation on Marine One, food service at Camp David, garage access at the White House, and medical care for White House personnel, among others. From its inception, its purpose was to aid the president in managing the many details related to the functions of the office. Over the years, ad hoc efforts became more systematized and led to the creation of a bureaucratic structure. Two major management reform efforts were undertaken: The first under the Carter presidency, and another at the end of the Reagan administration.

Creation of a Bureaucracy

Roosevelt created a new divisional structure for the executive office by Executive Order 8248 in 1939. The White House Office was one of four new offices created to organize and simplify executive activities to ensure the good functioning of the presidency. It consisted of three subdivisions: (1) the secretaries to the president, (2) an executive clerk for all documents and reports, and (3) administrative aides who were to act as personal aides to the president and his public functions. The White House Office was enacted to be the president's manager regarding the many household details involving the president and his office.

Camp Shangri-La, later renamed Camp David, developed as a presidential retreat, and was incorporated into the WHMO in 1942. Shortly thereafter, the need for secure and accurate communication led to the creation of the White House Communication Agency. In 1944, Roosevelt requested a White House pilot. This office is now known as the Presidential Airlift Group. A White House Medical Unit was set up in 1945. The White House Mess, established in 1951, is now known as the Presidential Food Service and is run by the navy. In 1957, Dwight Eisenhower's use of helicopters for short trips created Marine Helicopter Squadron One.

As the White House's technology and security needs increased, functions were added to the WHMO, and actions initiated in the 1940s took on a more sophisticated structure. John F. Kennedy was the first president to fly in jets; he was also the first president to become attached to the "Presidential football," a phrase applied to the nuclear briefcase and its constant proximity to the president, carried by a military aide. The White House Garage, initiated in 1913, became the White House Transportation Agency in 1963, and was placed within the WHMO during the Carter reorganization. The office includes support elements such as (a) operations; (b) policy, plans, and requirements; (c) administration and information resource management; (d) financial management comptroller; (e) WHMO counsel; and (f) security.

Reorganization

The Carter administration was the first presidential administration to try to tame the increasingly chaotic functions developed in the WHMO. The reorganization highlighted two separate functions, one focused on White House activities and the other related to the executive office of the president. These changes were codified in Executive Order 12028: "The primary responsibility for performing all administrative support and service functions of units within the Executive Office of the President shall be transferred and reassigned to the Office of Administration." In 1987, Reagan sought to further clarify the functions through Executive Order 12608. The changes occurred under the George H. W. Bush administration when all functions were brought under the Office of Management and Administration, reporting to the White House chief of staff.

The present structure places WHMO under the direct purview of the Office of Management and Administration, which supervises all White House activities. The director of the Office of Management and Administration is an appointment made by the president. The WHMO has a deputy assistant to the president and the director of Office of Management and Administration. All members of the WHMO are Department of Defense personnel, funded by that agency, but serving the executive and the White House. They are career personnel who may not have any personal connection to the president but are responsible for many of the president's personal needs.

Jacqueline Swansinger

See also Air Force One; Marine One; President as Commander in Chief

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WOMEN

In the United States, women have participated in every military conflict since the colonial period. However, women did not become part of the armed forces until the 20th century. Instead, women's war service consisted primarily of traveling with militaries to support husbands or male family members in service, volunteering with civilian organizations, or performing nursing care services. Beginning in 1901, the United States began to allow women to serve in more formal roles, beginning with the formation of nursing corps and eventually with the full admission of women to the armed forces on a permanent basis in 1948. This entry offers a brief history of (a) women's participation with and in the U.S. military, (b) the transition of women's service from traditional to nontraditional roles, (c) a comparative look at women in militaries in other nations, and (d) an overview of women's roles in the U.S. military in the early 21st century.

Camp Followers and Volunteers: The 18th and 19th Centuries

During the American war for independence, many women followed their soldier-husbands to the front lines. Known as "camp followers," these women provided support for their husbands by cooking food, doing laundry, and handling other similar tasks, including nursing. In some instances, these women also offered these services to other men who may not have had wives available to perform such tasks.

One of the most famous camp followers was Mary Ludwig Hays McCaulay, the wife of a private. During the Battle of Monmouth in 1778, McCaulay earned the nickname Molly Pitcher because she served water to her husband and other soldiers during battle. She became even more famous, however, because after her husband was wounded, she took

his place at the cannon and acted as rammer for the remainder of the battle to make sure that the cannon continued to fire.

In the 19th century, some women disguised themselves as men to serve in the military. Lucy Brewer is recognized as the first woman in the U.S. Marines because she passed herself off as a man and served on the USS *Constitution* during the War of 1812, although some believe that the story is primarily a myth. In the Civil War from 1861 to 1865, perhaps hundreds of women fought for both the Confederacy and the Union by cross-dressing and pretending to be young men.

Over the course of the 19th century, however, nursing became the war support role most associated with women. More than 2,000 women, including the author Louisa Alcott, volunteered as nurses in military hospitals during the Civil War. While Clara Barton is perhaps best known for her efforts during the war and her later establishment of the Red Cross, Dorothea Dix worked specifically to recruit women through the Army Medical Bureau. Although these nurses did not have formal military status, Dix became the Superintendent of Female Army Nurses and helped the army with its efforts to recruit female nurses.

From Military Nurses to Yeomanettes: The Early 20th Century

In the Spanish-American War (1898–1901), women nurses continued to play an important part in providing medical care to wounded soldiers. More than 1,500 women served in the United States, in war zones, and on hospital ships to care for soldiers. The military continued to classify these women as civilian workers. These nurses worked alongside the armed forces and in military facilities but were not eligible for military or veteran benefits.

Women's indispensable nursing support during the Spanish-American War led to the creation of the Army Nurse Corps in 1901. The Army Nurse Corps provided a permanent place for women nurses as members of the military for the first time. In 1908, the navy followed suit and created the Navy Nurse Corps to ensure they had similar support in wartime.

By the time the United States entered World War I in 1917, both the army and the navy had several thousand nurses. The army had slightly more than 4,000 nurses in their ranks in 1917, and by 1918, this number exceeded 20,000. More than 1,500 nurses



A group shot of yeomanettes from the Supply Department, U.S. Navy Yard, Mare Island, California, ca. 1918.

Source: National Archives and Records Administration.

served in the Navy Nurse Corps during the war. In both organizations, women served in the United States and abroad, as well as on hospital ships.

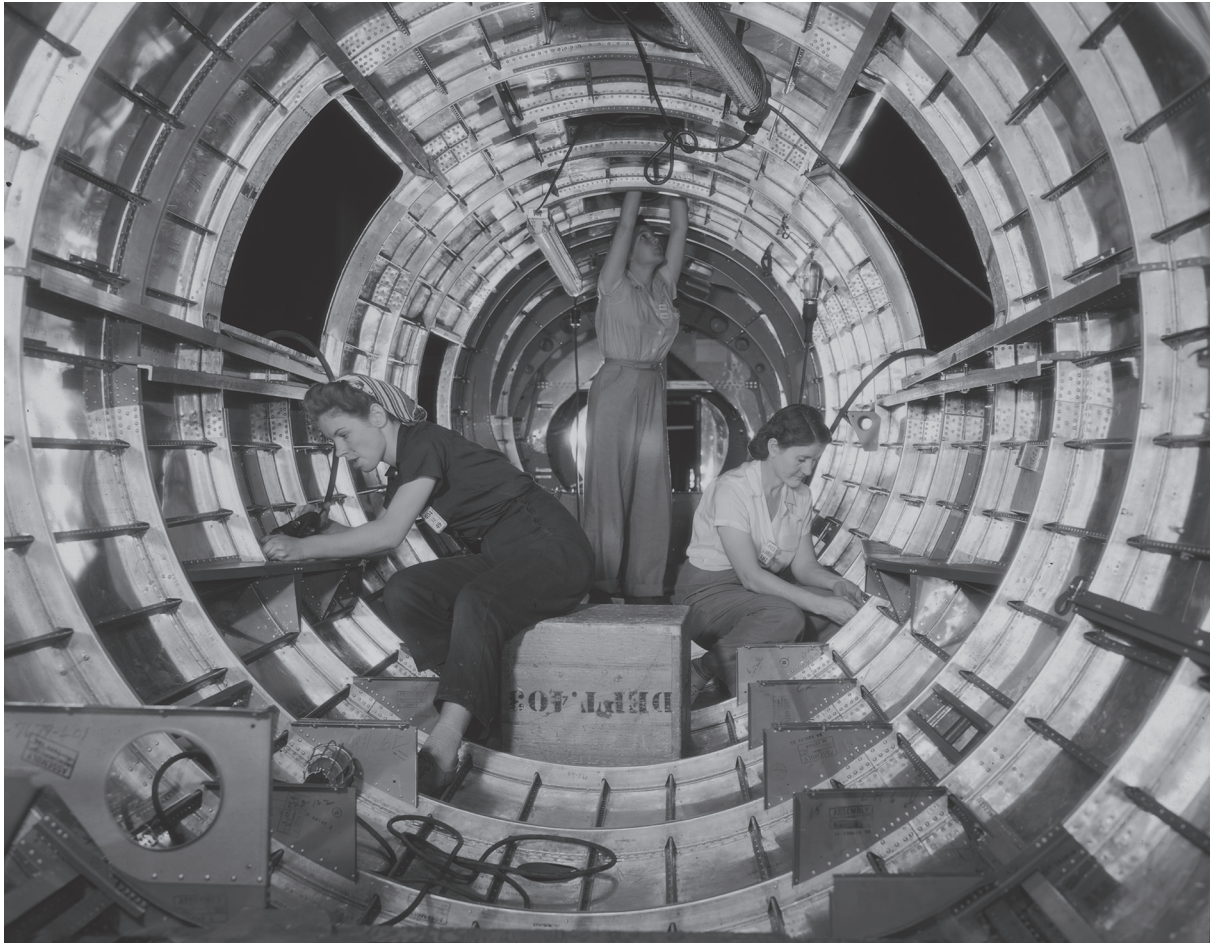
Outside of the Nurse Corps, the navy and the Marine Corps admitted more than 13,000 women to serve during World War I. These women, classified as Yeoman (F) and Marine (F) to indicate that they were female, quickly became known as yeomanettes and marinettes. Only several hundred women served in the army with the Signal Corps, and small numbers of women also joined the Coast Guard during World War I.

The Turning Point: World War II

When the United States entered World War II in 1941, however, women's military service began to change forever. In addition to the Army Nurse Corps and Navy Nurse Corps, the army established

the Women's Army Auxiliary Corps through a 1942 act of Congress, allowing nonmedical female personnel to serve as auxiliaries to the army. A year later, new legislation converted the Women's Army Auxiliary Corps to the Women's Army Corps, granting the Women's Army Corps full military status like women in the Nurse Corps. The navy, Marine Corps, and Coast Guard admitted women under reserve status, granting them the full benefits that male service members received.

Between 1941 and 1945, approximately 400,000 women served in all military branches. While the majority of servicewomen were stationed in the United States, thousands served in North Africa, Europe, and the Pacific. Although the army initially anticipated that women could fill only five jobs, by the war's end, women throughout the military performed a number of roles in addition to their traditional ones as nurses. World War II servicewomen



Women workers install fixtures and assemblies to a tail fuselage section of a B-17 bomber at the Douglas Aircraft Company plant, Long Beach, California. Better known as the “Flying Fortress,” the B-17F is a later model of the B-17, which distinguished itself in action in the South Pacific, Germany, and elsewhere. It is a long-range, high-altitude heavy bomber, with a crew of seven to nine men, and with armament sufficient to defend itself on daylight missions.

Source: Photo by Alfred T. Palmer. Courtesy of the Library of Congress.

worked as clerks, cooks, supply sergeants, mechanics, photographers, and held roles in nearly all fields, including intelligence and cryptography. Because total war called for effective personnel utilization, only a few roles remained closed to women by 1945.

In addition to the women who served within military branches, the Women Airforce Service Pilots (WASPs) consisted of a number of civilian women pilots. The WASPs, recognized in 2010 for their service to the nation in World War II, ferried planes from factories to military bases in the continental United States and Canada, trained male pilots, participated in night exercises, tested experimental aircraft, performed airplane maintenance, and provided other support. In 1977, Congress

granted former WASPs veteran status, and in 2010, President Barack Obama recognized WASPs with the Congressional Gold Medal.

Toward Full Integration: Women in the Cold War Military

By the end of World War II, the military reached a turning point with its utilization of women. Because of women’s indispensable participation in World War II, the services approached Congress with legislation that would make women a permanent part of the military. Previously, the legislation passed in World War II provided that the wartime women’s services (apart from the nursing corps) would be

dissolved 6 months after the war's end. However, prominent military leaders like General Dwight Eisenhower convinced Congress that the military needed women. If there was another war, the services argued, there would not be time to start again to re-create the women's service components.

The Women's Armed Services Integration Act of 1948 (Public Law 80-625) established women's military roles in the postwar era. According to this law, up to 2% of the total military strength could be made up of women in the army, the navy, the Marine Corps, and the new air force. The law stated that women in the navy, Marine Corps, and air force could not serve on ships or in planes, with the exception of hospital ships or transport craft. According to the law, women could not have any dependents under the age of 18 and could be discharged from the military at any time, a provision designed to make it easy to discharge women who became pregnant. Women who had never served in the military before had to be unmarried to enlist or to accept an officer's commission, but women could marry once they were in the military. The law did not say anything about which jobs women would perform but stipulated that women could not serve in combat roles.

When the Korean War began in 1950, the services made their first efforts to recruit women in large numbers but never hit their target recruitment numbers. In 1951, the Department of Defense created the Defense Advisory Committee on Women in the Services to help find ways to recruit and retain women. This committee, which comprises female civilian leaders from communities all around the nation, focused its efforts on publicizing opportunities for women in military service and helping the branches improve their ability to recruit women. In addition, this committee would advise the Department of Defense on ways to improve retention.

In the 1950s and 1960s, servicewomen primarily held traditional roles in all the branches. Most women outside of the Nurse Corps were concentrated in clerical jobs and personnel administration. Recruiting remained difficult, although the services focused on emphasizing femininity, equal pay, job training, and travel as some of the benefits of military service for women in particular.

Legal limitations on servicewomen also remained tight in these decades. In the 1950s, President Truman passed Executive Order 10240, which clarified that women with children could not serve in

the military. Although Public Law 80-625 said that women could only make up 2% of the nation's military strength, during these decades, women did not even usually reach 1% of the total military strength.

One of the most problematic Public Law 80-625 restrictions, however, was that women could not advance beyond the permanent rank of lieutenant colonel (in the army, air force, and Marine Corps) or commander (in the navy). Each of the women's service components could have one woman serving as colonel or captain—the director of each component. When that woman stepped down, however, she kept a permanent rank as lieutenant colonel or commander. This meant that women officers could not advance more than halfway up the officer grade scale.

In 1967, Congress passed legislation that remedied this problem. Public Law 90-130 removed this restriction and allowed women officers to be promoted to any rank, including general or admiral. This law represented another major turning point in women's military service opportunities. In 1969, the air force became the first branch to allow women in the Reserve Officers' Training Corps (ROTC) program. Although that branch experimented with a women's ROTC program in the 1950s, that program was short lived. The new admission of women to ROTC in 1969 led to all branches admitting women to ROTC by the mid-1970s.

The 1970s brought even bigger changes. When the draft ended in 1973, the military began to reassess its utilization of women. The presence of the women's movement in American society also helped servicewomen as they began to argue for equal opportunity and equality in the military. During the 1970s, all the service branches modified their regulations about mothers in service; by the middle of the decade, women could remain in service after having children. All the branches also began to expand women's job opportunities, and women received access to more than 95% of all military occupational specialties. The only exclusions were those in combat and combat support roles. In 1976, Congress authorized women to enroll in West Point, the United States Air Force Academy, and the United States Naval Academy. Finally, in 1978, Congress revised Title 10 of the U.S. Code to permit women to serve on ships and in airplanes.

In the 1980s, women continued to move into nontraditional military career fields and to serve

in even more locations worldwide. The military deployed women to Grenada and Panama, and the percentage of women in the U.S. military grew to more than 11%. Efforts to extend the draft registration system to include women failed, however.

International Militaries

The United States was not the only country to incorporate women into its defense system during and after World War II. In fact, British actions preceded American efforts to incorporate women; World War II officers such as Colonel Mary Hallaren looked to the United Kingdom's military system at the end of World War II as a model for how women might be incorporated in to the U.S. military. The United Kingdom also made women's service permanent at the end of World War II. As in the United States, British women's military roles began to move closer to combat in the 1990s. According to 2006 statistics from the UK Ministry of Defence, women account for about 9% of all British military personnel. Although they may serve on ships and in combat zones, they do not engage in direct combat.

The Soviet Union allowed women to fly in combat during World War II and utilized women in combat roles in both the World Wars. During the Cold War, Soviet legislation required that women be drafted during wartime only and subjected women to military training programs as part of their early education. Russia continued to utilize women after the end of the Cold War. By the end of the 20th century, women were 10% of the Russian armed forces. Although Russian servicewomen can hold nearly any position in the military, most servicewomen remain in fields such as clerical work, communications, and medicine.

In Israel, the draft applies to both men and women, although some women gain exemptions for religious reasons. In 1995, the Israel Defense Forces began to allow women to train in their flight programs. Approximately one third of all Israel Defense Forces personnel are women, and women may participate in nearly 90% of all jobs. Combat roles are voluntary.

During the second half of the 20th century, many countries around the world began to admit women into their armed forces, including Canada (1951), West Germany (1975), Norway (1977), the Netherlands (1979), and Spain (1988). A number of other countries also draft women into military

service, including North Korea, Taiwan, Egypt, Peru, Tunisia, Malaysia, and Eritrea.

U.S. Women in the Military Since 1991

Operation Desert Storm in 1991 marked another turning point in women's military participation in the United States. Following the Persian Gulf War, Congress reversed the limitations in U.S. Code Title 10 against women in combat. This meant that women could now serve in combat and combat support roles and that there were no more legal limitations against women in such capacities. However, as Congress revised Title 10, the services enacted new policies that continued to approach the issue of women in combat roles conservatively.

Issues of sexual harassment in the military began to emerge in the 1990s as well, particularly with news of the Tailhook scandal in 1991. This occurrence at the annual conference of the Tailhook Association, a private organization of active, reserve, and retired navy and Marine Corps personnel (primarily those associated with aircraft carriers and naval aviation), brought new, widespread attention to the issue of sexual harassment within the military. During the conference, a number of female officers became the victims of sexual abuse that occurred in connection with extensive drinking. Although prior to this the service branches had worked toward rape and sexual assault prevention efforts, it was not until 2005 that the Department of Defense initiated its first uniform sexual assault and prevention policy (DOD Directive 6495.01, Sexual Assault Prevention and Response Policy). Along with that policy, the Sexual Assault Prevention and Response Office was established to oversee compliance with this policy.

In 1993, the instatement of Public Law 103-160 (Title 10, Section 654, commonly known as "Don't Ask, Don't Tell") initiated a new period in which homosexual service members could maintain their military status by hiding their homosexuality. By 2008, however, data showed that women were discharged in disproportionate numbers under this law. Nearly one third of all discharges under this law in 2008 were of women, although women made up approximately 15% of the total military strength at that time.

U.S. military involvement in the Middle East under Operation Iraqi Freedom and Operation Enduring Freedom (Afghanistan) continues to give women new opportunities to expand into a number of new roles. Although policy still excluded women

from the infantry and other combat branches, many American servicewomen stationed in Iraq and Afghanistan found themselves participating in combat activities. Eleven percent of all personnel in the Iraq and Afghanistan theaters by late 2009 were female. In 2008, General Ann Dunwoody (U.S. Army) became the first woman promoted to four-star general, followed by General Janet Wolfenbarger (U.S. Air Force) in 2012.

In 2010, the navy announced plans to allow women on submarines for the first time beginning in 2011. Eleven 2010 United States Naval Academy graduates volunteered for submarine duty and were announced as the first women to be selected for this role. Additional volunteers were to come from ROTC and officer candidate schools nationwide.

Additionally, the expansion of women's roles into combat zones and combat activities led to greater awareness about (a) how such participation affects women's bodies, (b) the need for more women's care in the Veterans Administration system, and (c) the effect of posttraumatic stress disorder on women. Concerns over women and pregnancy in war zones became particularly prominent in late 2009 when

Major General Anthony Cucolo announced that women under his command in Iraq could be subject to discharge for becoming pregnant, a violation of policies against sexual activity in war zones. Although his superiors quickly reversed his command, the incident heightened awareness of concerns over women in combat.

Although women have been a permanent part of the military since the middle of the 20th century, gender-based restrictions often kept women in "traditional" roles such as nursing and clerical or administrative positions and out of combat. For most of the 20th century, women made up less than 2% of the nation's total military strength. This percentage began to increase following the end of the draft in 1973, and by 2012, the Department of Defense estimated that women comprised approximately 15% of total military personnel.

Only in the late 20th and early 21st centuries did women begin to serve as nonmedical personnel in combat zones. Combat exclusion policies, primarily those restricting women from the combat branches, continued to exist as of early 2013. However, in January 2013, Secretary of Defense Leon Panetta and



U.S. Army Lieutenant General Ann E. Dunwoody (center) smiles as chief of staff of the army General George W. Casey (left) and her husband, Craig Brotchie, pin the rank of general on her during her promotion ceremony in the Pentagon on November 14, 2008. Dunwoody is the first female in the U.S. military to achieve the rank of four-star general.

Source: Department of Defense photo by Petty Officer 2nd Class Molly A. Burgess, U.S. Navy (released).

Chairman of the Joint Chiefs of Staff Martin Dempsey announced that all combat exclusion policies would be eliminated, including the 1994 Direct Ground Combat Definition and Assignment Rule and other policies that prevented women from roles in combat branches. Full implementation of the new policy is expected by January 1, 2016. Military branches may request exceptions for specific combat roles, but such requests require data to support the need for such exceptions and may only be approved by the Chairman of the Joint Chiefs of Staff and Secretary of Defense.

While the 2013 policy signaled a significant shift in women's military roles, 2013 also saw renewed attention to concerns over military sexual assault and harassment. The officer in charge of the air force's sexual assault prevention program was arrested on sexual assault charges. An unrelated but similar case

involving an army sergeant who served in a sexual assault prevention and response coordination role led to a formal inquiry. At West Point, charges also came against a sergeant who had secretly videotaped and photographed female cadets. In response to these and other concerns, including new data showing a growth in military sexual assault, Secretary of Defense Chuck Hagel announced a number of new efforts to try to eliminate military sexual assault and change the over-all culture toward sexual assault in the armed forces.

Tanya L. Roth

See also All-Volunteer Force; Army Nurse Corps; Diversity; "Don't Ask, Don't Tell"; Family, Military; Gays and Lesbians; Navy Nurse Corps; Rape; Trauma, Military Sexual



U.S. Marines with a female engagement team attached to 3rd Battalion, 5th Marine Regiment, Regimental Combat Team 2 talk with an Afghan man during a security patrol in the Sangin district of Helmand Province, Afghanistan, February 1, 2011. The marines conducted security patrols to decrease insurgent activity and gain the trust of Afghan citizens. The battalion was one of the combat elements of Regimental Combat Team 2, whose mission was to conduct counterinsurgency operations with the International Security Assistance Force.

Source: U.S. Marine Corps photo by Lance Corporal Dexter S. Saulisbury (released).

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Franz Ferdinand in Sarajevo as a pretext for securing greater territorial, military, and economic strength at the expense of their rivals. With the Central Powers of Germany, Austria-Hungary, and the Ottoman Empire squaring off against more than 20 Entente nations (also known as the Allies) led by Britain, France, and Russia, U.S. president Woodrow Wilson made a decision to stay neutral. Neutrality proved difficult to maintain, and for 2½ years the United States found itself embroiled in a series of diplomatic crises that gradually edged the nation nearer to war.

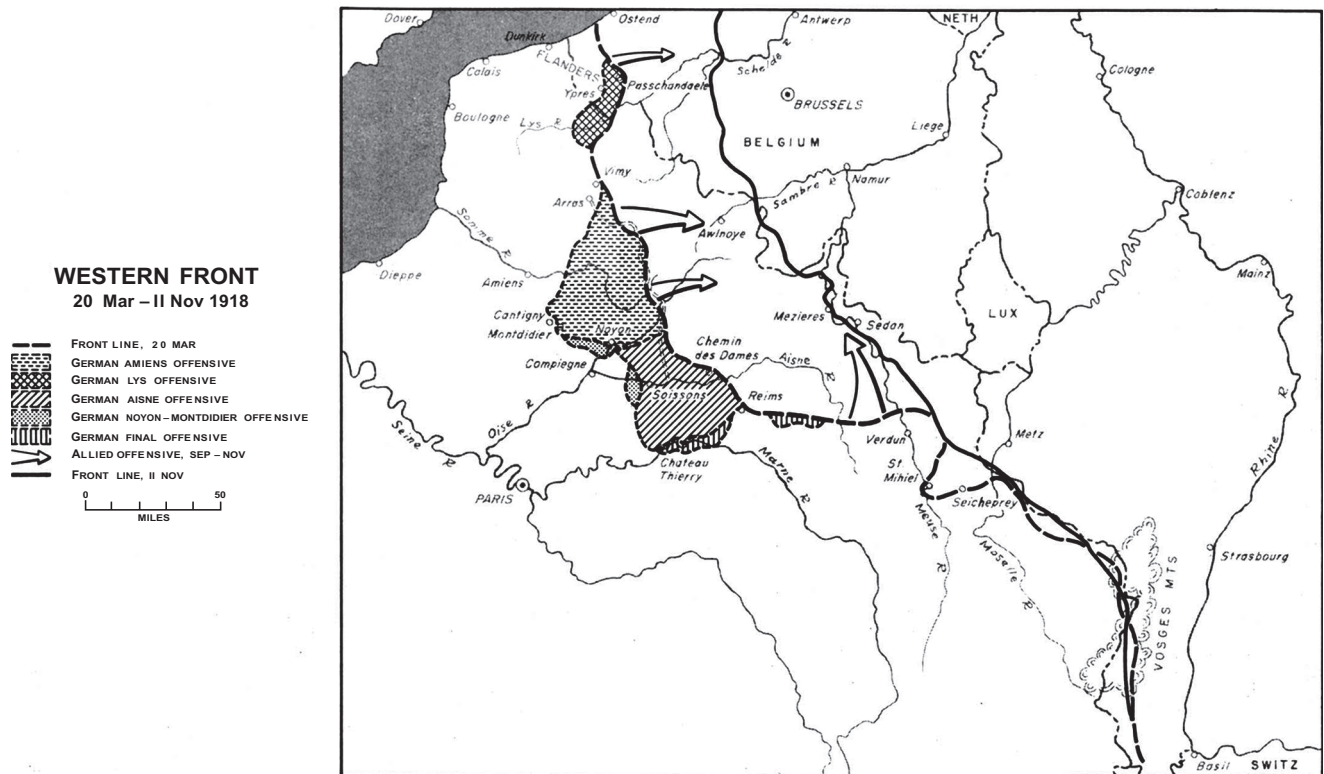
Causes for America's Entry

With their armies locked in a stalemate along the Western Front in 1915, both Britain and Germany tried to gain the advantage by using their navies to disrupt the trade of their enemy. The British established a blockade that included mining the North Sea, while Germany turned to its new weapon, the U-boat or submarine, to launch surprise attacks against merchant and military vessels. Both tactics met with protest from the United States, but the British proved much more successful than Germany in resolving disagreements with the United States through diplomatic channels. In response, for example, to U.S. complaints when Britain added cotton to the contraband list, Britain agreed to buy excess American cotton to stabilize the price. The British blockade did not disrupt the Americans' traditional trading route through the English Channel and consequently trade with Britain (the nation's largest prewar trading partner) boomed. This trading relationship received another boost in January 1915 when the financial giant JPMorgan became the purchasing and contracting agent for the British government within the United States. Over the next 2 years, the House of Morgan worked closely with British military and financial officials to award more than 4,000 contracts worth more than \$3 billion to American businesses. In addition, American bankers extended commercial credit to the Allies that averaged nearly \$10 million a day. By 1916, American trade with Germany was less than 1% of what it had been in 1914, but trade with Britain and France had tripled.

Germany's decision to erect a submarine blockade around British waters proved more contentious. Wilson protested that unconditional submarine warfare (which relied on undetected U-boats firing

WORLD WAR I

War exploded across Europe in August 1914 as the result of key decisions taken by European leaders who tried to use the assassination of Archduke



Map of the Western Front, World War I.

Source: U.S. Army, Center of Military History.

torpedoes) denied civilian passengers the internationally sanctioned right to vacate a merchant ship before its cargo was sunk. On May 7, 1915, a torpedo fired by a German U-boat sank the *Lusitania*, a British passenger ship that also carried munitions, and killed 1,198 passengers, including 127 Americans. In the wake of the sinking, Wilson demanded that Germany pay reparations and accept the right of Americans to travel on any ship they wished. Secretary of State William Jennings Bryan disagreed and, instead, urged Wilson to order Americans to stay off ships headed to the war zone. Bryan soon resigned in protest, and his successor Robert Lansing consistently advised Wilson to take decisive action in response to German provocations. Faced with deteriorating relations with the United States, two other controversial torpedoings eventually convinced Germany to temporarily halt surprise attacks on merchant and passenger ships. In the *Arabic* Pledge on September 1, 1915, Germany agreed to stop firing on passenger ships without warning, and in the *Sussex* Pledge on May 4, 1916,

it promised to refrain from attacking unarmed merchant ships until the crew and passengers could vacate the vessel.

Strong financial ties did not guarantee a trouble-free relationship between Britain and the United States, however. As tension between Germany and the United States eased, U.S.-British relations deteriorated in the wake of Britain's decision to blacklist American firms that traded with Germany and Britain's violent suppression of the 1916 Irish Easter Rebellion. Perhaps more important, a credit crisis loomed that threatened to cut off Britain's access to American goods and financing. The British had exhausted their capacity to borrow money against secured assets, and the Federal Reserve cautioned U.S. bankers against making unsecured loans.

Unaware that collapsing finances might soon stop the flow of U.S. goods to Britain, Germany resolved to reignite unconditional submarine warfare to accomplish the same goal. German officials reasoned that their now substantial fleet of U-boats could sink enough Allied shipping fast enough to

win the war before the Americans could make any difference along the Western Front. In preparation for the January 31, 1917, announcement that Germany would resume unconditional submarine warfare, German foreign minister Arthur Zimmermann attempted to take advantage of the Americans' recent conflicts with the Mexican government. Mexico had objected strenuously when U.S. troops invaded Mexico in 1916 to stop rebel raids along the border; after nearly coming to blows with the Mexican army, American troops withdrew in January 1917. Striking while the iron was hot, Zimmermann sent his famous telegram promising Mexico territorial concessions if it attacked the United States and Germany won the war. In one of the war's great intelligence victories, British agents intercepted and decoded the telegram. They then turned it over to Wilson who made its contents public in March, the same month that Americans began dying when German U-boats sank three American merchant ships.

America Enters the War

With Germany now posing a tangible physical danger to the nation's territorial and economic security, Wilson asked Congress for a declaration of war. On April 6, 1917, the United States declared war on Germany. It did not declare war on Austria-Hungary until December 1917 and was never at war with the Ottoman Empire. In declaring war, Wilson saw a potential opportunity to reshape international relations so that a permanent peace could reign. Dedicated to creating a league of nations that could foster self-determination and free trade, Wilson hoped that a major contribution by American troops on the battlefield would allow the United States to play a key role in shaping the peace settlement.

The United States had made few preparations for war during the period of neutrality. Available active-duty and reserve troops numbered fewer than 350,000, with only enough artillery and ammunition to support approximately 220,000 men. When the war ended on November 11, 1918, the Americans would look back over the past 19 months and marvel that they had managed to raise an army of more than 4 million men, transport 2 million to France, and command a field army of

1.2 million in major offensive operations along the Western Front. Despite these significant achievements, the Americans paid a price for their inexperience and unpreparedness. American-commanded operations in the last 4 months of the war (when the United States took over its own sector of the Western Front) were hampered by disorganization in the rear, high casualty rates, and constantly changing leadership—problems all symptomatic of an army forced by circumstances to fight before it was fully trained and formed.

American Strategy

The American Expeditionary Forces (AEF) commander, John J. Pershing, had perhaps greater latitude than any American commander before or since to direct overall military operations as he saw fit. In the summer of 1917, Pershing selected the Lorraine sector as the eventual site for an independent American presence along the Western Front. He also devised an overall strategic plan that settled on taking Metz, the site of critical railroads, as the key to defeating Germany. To fight in the open terrain of the Moselle Valley, Pershing developed an open warfare strategy that served his dual purposes of training his army to fight in this region while also creating a uniquely American combat doctrine that would clearly separate American fighting technique from that of the French or British. Open warfare became Pershing's mantra throughout the war, a concept defined as much by the failings he saw in the Allied approach to war as his eagerness to champion American initiative and individualism. Trench warfare, the AEF commander concluded, had weakened the aggressive spirit of the Allied forces, and now their troops fought ineffectively when forced out of the trenches and into the open battlefield. To further this goal of open warfare, Pershing decided to form divisions twice the size of their Allied counterparts and to privilege the firepower of the infantry over the artillery. As a result, American divisions went into combat with the same artillery as European divisions half their size and with a combat doctrine at odds with the military values embraced by the nation's major allies.

Pershing's steadfast commitment to creating an independent army caused much conflict with the

French and the British. Throughout the war, French general Philippe Pétain argued forcefully that it would be more efficient to funnel fresh American troops into existing Allied divisions. Pershing's reliance on his allies to train, transport, and equip his troops did force some compromises in how and where the Americans fought. Although Pershing repeatedly resisted Allied demands to amalgamate American troops permanently into their armies, American units did a significant amount of fighting under British and French command. Between March and July 1918, German forces under the command of General Eric Ludendorff launched a series of five major assaults against the British and French lines, and by May, the German army was within 40 miles of Paris.

Key Battles

Ultimately the assault collapsed due to poor logistical support on the German side, but the arrival of American troops on the battlefield at key moments also helped stem the German advance. In March, at the height of the German spring offensives, Pershing offered American troops to Marshal Ferdinand Foch, the newly appointed Supreme Commander of the Allied Armies on the Western Front. For the next 2 months, American troops occupied quiet sectors of the front to free up more experienced British and French soldiers before undertaking the first major American-commanded engagements of the war at Chateau-Thierry (May 27 to June 5, 1918), Cantigny (May 28–31, 1918), and Belleau Wood (June 6–25, 1918), which helped stem the German offensive. Over the summer, the Americans joined the Allied counteroffensives, which included successful fighting at Soissons (July 18–22, 1918), a battle that Pershing considered as the turning point that put the Germans on the defensive for the rest of the war.

In September 1918, the AEF successfully executed part of Pershing's initial strategic plan by straightening out the St. Mihiel salient (September 12–16, 1918). Pershing had expected this battle to put the Americans in a better position to launch their planned 1919 attack on Metz. Instead, it proved a costly diversion that left the Americans with only 2 weeks to get into position 60 miles away to begin the Meuse-Argonne offensive, the American component of the final coordinated Allied attack along the Western Front that would end in an eventual Allied

victory. Contrary to American expectations, their larger divisions often proved unwieldy and difficult to maneuver during this final 47-day battle that lasted from September 26 to November 11, 1918. The battle was the largest American military engagement to date, engaging 600,000 men, 4,000 artillery guns, and 90,000 horses on the opening day. Nearly 45,000 men were killed and wounded in the first 4 days of the battle, and more U.S. troops died in September and October, 1918. Some of these casualties were the result of poor command decisions and inadequate training. Huge traffic jams in the rear prevented supplies from reaching the front lines, further hampering the progress of the Americans. The fighting ability of the AEF improved as the battle wore on, however, and the final days saw the introduction of rear-area aerial bombing, better coordination between the infantry and artillery, and the use of infantry assault teams to knock out machine gun nests. By early November, the Allies had captured one fourth of the German army and half of its guns along the Western Front. With the newly introduced convoy system reducing the effectiveness of U-boats and millions more Americans on their way to the Western Front, Germany sued for an armistice. Overall, nearly 53,500 American men died in combat compared with 1.3 million Frenchmen and 900,000 British.

Historical Interpretations

In assessing the American experience of war, historians have focused on the path to war, the strategic decisions and mistakes made by military commanders, and the contribution of the United States to the eventual Allied victory. On America's decision to declare war, scholars have disagreed about which factors played the most decisive role in prompting Wilson to abandon neutrality for belligerency—financial ties with the Allies, concerns about German aggression, or his desire to shape the peace. Historian Ross Gregory, in *The Origins of American Intervention in the First World War* (1971), notes that disproportionate trading and lending to the Allies increasingly tied American economic prosperity to an Allied victory, while negative publicity surrounding the *Lusitania* and Zimmermann Telegram hardened American views against Germany. This emphasis on the trade benefits that war bestowed has fallen out of favor, although Benjamin O. Fordham

has recently argued for a reconsideration of economic causes to explain American entry into World War I. Wilson's biographer, John Milton Cooper Jr., in his *Woodrow Wilson: A Biography* (2009), emphasizes Wilson's activist personality. Facing the prospect of an indefinite period of armed neutrality and languishing interest in his "peace without victory" proposals, Wilson decided to support a war with Germany to achieve his larger goal of creating a new structure to govern international relations in the postwar world. Lloyd E. Ambrosius in his *Wilsonianism: Woodrow Wilson and His Legacy in American Foreign Relations* (2002) agrees that Wilson's desire to spread American-style democracy and capitalism were the catalyst that drew the United States into war but disagrees with Cooper on the legacy of this decision. Whereas Cooper observes the origins of fundamentally sound democratic values that would guide future foreign policy, Ambrosius laments the birth of a destructive messianic impulse that would justify countless American interventions throughout the world in the 20th century. Presidents after the Wilson era viewed World War II and the Cold War as a second chance to realize Wilson's vision of constructing a new world order. Drawing lessons from both Wilson's rhetoric and failures, American leaders as diverse as Harry Truman, Lyndon Johnson, and Richard Nixon continued to believe that America's national security depended on spreading democracy and active engagement in the world even as they sought alternative routes to realize Wilson's vision of collective security.

Scholars have also focused on how well the American Army performed during the war. Pershing took the lead in establishing one major interpretative school of thought with his two-volume autobiography, *My Experiences in the World War* (1931). This memoir championed Pershing's tenacity in overcoming Allied resistance to build an independent army that, after a few trials by fire, evolved into a first-rate fighting force that played a critical role in winning the war. Historians such as Harvey A. DeWeerd, *President Wilson Fights His War: World War I and the American Intervention* (1968), and Edward Coffman, *The War to End All Wars: The American Military Experience in World War I* (1968) added some qualifications to this tale of glowing success, but it wasn't until the 1970s and 1980s that revisionist scholars began to fully attack the Pershing narrative. James

W. Rainey, Timothy K. Nenninger, Donald Smythe, and Paul Braim instead portrayed the AEF as a poorly trained, led, supplied, and deployed force whose slow improvements over time did not excuse the initial mistakes made by AEF commanders. Many scholars took issue with Pershing's insistence on undertaking the preplanned attack on St. Mihiel after Foch made it clear that the Americans would need to take part in a coordinated Allied attack 2 weeks later. Arriving at the Meuse-Argonne with his best troops tired and their logistical network in disarray, the Americans entered this major battle at a disadvantage. Mark E. Grotelueschen, *The AEF Way of War: The American Army and Combat in World War I* (2006), and Edward G. Lengel, *To Conquer Hell: The Meuse-Argonne, 1918* (2008), have tried to change the tenor of this debate by moving the spotlight away from top-level leadership and instead focusing on the learning curve under way within divisions and companies among the officers and men directly involved in the fighting. Rather than painting the British and French as corrupting forces within the AEF, these two have emphasized how commanders and men adapted their methods of fighting based on actual combat experiences and interaction with Allied instructors and liaisons. They find successes as noteworthy as failures, striking a middle ground between the Pershing narrative and revisionist accounts. In their view, the most substantial and effective learning occurred bottom-up. Other historians have taken issue with the tendency to judge American success by how well Pershing realized his goal of creating an independent army. David Trask, *The AEF and Coalition Warmaking, 1917–1918* (1993); Robert Bruce, *A Fraternity of Arms: America and France in the Great War* (2003); and Mitchell Yockelson, *Borrowed Soldiers: Americans Under British Command, 1918* (2008), have instead emphasized the importance of American participation in coalition fighting, seeing this as the real lesson to be learned from the war.

More disagreement surfaces when evaluating the ultimate role that the United States played in winning the war. John Mosier, *The Myth of the Great War: A New Military History of World War I* (2001), carries Pershing's claim that the Americans were responsible for the Allies' decisive win into the present day. On the other side of the pendulum, World War I historians Gary Sheffield, Robin Prior, Trevor Wilson, Tim Travers, and Ian Beckett view

WESTERN UNION TELEGRAM
NEWCOMB CARLTON, PRESIDENT

Send the following telegram, subject to the terms on back hereof, which are hereby agreed to

**GERMAN LEGATION
MEXICO CITY**

via Galveston

JAN 19 1917

862.20219/124

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98092	5905	11311	10392	10371	0302	21290	5161	39695	
23571	17504	11269	18276	18101	0317	0228	17694	4473	
22284	22200	19452	21589	67893	5569	13918	8958	12137	
1333	4725	4458	5905	17166	13851	4458	17149	14471	6706
13850	12224	6929	14991	7382	15857	67893	14218	36477	
5870	17553	67893	5870	5454	16102	15217	22801	17138	
21001	17388	7446	23638	18222	6719	14331	15021	23845	
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23610	18140	22260	5905	13347	20420	39689	13732	20667	
6929	5275	18507	52262	1340	22049	13339	11265	22295	
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Charge German Embassy.

Zimmermann Telegram as Received by the German Ambassador to Mexico, January 19, 1917.

Source: Courtesy of the National Archives.

the American military contribution as negligible, citing instead British and French improvements in war making, especially the coordination between infantry and artillery that allowed a breakthrough in the

trench deadlock to occur in 1918. In these accounts, the long learning curve reached fruition when the Allies learned how to harness the power of their own artillery. Most American scholars of the AEF

are more circumspect about the overall difference the AEF made to the ultimate victory. Most contend that the Americans may not have won the war for the Allies, but they certainly kept them from losing it. They emphasize the infusion of American troops that helped stem the German spring offensives and fueled the overall Allied advance, German demoralization when faced with the prospect of millions more Americans arriving in the coming year, the effectiveness of the American convoy system, and the importance of ongoing American financial support as critical contributions that the United States and its armed forces made to the Allied victory.

Jennifer D. Keene

See also American Battle Monuments Commission; American Legion; Laws of War; Submarines; Tanks; Total War; Weapons, Chemical; World War II

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WORLD WAR II

What historians and the public refer to as World War II was the joining, between 1937 and 1941, of two separate but related conflicts: the Second Sino-Japanese War, which began in July 1937, and the Second World War in Europe, which began with the German invasion of Poland in September 1939. The European war ended with Germany's unconditional surrender in May 1945, and Japan's surrender in August 1945 ended the war in Asia and the Pacific. The Second World War claimed between 50 and 70 million lives. Of this total, the United States suffered 322,000 dead.

World War II featured two alliances, the Axis and the Allies. The primary Axis nations included Germany, Italy, and Japan, while the major Allied powers included Great Britain, the Soviet Union, China, and the United States. However formidable, the Axis was a far weaker coalition, and in 1939, its combined population was scarcely greater than the Soviet Union's, while U.S. industrial production equaled the combined Axis output as early as 1942.

The War in Europe, September 1939 to December 1941

The origins of the war in Europe are clear and explicit, and the responsibility rests with Adolf Hitler and Nazi Germany. Shortly after assuming complete control of the German government in 1934, following the Nazi Party's solid gains in the elections, Hitler's appointment as German chancellor in 1933, and President Paul von Hindenburg's death in 1934, Hitler began to systematically violate the Versailles Treaty, the 1919 agreement that ended World War I. After Germany absorbed Czechoslovakia in March 1939, England and France abandoned their policy of appeasement, whereby Germany had been allowed to unilaterally abrogate existing treaty agreements, and publicly pledged to defend Poland and other nations from German aggression. The August 1939 Nazi-Soviet nonaggression agreement freed Hitler from the prospect of a two-front war and facilitated the September 1, 1939, invasion of Poland. Within days of the attack, Britain and France promptly honored their commitment and declared war on Germany.

Despite Anglo-French support, Poland fell within a month. In Poland, and again in early 1940 against Denmark and Norway, the German military displayed its new Blitzkrieg strategy (lightening war), which combined land and air assaults and the employment of airborne and armor for maximum effect. The Germans applied this new doctrine again in the spring of 1940 when they bested the Belgian, Dutch, and French armies in just 6 weeks. While slightly outnumbered in infantry, artillery, and armor, superior German tactics and control of the air, combined with Allied mistakes and low morale, doomed France. Only the May 26 to June 4 "Miracle at Dunkirk," in which the British evacuated the bulk of their army, some 340,000 soldiers, ahead of the advancing Germans, lessened the enormity of the Anglo-French defeat.

Although successful on the Continent, the German war machine faltered when the Luftwaffe (German air force) attempted to gain air supremacy over southern England in preparation for a cross-channel invasion. Germany's defeat in the August to October 1940 Battle of Britain prevented a seaborne invasion of the British Isles, and American aid during the winter and spring of 1940–1941 helped sustain British resistance. Washington's transfer of 50 World War I-era destroyers proved vital to Britain's antisubmarine campaign, and the massive Lend Lease program, under which Washington eventually directed \$50 billion in aid to Allied nations, ensured England's survival. Unable to defeat Britain or starve it into submission, Hitler turned his attentions elsewhere.

In June 1941, Germany launched Operation Barbarossa, a massive three-pronged assault against the Soviet Union, involving some 4 million men along a nearly 1,500-mile-long front. Stunned, the Soviets experienced staggering losses, both in terms of manpower and territory. By December, the Red Army had nearly three quarters of a million dead and, partly because of Joseph Stalin's order forbidding retreat, some 3 million men captured. By this time, German forces occupied the Baltic states of Latvia, Lithuania, and Estonia, as well as present-day Belarus and the bulk of the Ukraine and had advanced to the gates of Moscow. On December 5, 1941, however, the Soviets launched a successful counterattack, thus sparing their capital and avoiding defeat. Two days later, the USSR won another great victory when the United States entered World War II.

Asia and the Pacific, July 1937 to December 1941

While the causes of the war in Europe are clear, the origins of the Second World War in Asia and the Pacific are more difficult to trace. That being said, the conflict resulted in large measure from the American response to the Sino-Japanese War, which began in July 1937 following a clash between Japanese and Chinese forces at the Marco Polo Bridge on the outskirts of Peking, as well as the course of the fighting in Europe.

The Sino-Japanese War immediately alarmed the Western democracies and exacerbated Japan's relations with the United States. Beginning in 1938, Washington built up its naval forces, instituted

economic restrictions against Japan, and increased aid to the beleaguered Chinese. Japan responded to America's naval buildup, economic sanctions, and aid to China, as well as continued Chinese resistance and Germany's early overwhelming victories in Europe, by joining the Axis Alliance in September 1940. Rather than deter the United States, as Japanese diplomats had hoped, this action only worsened Japanese-American relations. The United States, for example, increased both sanctions and rearmament after September 1940, especially once it became clear that England would prevail in the Battle of Britain. Washington also pursued diplomacy during the winter and spring of 1941, when England's future appeared in doubt, and again in the autumn of 1941, when it looked like the German blitzkrieg would bring down the USSR. Neither American sanctions, which culminated in a general Anglo-American-Dutch embargo in the summer of 1941, nor American-Japanese diplomacy, which featured a proposed leaders' summit and multiple plans to avoid war, could keep the peace in the Pacific. Denied access to Western oil, Japan struck the United States at Pearl Harbor on December 7, 1941, and launched near-simultaneous strikes against British and Dutch targets. With Washington's swift declaration of war the next day, and Germany's immediate decision to enter the war on the side of Japan, the wars in Europe and Asia were joined.

Europe, 1942–1945

With America's entry into the war and Russia's continued survival, the prospects for a German victory dimmed. On the Eastern Front, the Red Army tied down the bulk of the German military for the remainder of the war. In the spring of 1942, the *Heer* (German army) continued its advance deeper into the Soviet Union, but unlike 1941, the Germans could only advance along one front. As in the previous summer, the Red Army initially proved no match for the Germans, whose Army Group South steadily advanced toward the Volga River and farther south toward the Caucasus oil fields. After the Germans entered Stalingrad in November 1942, Soviet forces fought tenaciously to hold the city. In a few weeks, the Red Army managed to encircle the city, trapping the 300,000 German troops in and around the city. Unable to break out, the survivors, numbering less than 100,000, surrendered in February 1943.

The following spring, the Germans once again took the offensive until the Soviets decisively defeated them at Kursk, in eastern Ukraine, in a battle in which more than 2.5 million men and 7,000 tanks took part. After the Battle of Kursk in July and August 1943, the initiative passed to the Soviets who for the next 2 years pushed the retreating Germans all the way to Berlin.

As the Red Army struggled to stem the German invasion, the United States and Great Britain fought an equally formidable, though less deadly, German enemy: the U-boat. From the war's outset in September 1939, German raiders, surface ships, aircraft, and mines all took a heavy toll on Allied merchant ships, but even combined, they caused far less damage than German submarines. As the number of U-boats grew from 57 in September 1939 to 300 in July 1942, Allied losses mounted. With the U.S. entry into the war, German submarines, now free to carry their attacks to American shores, celebrated the "Happy Time," a period when they took advantage of American inability to protect coastal shipping in order to inflict devastating losses. By the summer of 1942, German submarines were able to sink 7 million tons of Allied shipping (an average merchant ship displaced 5,000 tons) in the Atlantic war zone. By the following summer, however, the Allies had averted disaster and won the "Battle of the Atlantic."

First, the Allies minimized losses by using radio intelligence to locate concentrations of German submarines and reroute merchant ship convoys away from the danger. Next, American naval expansion provided some 200 additional escort ships as well as new escort carriers, which carried 20 aircraft each and provided an "air umbrella" for the threatened convoys. By this time, the deployment of the VLR (very long range) B-24 Liberator to bases in Canada, Iceland, and the British Isles allowed for near-continuous air patrols over the convoy routes. Escort ships and air power saved Allied ships from destruction while increasing the danger to German submariners. By the spring of 1943, German submarines were forced to travel more time submerged, which slowed their travel and expended precious fuel, or face destruction from above. In May 1943 alone, Germany lost 43 submarines, a number that forced Berlin to recall its vulnerable U-boat fleet from the high seas and led the fleet's commander, Admiral Karl Doenitz, to conclude, "We had lost the Battle of the Atlantic."

In addition to defeats in Russia and on the high seas, Germany also faced an increasingly withering Anglo-American bombing campaign. While fortunes were reversed early in the war, particularly during the Battle of Britain, and again during the war's final month when German V1 and V2 rockets rained down on London, by mid-1942, the Anglo-American bombing offensive was under way. The American 8th Air Force, the first U.S. bombers to carry the war to Germany, began its mission in August 1942. American bombers flew predominately daytime raids and practiced precision bombing. In contrast, the more lightly armed Royal Air Force bombers more often bombed at night and commonly practiced area bombing, whereby a general area, rather than a specific target, was attacked.

In the spring of 1943, the joint Anglo-American Combined Chiefs of Staff (see below) agreed to Operation Pointblank, a combined British-American bombing campaign designed to strike German air, sea, and ground forces and their supporting infrastructure (i.e., ball bearing plants, oil refineries, tank farms, submarine pens, etc.) in order to weaken the military, break the will of the German people, and pave the way for the invasion of German-occupied Western Europe. The 8th Air Force temporarily suspended daylight bombings after Black Week, the series of October 1943 raids against multiple targets—including the heavily defended ball bearing factories in Schweinfurt—which resulted in the loss of one in four of the attacking B-17 bombers. Operations resumed the following February, however, with the addition of long-range escort fighters. The bombing campaign reached its height in 1944, when the combined Anglo-American bomber fleets, augmented by the U.S. 15th Air force, based in Italy, dropped slightly less than 1 million tons of ordnance on German targets.

All told, the bombing of Germany killed nearly 600,000 German civilians and cost the lives of slightly fewer than 160,000 Allied airmen. Efforts to break German morale, however, failed, despite instances of terror bombing, including the July 1943 raids on Hamburg that resulted in 45,000 civilian deaths. Strategic bombing, meanwhile, did not cripple German industry but did cut aircraft and tank production by better than a third and drastically affected German oil output and transportation. Perhaps most important from the standpoint of Pointblank's original goals was that by D-Day, the



Coast Guardsmen on the deck of the U.S. Coast Guard Cutter *Spencer* watch the explosion of a depth charge that blasted a Nazi U-boat's hope of breaking into the center of a large convoy. The depth charge tossed from the 327-foot cutter blew the submarine to the surface, where it was engaged by Coast Guardsmen. Ships of the convoy may be seen in the background. The Nazi U-175 was actually targeting the tanker *SS G. Harrison Smith*. The Germans had already entered the targeting information on their torpedo data computer when the *Spencer* first attacked. *Spencer's* timely and effective attack thereby saved the tanker and her crew.

Source: Jack January, U.S. Coast Guard.

bombing campaign had destroyed the Luftwaffe as an effective fighting force as the Germans lost some 15,000 aircraft in a vain effort to save their cities from destruction.

As the Red Army blunted and then threw back the German invasion and Anglo-American naval and air forces turned the tide of battle in their respective theaters, Britain and America prepared to open a second front in German-occupied France. Soon after entering World War II, the U.S. military developed a plan, Operation Sledgehammer, for a cross-channel invasion. British resistance and a lack of landing craft led officials to scrap the plan in favor of Operation Torch, the November 1942 invasion of French North Africa. Torch allowed the Allies to advance on the Italians and the vaunted German Africa Corps led by Erwin Rommel, from two directions. With the British advancing from Egypt and the Americans, having recovered from an early setback in the February 1943 Battle of the Kasserine Pass, advancing from Tunisia, the Allies drove the Axis from North Africa in May 1943.

The Allies next struck Italy, first with assaults on the island of Sicily in July 1943, before moving on to the Italian mainland in September 1943. The September landing produced a quick Italian surrender but no peace, as the German forces soon occupied the bulk of the peninsula. For the remainder of the war, Italy proved a deadly theater where German forces, and those Italians that remained loyal to the Italian dictator Benito Mussolini, fought Allied forces and anti-Fascist Italians until the war's final hours in May 1945.

While the fighting at sea, in the air, and in peripheral theaters such as North Africa and Italy was important, the war was won on two decisive fronts: first in the East and then, after considerable delay, in the West. The long awaited Allied landings in France at last materialized on June 6, 1944, when a little more than 150,000 Allied troops landed or air-dropped on or near five French beaches along the Normandy Coast. After weeks of buildup and fighting in the coastal hedgerow country, American forces broke through German defenses on July 25. Paris fell to advancing Allied armies on August 25,



Hauled in from the mid-Atlantic, crewmen from the sinking Nazi U-175 huddle on the quarterdeck of a Coast Guard combat cutter. They were marked as prisoners of war and sent to a prison camp in Britain.

Source: Jack January, U.S. Coast Guard.

but German forces shattered hopes for an early peace with an unexpected and successful December counteroffensive against Allied forces in northern France, Luxembourg, and Belgium. During the nearly 6-week-long Battle of the Bulge, U.S. casualties numbered almost 90,000, while German losses, by some estimates, reached as high as 100,000.

During the war's final months, Allied armies advanced on Germany from two directions. In the west, Allied forces poured into Germany in late February and March with American forces halting along the Elbe River, approximately 150 kilometers from Berlin. The Soviets, meanwhile, began Operation Bagration, a massive counteroffensive against the overstretched Germans, just 2 weeks after the Normandy landings, which propelled the Red Army into Eastern Europe. The battle for Berlin resulted in 300,000 Red Army casualties; Berlin fell to the Soviets on May 2, and 5 days later, German forces unconditionally surrendered to the Allies, marking the end of the war in Europe.

Asia and the Pacific, 1942–1945

While German conquests had reached flood tide by the time the United States entered the war in

Europe, the opposite was true in Asia and the Pacific where, for the first 6 months of the war, Japanese forces were all but unstoppable. Between December 1941 and May 1942, Tokyo conquered the crucial British colonies of Malaya, Singapore, and Burma, the Dutch East Indies, and America's colony, the Philippines. Japanese forces also penetrated deep into the Pacific, overrunning the American outposts in Guam and Wake Island and British possessions in the Gilbert and Solomon Island chains.

Although the United States achieved a major psychological victory with the April 1942 Doolittle raid, in which 16 carrier-borne bombers struck Tokyo and four other cities and blunted Japan's advance toward Australia in the May 1942 Battle of the Coral Sea, Tokyo's first major defeat came in June 1942, at the Battle of Midway. There, Japan lost four aircraft carriers; after Midway, the naval balance of power in the Pacific swung decidedly to the United States, where it remained for the war's duration.

Following its victory at Midway, the United States led an island-hopping campaign across the Pacific. Beginning at Guadalcanal from August 1942 to February 1943, the United States and its allies attacked select islands as part of a strategy that

sought first to establish airbases with which to interdict supplies and bomb targets in the home islands, before seizing bases nearer Japan, which could be used in the event of an invasion. During the summer of 1944, American forces seized key islands in the northern Marianas that allowed the United States to begin a sustained bombing campaign against targets throughout Japan.

From February to August 1945, B-29 bombers of the American 21st Bomber Command operating out of the newly won bases in the Marianas struck nearly every major Japanese city. Flying at night and using incendiary bombs, U.S. forces had, by the start of summer of 1945, killed some 260,000 people while leaving an additional 10 plus million homeless. During this same period, American forces carried island hopping closer to Japan. In February, U.S. Marines landed on Iwo Jima where more than 6,000 Americans and 21,000 Japanese died before the island fell the following month. From April to June 1945, an overwhelmingly American-led force seized the Japanese island of Okinawa in preparation for an invasion of the home islands. At Okinawa, the Japanese used almost 2,000 kamikaze attacks, where pilots deliberately crashed their explosive laden aircraft into the predominately U.S. flotilla. All told, nearly 7,000 Americans and 110,000 Japanese lost their lives at Okinawa.

In addition to its setbacks throughout the Pacific, Japan also found itself on the defensive in Southeast Asia. After blunting the Japanese invasion of India in the spring of 1944, a largely British-led counterattack retook most of Burma by war's end. Elsewhere, American forces retook the Philippines during the autumn and winter of 1944 and destroyed some 300 aircraft and more than 60 warships during the October 23–26 Battle of Leyte Gulf. Only in China could the Japanese forces still take the initiative, and during Operation Ichi-Go, mounted from April to December 1944, Japanese forces won repeated victories over Chinese Nationalist forces in central and southern China.

Despite losses in the Pacific and Southeast Asia and the American-led bombing campaign, Japan refused to surrender. The long-awaited invasion, however, which was slated to begin in November with an invasion of Kyushu at a projected cost of 268,000 American casualties, never occurred. Instead, Japan capitulated on August 15, following the August 6 atomic bombing of Hiroshima,

the Soviet Union's declaration of war on August 8, the August 9 atomic attack on Nagasaki, and the American decision on August 11 to allow Japan to retain Emperor Hirohito. The war in Asia and the Pacific formally ended with the signing of the instrument of surrender on board the USS *Missouri* on September 2, 1945.

Wartime Diplomacy and Military Cooperation

Part of the Allies military success can be explained in reference to the extraordinary degree of Anglo-American political and military cooperation and the ability of the “Big Three” powers—the United States, Great Britain, and the Soviet Union—to work in relative harmony despite their often divergent war aims. In contrast, the Axis powers never achieved this level of cooperation and coordination. Hitler and Japan's wartime Prime Minister Hideki Tojo, for example, never met nor did the two sides share their plans or intentions. Berlin never informed Tokyo of its intention to either conclude a nonaggression agreement with Moscow in August 1939 or its plan to break the agreement and attack the USSR in June 1941. For their part, Japanese leaders neither informed German officials of the impending April 1941 neutrality agreement with Moscow nor of their plan to go to war with the United States, Great Britain, and the Dutch Empire in December 1941. Nazi Germany and Fascist Italy cooperated to a greater degree, and Hitler and Mussolini met 17 times between 1934 and 1944. Despite their frequent meetings, however, the two leaders never achieved the level of cooperation enjoyed by the U.S. president Franklin D. Roosevelt and the British prime minister Winston Churchill.

Axis efforts to coordinate their vast military machines likewise failed, despite the 1942 agreement to divide the globe into three operational zones. Senior German commanders, for example, discouraged their subordinates from liaising with their Japanese counterparts, divulging war plans, or securing direct Japanese military participation in German operations. Italian-German military cooperation fared little better and focused more often than not on each nation's military priorities rather than joint planning for common objectives. Early in the war, this lack of cohesion was most apparent in France, where Italy declared war only on June 10, a

month after the campaign had begun, and in Greece, where Germany intervened in April 1941, 6 months after Mussolini's invasion had begun. Later in the war, Italian-German cooperation splintered as each nation vied for influence in occupied territories such as Croatia, and by the time the Allies landed in Sicily in July 1943, control had replaced cooperation as the Italian defenders had ceded to their German partners the defense of their home soil. Set against this dismal record of cooperation, the Allies managed to maintain unity despite their divergent goals and dissimilar political and economic institutions.

Throughout the war, the core of the alliance remained the "special relationship" forged by the United States and the United Kingdom. In fact, Anglo-American cooperation began long before the first bombs fell on Pearl Harbor. In June 1941, secret talks, dubbed ABC 1, began in Washington, D.C., between senior American, British, and Canadian military officials. By the time the talks concluded in March, the conferees had agreed to focus their shared resources on the defeat of Germany while waging a defensive struggle against Japan in Asia and the Pacific.

Military cooperation was soon matched by collaboration among senior American and British civilian officials. In August 1941, President Roosevelt and Prime Minister Churchill met for the first time. During the secret talks, held off the coast of Newfoundland, Canada, the two leaders, accompanied by senior military and civilian advisors, refined earlier military planning and produced the Atlantic Charter, an extraordinary document that delineated the common Anglo-American war aims and vision for the postwar world. Included in the document was a common pledge to forgo territorial aggrandizement while seeking free access to raw materials, political self-determination, and the peaceful resolution of disputes.

With America's entry into the war 4 months later, Anglo-American military and political cooperation increased. Just 2 weeks after Pearl Harbor, Prime Minister Churchill arrived in Washington for the nearly 3-week-long Arcadia Conference. Arcadia reaffirmed the Germany-first strategy, produced the Declaration of the United Nations (essentially a restatement of the Atlantic Charter), and created a common British and American Combined Chiefs of Staff. The creation of the Combined Chiefs of Staff, which underscored the need for greater cooperation

within the U.S. military, quickly led to the creation of the U.S. Joint Chiefs of Staff a month later.

In June 1942, Churchill arrived in Washington yet again and U.S. and British officials agreed to forgo an immediate cross-channel invasion in favor of landings in French North Africa. Two months after the successful Torch landings, Churchill and Roosevelt held their fourth meeting, this time in Casablanca, French Morocco. At Casablanca, the two leaders announced the unconditional surrender policy for the defeated Axis and worked to ameliorate differences between Charles de Gaulle and Henry Giraud, competing leaders for the Free-French movement. At Casablanca, the Combined Chiefs met regularly and formulated plans to invade Italy before the year's end.

The war in Asia and the Pacific dominated the next major conference, held in Cairo, Egypt, in November 1943. Cairo furthered wartime cooperation by including the Chinese leader Generalissimo Chiang Kai-shek and produced an agreement to strip Japan of its entire overseas empire, including gains dating back to the 1894–1895 Sino-Japanese war. From Cairo, Churchill and Roosevelt flew to Tehran, Iran, for the first of the "Big Three" summits with the Soviet leader Joseph Stalin. At Tehran, Roosevelt labored successfully to establish a working relationship with Stalin, who promised to launch a major offensive on the Eastern Front to coincide with the Normandy landings.

The next "Big Three" summit, held in Yalta on the USSR's Crimean Peninsula in February 1945, was far more significant and far more contentious than Tehran. At Yalta, Roosevelt gained Stalin's commitment to join the United Nations as well as vague Soviet guarantees to hold free and fair elections in Poland. The three agreed on German reparations and to include France in Germany's postwar occupation. Anxious to secure Russian participation in the coming invasion of Japan, Roosevelt also secured Stalin's pledge to enter the war in Asia and the Pacific 90 days after Germany's surrender.

The last major wartime conference, held at Potsdam in defeated and occupied Germany during July 1945, featured two new figures. President Roosevelt had died the preceding April and so Harry S. Truman attended his first, and last, World War II summit. A second new face at Potsdam was Clement Attlee, who replaced Churchill midway through the conference after his Labor Party swept to victory in

the British national elections. Despite new personalities, the conferees agreed on German occupation zones, Poland's new western border, and limitations on Russian reparation from occupied Germany.

Despite its focus on Germany, the conference is best known for the July 26 Potsdam Declaration. Issued just 10 days after the successful atomic bomb test at Alamogordo, New Mexico, the declaration called for Japan's unconditional surrender, despite urging from the then undersecretary of state and former ambassador to Japan, Joseph Grew, that the Allies guarantee the continuation of Japan's imperial system. Although some of the scientists who created the bomb urged a test demonstration rather than an attack on Japan, Tokyo's swift rejection of the declaration led to the twin atomic attacks on Hiroshima and Nagasaki.

Industry, Science, and Manpower

In addition to the remarkable achievements secured by the Allied soldiers and statesmen, victory over the Axis also rested, in part, on the unmatched industrial and scientific output of the United States, Great Britain, and the Soviet Union, as well as the manpower of these nations and China. American industry, one key to the Allied victory, outproduced the entire Axis by the end of 1942. Between the fall of France and VJ Day, 62 months later, the United States produced nearly 300,000 aircraft, more than 75,000 ships, and some 87,000 tanks. British scientists, meanwhile, pioneered the development of radar and jet engine technology and played a critical role in the success of the American-led Manhattan Project, which developed the atomic bomb. Although Soviet technology lagged behind that of America and Britain, the USSR made significant improvements in aircraft design and also produced remarkably reliable and resilient weapons such as the T-34 tank. Although the T-34 and the vastly inferior U.S. Sherman tank were outmatched by the main German battle tanks, the Panzers III and IV, U.S. and Soviet industry outproduced the Germans by a ratio of more than 5:1. German inability to match Soviet-American tank production was also indicative of another, deeper problem. The nation with the finest armor, first operational jet aircraft (the Messerschmitt 262), and long-range surface-to-surface missiles (the V1 and V2 rockets) could not produce an adequate long-range bomber or even

sufficient mechanized transport. Two years into the war, at the start of Barbarossa, German horses outnumbered German mechanized transport.

Just as Allied war production overwhelmed the Axis, so too did Allied manpower. Though its population was dwarfed by the other combatants, Great Britain summoned the Commonwealth and the near limitless manpower reserves of its empire, most notably India, whose army numbered nearly 2.5 million by the war's end. Nationalist China, meanwhile, maintained an army of some 5 million, only half a million men fewer than the Japanese army, while the United States built a military of nearly 16 million men and women. The Soviet Union, despite wartime losses of some 26 million, conscripted nearly 30 million soldiers, 10 million more than Germany during the period from 1934 to 1945.

Continuing Controversies

The passage of time has not erased the many historical controversies created by World War II. First and foremost for some Americans is the controversy surrounding the Japanese attack on Pearl Harbor. Beginning with books such as Charles Tansill's *Back Door to War: The Roosevelt Foreign Policy, 1933–1941* (1952) and later Robert B. Stinnett's *Day of Deceit: The Truth About FDR and Pearl Harbor* (2000), historians and journalists have painted a beguiling web connecting the White House to the wrecked and burning fleet at Pearl Harbor. While refuted by the bulk of historical evidence, as well as the nine separate civilian and military inquiries held between December 1941 and May 1946, speculation still persists that the president and his key military advisors were aware of the planned Japanese attack on Pearl Harbor but did not take action.

A deeply ingrained controversy likewise surrounds the war's end in August 1945. For more than half a century, historians have debated key issues surrounding the use of atomic weapons, including whether or not the bombs were necessary to secure Japan's surrender, as well as other motives for the atomic attacks. While leading civilian and military figures argued in 1945 that the twin attacks ended the war and saved countless American and Japanese lives, critics of the decision—including the activist Norman Cousins and Patrick Blackett, a Nobel Prize winning physicist—quickly challenged the orthodox interpretation. Historian and State Department

official Herbert Feis was among the first insiders to cogently and compellingly question the utility of the atomic bombs with the 1961 publication of *Japan Subdued: The Atomic Bomb and the End of the War in the Pacific*. Feis concluded that while the administration used the bombs to end the war quickly and unconditionally, it could have obtained Japan's surrender through other means. Gar Alperovitz likewise argued in his landmark revisionist study *Atomic Diplomacy: Hiroshima and Potsdam* that not only were the atomic attacks unnecessary, but they were also motivated far more by a desire to influence the postwar Soviet Union than by a desire to secure Japan's immediate, unconditional surrender. However compelling, the revisionist school has faced repeated challenges, especially in the past two decades by the resurgence of the orthodox

interpretation in well-received works such as the historian Robert H. Ferrell's *Harry S Truman: A Life* and author Stanley Weintraub's *The Last Great Victory: The End of World War II July/August 1945*.

The war's major historical controversies and debates are not limited to those surrounding the conflict's origins or end, and many of the most enduring questions involve major campaigns and individual battles and the armies and men who fought them. For a generation after VE Day (Victory in Europe Day), a host of historians and writers maintained that the German army was superior to the Allied forces and that quantitative rather than qualitative Allied advantages determined the war's outcome. The military historian S. L. A. Marshall's 1947 *Men Against Fire* cast serious doubt on the combat effectiveness of the U.S. Army after Marshall



Two women walking the streets of the destroyed city of Hiroshima, November 1945.

Source: Operated by Los Alamos National Security, LLC for the U.S. Department of Energy's NNSA © Copyright 2010–2011.

argued that in any given engagement, three quarters of the general infantry involved failed to fire their weapons. The Dutch-born Israeli historian Martin Van Creveld furthered the idea of German military superiority in his 1982 *Fighting Power: German and U.S. Army Performance, 1939–1945*, when he maintained that German “small unit cohesion, training, and tactics, made their combat units much more effective” than their American counterparts.

However, within a decade of *Fighting Power*’s publication, revisionist scholars cogently challenged the dominant orthodox interpretation, and with the publication of Richard Overy’s *Why the Allies Won* (1995), the pendulum swung decisively away from the Marshall-Creveld school. Overy compellingly demonstrated that whatever its early deficiencies, by 1944 the U.S. Army stood on a par with its German counterpart. Soon after Overy’s publication, revisionist scholars, John Whiteclay Chambers II foremost among them, highlighted shortcomings in Marshall’s methodology that called into question the foundations of the orthodox argument.

The war in Europe continues to generate other significant controversies, foremost among them the Allied landings in occupied France and the long-awaited second front. The Soviet Union had pressed for an early Western landing in German-occupied France, but the British opposed Sledgehammer and pushed successfully for landing in North Africa and Italy. While the Mediterranean campaign bled resources from an assault on northern France, the disastrous August 1942 Anglo-Canadian raid on the French port of Dieppe, where over half of the largely Canadian landing force was lost, validated British caution.

Although the Allied landings at Normandy in June 1944 are rightly hailed as a success, controversy nonetheless surrounds the war’s final year in Europe, especially the wide-front versus narrow-front controversy. Confident that a broad advance was safer, General Eisenhower favored a wide-front strategy, in which ground forces advanced into Germany along a northern and southern axis. British general Bernard Montgomery supported a narrow-front strategy that called for a single-line of advance into Germany, certain that this strategy would shorten the war and allow for the quick capture of Berlin. The failure of Operation Market Garden, Montgomery’s plan to seize bridges on the

Maas and Rhine rivers in September 1944, validated Eisenhower’s caution but has not ended the narrow-versus wide-front debate.

In the Pacific, historians and writers continue to debate the joint chiefs’ decision to approve an army-navy advance across the Pacific, with MacArthur and the army moving north from Australia and Nimitz and the navy moving on Tokyo from Hawaii. While intended to support one another, the strategy could also, argues historian Ronald H. Spector, “be mutually competing.” This competition could, in part, explain the decision to retake the Philippines, rather than striking farther north at Formosa, as had originally been agreed on by the joint chiefs in 1943. The reconquest of the Philippines during the war’s final 10 months cost 14,000 U.S. lives and hundreds of thousands of Philippine casualties, including the 100,000 who died in Manila’s recapture. The invasion of Iwo Jima in February 1945, made necessary because of the decision to forgo landings in Formosa, likewise ignited controversy both at the time and subsequently. Taken largely to facilitate the bombing campaign against Japan and provide an emergency landing site for long-range bombers making the journey from the northern Mariana islands, the invasion of Iwo Jima cost many more lives than it saved.

Lingering World War II controversies are not limited to the battlefield, and indeed, the final meeting between Roosevelt, Churchill, and Stalin at the Yalta Conference generates continued scrutiny and controversy. During the Cold War, the late president’s opponents charged that Roosevelt had sold out China, Poland, and the remainder of Eastern Europe to the Soviet Union. As historian Fraser J. Harbutt compellingly demonstrated in his 2010 *Yalta: Europe and America at the Crossroads*, “the Republican Party began to use Yalta systematically as a bludgeon against the Truman administration and Democratic foreign policy.” As late as 1985, right-wing critics of New Deal foreign policy continued to batter the Yalta agreements, with the conservative columnist Irving Kristol calling the summit one of America’s three greatest foreign policy mistakes.

Often forgotten in the polemics, however, is the fact that by February 1945, the Red Army already controlled much of Central and Eastern Europe, and so the president could do little but salvage what he could from the maelstrom created by the war’s end. Moreover, as continued Japanese resistance

promised to make the long-expected invasion of the home islands the most costly campaign of the entire war, Stalin's promise to engage Japan meant lower American casualties, and for this, Roosevelt had only to offer either what the Red Army already possessed or what it could easily have for the taking. In his often critical *Decisions at Yalta*, historian Russell D. Buhite highlights what all too many have forgotten when examining this long-ago conference. Yalta, Buhite notes, "was a conference in which the West had only a marginal chance of success." Even with the end of the Cold War, Yalta remains one of many enduring controversies that continue to intrigue both students and scholars of the Second World War.

Sidney Pash

See also Blitzkrieg Warfare; Bombs, Nuclear; Genocide; Marshall, S. L. A.; President as Commander in Chief; Tokyo War Crimes Tribunal; Total War; World War I; Yamashita Precedent

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WOUNDS AND INJURIES

Hippocrates, often hailed as the father of modern medicine, focused much of his writing on surgical techniques and wound care. Galen's work on the circulatory system and human anatomy ruled well into the Renaissance. As human knowledge advanced, so, too, did combat techniques and weaponry. With every major American war, the medical community gained valuable information on wound care and combat surgery. Since 1991, nontraditional weapons from nonstate actors have significantly changed the medical outcomes for soldiers because of the amount of damage they are capable of doing. However, as urban warfare continues with ever-evolving weaponry, the medical community is continuously researching new, more effective treatment protocols.

A Brief History of War Wounds

The first major war wound breakthrough was debridement, a procedure first used during the Russo-Turkish War. Medically, the debridement procedure had a doctor cut the infected, dying (necrotic) tissue until healthy tissue is found. This helped avoid amputation and gangrene when done shortly after the injury occurred. During the Revolutionary War, soldiers were treated in private homes and churches. In 1775, the Continental Congress established the Hospital Department for the Army, which

marked the mainstreaming of medical treatment of war wounds. The War of 1812 saw an increase in amputations performed shortly after the wound was inflicted, in hopes of shortening hospital stays, infection, and progressive healing. However, it was the Civil War that saw the height of amputations. Amputation was frequently used by both Union and Confederate forces. Although not the first choice for flesh wounds, many soldiers underwent amputation due to the nature of the injury and the dangers of secondary infection. Virginia's Stonewall Jackson suffered severe wounds requiring the amputation of his left arm after the Battle of Chancellorsville. Although he survived the surgery, he died from pneumonia shortly after.

In the time between the Civil War and the First World War, there were several major medical advancements. Debridement procedures evolved to include the removal of necrotic tissue and the application of silver nitrates, usually in a foil, to help fight and prevent infection. Although used sporadically during the Civil War, rapid evacuation steadily improved and was vital in the lower death rate during World War I. The war saw an increase of topical antimicrobial creams and lotions, lowering the infection rate after a wound. It was not until the onset of the Second World War that the introduction and widespread use of antibiotics, including sulfonamides and penicillin, were seen. Sulfa drugs, also called sulfonamides, became the first line of treatment for many skin wounds. Applied topically, soldiers carried packets of the powder with them to treat wounds of their peers on the front lines. Penicillin was effective in fighting staphylococci and streptococci bacteria, which were often present in wounds. Additionally, rapid evacuation and treatment by trained medical professionals helped keep more soldiers alive.

With the introduction of the helicopter, injured soldiers during the Korean War were airlifted to Mobile Army Surgical Hospitals (MASH), where they received lifesaving treatment. Many soldiers underwent cutting-edge vascular and arterial surgeries instead of amputation. During the Vietnam War, the proximity of hospitals and use of helicopters for evacuation meant faster access to well-trained and -equipped surgeons spread throughout South Vietnam. Incidence rates of infection after injury were in the single digits, unlike any prior war. Lifesaving technology, including mechanical

ventilation, was also used for the first time in a military setting.

Recent Developments

America's most recent wars, beginning with the Persian Gulf War in 1991, saw new forms of combat wounds and injuries. Shrapnel and bullet wounds evolved with each war; however, the use of improvised explosive devices (IEDs) gave enemy combatants new means of attacking soldiers. In the Persian Gulf War, IEDs played a notable role in the number of amputations, traumatic brain injuries, and concussions. This trend continued during the War in Afghanistan and the War in Iraq.

In both Afghanistan and Iraq, soldiers have suffered severe wounds causing brain injury and amputation, while the military has simultaneously procured the most advanced body armor in its history. Advances in wound care and trauma surgery can clearly be seen when comparing earlier conflicts with today's conflicts. In the two World Wars, for every death there were an estimated 1.7 war injuries. In Afghanistan and Iraq, there are an estimated seven injuries for every death. As of August 1, 2012, 49,000 soldiers had been wounded in the wars in Afghanistan and Iraq. Of the war injuries, a majority are attributed to IEDs. Vehicles are a high-priority target, injuring soldiers and destroying equipment and intelligence. Concussions, broken bones, brain injuries, severe burns, internal bleeding, shrapnel wounds, and loss of limbs are frequent injuries consistent with IED attacks.

Under the Department of Defense's military medicine division, the Tactical Combat Casualty Care program was established in 1996 to decrease preventable deaths through better training. For the first time, data were culled solely from combat cases, not civilian records. Although helpful in past protocols, civilian records focused on blunt trauma. Tactical Combat Casualty Care was established for penetrating wounds and longer evacuation times, allowing for better on-scene care and health outcomes in war and tactical situations. Since its implementation, killed in action and death by wound percentages have shifted positively. (Death by wound is limited to soldiers whose wounds and subsequent infection are the cause of death. Those who are wounded and die off the field are not considered to have been killed in action.) In World War II and the Vietnam War, 88%

of soldiers who died were killed in action and 12% died from wounds. As of 2006, in Afghanistan and Iraq the killed in action rates are 18.7% and 13.5%, respectively. These numbers reflect an amalgamation of new technology and medical protocols that have adapted to new military demands. On-scene treatment is better than ever before, evacuation is done quickly, and soldiers are more protected from chest and abdominal wounds by advanced body armor. Together, these elements represent cutting-edge military medicine and technology necessary to protect its soldiers.

In an effort to maintain the highest standards of military excellence, much research has been dedicated to the medical field to help wounded soldiers. The Second World War altered the medical community in very tangible ways. The specialization of physicians has led to better training and advancements. In the 20th century, there were fewer deaths from infection than from battle, a huge milestone for the military community. The decreased rate of dead-to-wounded further demonstrates the commitment to bettering the technology used to diagnose and treat injured soldiers.

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See also Combat, Physical and Psychological Impact; Medicine, Military; Traumatic Brain Injury

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YAMASHITA PRECEDENT

The Yamashita Precedent refers to commanding officers' responsibility to both refrain from committing war crimes and also stop those under their command from committing them. Under the precedent, officers ignoring and/or failing to meet this responsibility may be held responsible for war crimes even if it cannot be proven that they were aware of them. The term originates from the 1945 trial by military tribunal of General Tomoyuki Yamashita, the Japanese commander of the Philippines, who was hanged for war crimes committed by his men that he failed to prevent. The precedent has been largely superseded by more recent cases and has not been widely referenced in military legal decisions. This entry reviews the background and events of the trial and discusses its legal implications.

The Trial of Yamashita

The military tribunal tasked with trying General Yamashita convened on October 8, 1945, in downtown Manila, Philippines. The United States sought his conviction for failure to control the actions of his troops while in command of the Japanese 14th Area Army. These actions included the rape of Filipino women, destruction of private property, and the murder or abuse of more than 32,000 Filipino civilians and captured Americans. Prosecutors based their case on the grounds that Yamashita failed to control the troops under his command and, in doing

so, violated the Hague Convention of 1907 and the Geneva Red Cross Convention of 1929. With six U.S. Army officers provided as defense counsel, Yamashita pleaded "not guilty" to all counts. After his plea, an addendum of 64 specific crimes committed by his subordinates were added to the charges against Yamashita. Apart from this, the prosecution added 59 more war crimes the day the trial began without granting an extension for further defense preparations.

Once the trial began, the prosecution could not definitively prove that Yamashita ordered or had knowledge of any atrocities. Therefore, the prosecution's argument rested on the belief that Yamashita either should have been or must have been aware of the actions of his men due to the sheer scale and brutality of the crimes. The prosecution illustrated the widespread nature of the crimes by providing hundreds of witnesses to myriad atrocities. The defense contended that not only had Yamashita been unaware of his men's actions but also the poor communications during warfare made such knowledge impossible. A number of Yamashita's staff officers testified that he had not been informed of the situation.

In the final days of the trial, the defense moved for a continuance to review the latest supplemental charges, but the tribunal declined the motion. Expecting a guilty verdict, the defense dispatched an appeal to the U.S. Supreme Court and the Filipino Supreme Court before the trial's conclusion. The appeal rested mainly on the grounds that the military tribunal lacked proper jurisdiction because of reduced military authority during peacetime.

On December 7, 1945, the court handed Yamashita a guilty verdict and sentenced him to death. Following a brief stay of execution while it deliberated, the U.S. Supreme Court declined to review the case, declaring the tribunals valid as permitted by act of Congress. The Filipino Supreme Court also opted not to review the case.

The Yamashita trial generated some initial dissatisfaction and remains controversial. General Douglas MacArthur urged the tribunal to expedite the case so that justice could be delivered swiftly, setting a precedent for the upcoming war crimes trials in Tokyo. In an attempt to speed the trial along, some customary court procedures were not followed and significant hearsay evidence admitted. Justice Frank Murphy, joined by Justice Wiley Rutledge in a dissent of the U.S. Supreme Court's rejection to hear Yamashita's appeal, concluded that the Yamashita trial set a dangerous precedent by allowing any military officer or even the president of the United States to be held criminally responsible for the actions of a subordinate even if the superior could not be directly linked to the action. Nonetheless, these initial dissenters proved in the minority, and Yamashita was hanged on February 23, 1946.

Yamashita Precedent in Practice

The precedent set by Yamashita's conviction carried enormous legal implications. The precedent firmly established a commanding officer's responsibility not only to not participate or sanction war crimes but also to take positive steps to prevent them from occurring under his command. In practice, however, other cases have overruled or taken the place of the Yamashita Precedent. Shortly after Yamashita's execution, the 1947–1948 trial of Marshal Wilhelm

von Leeb challenged the Yamashita Precedent by acknowledging that battlefield complexities could serve as evidence that a commanding officer did not know of atrocities. The von Leeb trial created a precedent whereby proof of actual knowledge must be presented alongside failure to prevent or punish human rights violations. The trial of Captain Ernest Medina, the man in command of the unit that committed the My Lai massacre during the Vietnam War, further found that an officer can be held responsible for not taking action against war crimes committed by soldiers under his command, but only when he possessed knowledge of the crimes. The International Criminal Court's guidelines, adopted in 1998, also require knowledge of the crime before one can be charged with crimes against humanity or war crimes. While the principle of holding officers responsible for failure to prevent war crimes has been upheld, the more specific provisions of the Yamashita Precedent regarding prosecution based on implied knowledge has fallen out of use.

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See also My Lai Massacre; Nuremberg War Crimes Trials

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Appendix 1

CIVIL-MILITARY RELATIONS

U.S. Constitution

Ratified in 1788, the Constitution represented the second attempt by the thirteen original states of the United States of America to forge an effective national government. In contrast to the earlier Articles of Confederation, the U.S. Constitution granted Congress clear power to raise revenues in support of a national government and created a separate executive branch. The President of the United States serves as commander in chief of armed forces and is vested with the power to appoint civil and military officers, subject to the consent of the U.S. Senate. Presidential authority is checked by the granting to Congress the sole power, through appropriate legislation, to establish armed forces and enact laws to govern them. Also, only this body can levy taxes and appropriate money for the military. Although the Constitution centralizes power in the hands of the national government, it does provide for sharing power with state governments. In the case of the militia, authority is divided between the national government and the states.

We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

Article I.

Section 1.

All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives. . . .

Section 8.

The Congress shall have Power To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States;

To borrow Money on the credit of the United States;

To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes;

.....

To define and punish Piracies and Felonies committed on the high Seas, and Offences against the Law of Nations;

To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water;

To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years;

To provide and maintain a Navy;

To make Rules for the Government and Regulation of the land and naval Forces;

To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions;

To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress; ...

To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof.

Section 9.

... The Privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

No Bill of Attainder or ex post facto Law shall be passed.

Section 10.

... No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

Article II.

Section 1.

The executive Power shall be vested in a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice President, chosen for the same Term, be elected, as follows:

Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors, equal to the whole Number of Senators and Representatives to which the State may be entitled in the Congress: but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed an Elector.

The Electors shall meet in their respective States, and vote by Ballot for two Persons, of whom one at least shall not be an Inhabitant of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; which List they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have an equal Number of Votes, then the House of Representatives shall immediately chuse by Ballot one of them for President; and if no Person have a Majority, then from the five highest on the List the said House shall in like Manner chuse the President. But in chusing the President, the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this purpose shall consist of a Member or Members from two thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice President. But if there should remain two or more who have equal Votes, the Senate shall chuse from them by Ballot the Vice President.

The Congress may determine the Time of chusing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

No Person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained to the Age of thirty five Years, and been fourteen Years a Resident within the United States.

In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the Same shall devolve on the Vice President, and the Congress may by Law provide for the Case of Removal, Death, Resignation or Inability, both of the President and Vice President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

Section 2.

The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any Subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offences against the United States, except in Cases of Impeachment.

He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law: but the Congress may by Law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.

The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

Section 3.

He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

Section 4.

The President, Vice President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

Article III

Section 2.

. . . The Trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the Trial shall be at such Place or Places as the Congress may by Law have directed.

Section 3.

Treason against the United States, shall consist only in levying War against them, or in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

The Congress shall have Power to declare the Punishment of Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person attainted.

Article IV.**Section 4.**

The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened), against domestic Violence.

This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

Article VI.

... The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

Article VII.

The Ratification of the Conventions of nine States, shall be sufficient for the Establishment of this Constitution between the States so ratifying the Same.

Amendment I

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

Amendment II

A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

Amendment III

No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

Amendment IV

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Amendment V

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual

service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

Amendment VI

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence.

Amendment VII

In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

Amendment VIII

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

Amendment IX

The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

Amendment X

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

Source: US Archives: http://www.archives.gov/exhibits/charters/constitution_transcript.html

Naturalization Oath of Allegiance to the United States

"I hereby declare, on oath, that I absolutely and entirely renounce and abjure all allegiance and fidelity to any foreign prince, potentate, state or sovereignty, of whom or which I have heretofore been a subject or citizen; that I will support and defend the Constitution and laws of the United States of America against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; that I will bear arms on behalf of the United States when required by the law; that I will perform noncombatant service in the armed forces of the United States when required by the law; that I will perform work of national importance under civilian direction when required by the law; and that I take this obligation freely without any mental reservation or purpose of evasion; so help me God."

Source: U.S. Citizenship and Immigration Services: <http://www.uscis.gov/portal/site/uscis/menuitem.5af9bb95919f35e66f614176543f6d1a/?vgnextoid=facd6db8d7e37210VgnVCM100000082ca60aRCRD&vgnnextchannel=dd7ffe9dd4aa3210VgnVCM100000b92ca60aRCRD>

United Nations Charter Excerpts

Until 1945, the United States heeded George Washington's call to avoid entangling alliances outside of the western hemisphere. By establishing and joining the United Nations in 1945, the United States committed itself

to collective security in order to preserve international peace and stability. Under the United Nations system, power is concentrated in the hands of the United Nations Security Council, where the great powers of World War II—the United States, Great Britain, Russia, China, and France—continue to exercise an absolute veto over the actions of this body. The veto ensures that the UN can take action in matters of war and peace only with consent of the United States and the other major powers. Twice, the United States has entered a major armed conflict based on UN Security Council Resolutions: the Korean War in 1950 and the Persian Gulf War in 1991. U.S. forces have also served in a number of UN peacekeeping operations authorized by the Security Council. In 2003, the Security Council, after a heated debate, refused to authorize the U.S. invasion of Iraq.

WE THE PEOPLES OF THE UNITED NATIONS DETERMINED to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and to promote social progress and better standards of life in larger freedom, AND FOR THESE ENDS to practice tolerance and live together in peace with one another as good neighbours, and to unite our strength to maintain international peace and security, and to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and to employ international machinery for the promotion of the economic and social advancement of all peoples, HAVE RESOLVED TO COMBINE OUR EFFORTS TO ACCOMPLISH THESE AIMS. Accordingly, our respective Governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

Chapter I: Purposes and Principles

Article 1

The Purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;
2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;
3. To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion; and
4. To be a centre for harmonizing the actions of nations in the attainment of these common ends.

Article 2

The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles.

1. The Organization is based on the principle of the sovereign equality of all its Members.
2. All Members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and, justice, are not endangered.
4. All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.
5. All Members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.
6. The Organization shall ensure that states which are not Members of the United Nations act in accordance with these Principles so far as may be necessary for the maintenance of international peace and security.
7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

Chapter II: Membership

Article 3

The original Members of the United Nations shall be the states which, having participated in the United Nations Conference on International Organization at San Francisco, or having previously signed the Declaration by United Nations of 1 January 1942, sign the present Charter and ratify it in accordance with Article 110.

Article 4

1. Membership in the United Nations is open to all other peace-loving states which accept the obligations contained in the present Charter and, in the judgment of the Organization, are able and willing to carry out these obligations.
2. The admission of any such state to membership in the Nations will be effected by a decision of the General Assembly upon the recommendation of the Security Council.

Article 5

A Member of the United Nations against which preventive or enforcement action has been taken by the Security Council may be suspended from the exercise of the rights and privileges of membership by the General Assembly upon the recommendation of the Security Council. The exercise of these rights and privileges may be restored by the Security Council.

Article 6

A Member of the United Nations which has persistently violated the Principles contained in the present Charter may be expelled from the Organization by the General Assembly upon the recommendation of the Security Council.

Chapter III: Organs

Article 7

1. There are established as the principal organs of the United Nations: a General Assembly, a Security Council, an Economic and Social Council, a Trusteeship Council, an International Court of Justice, and a Secretariat.
2. Such subsidiary organs as may be found necessary may be established in accordance with the present Charter.

Article 8

The United Nations shall place no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in its principal and subsidiary organs.

Chapter IV: The General Assembly**Composition****Article 9**

1. The General Assembly shall consist of all the Members of the United Nations.
2. Each Member shall have not more than five representatives in the General Assembly.

Functions and Powers**Article 10**

The General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided for in the present Charter, and, except as provided in Article 12, may make recommendations to the Members of the United Nations or to the Security Council or to both on any such questions or matters.

Article 11

1. The General Assembly may consider the general principles of co-operation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments, and may make recommendations with regard to such principles to the Members or to the Security Council or to both.
2. The General Assembly may discuss any questions relating to the maintenance of international peace and security brought before it by any Member of the United Nations, or by the Security Council, or by a state which is not a Member of the United Nations in accordance with Article 35, paragraph 2, and, except as provided in Article 12, may make recommendations with regard to any such questions to the state or states concerned or to the Security Council or to both. Any such question on which action is necessary shall be referred to the Security Council by the General Assembly either before or after discussion.
3. The General Assembly may call the attention of the Security Council to situations which are likely to endanger international peace and security.
4. The powers of the General Assembly set forth in this Article shall not limit the general scope of Article 10.

Article 12

1. While the Security Council is exercising in respect of any dispute or situation the functions assigned to it in the present Charter, the General Assembly shall not make any recommendation with regard to that dispute or situation unless the Security Council so requests.
2. The Secretary-General, with the consent of the Security Council, shall notify the General Assembly at each session of any matters relative to the maintenance of international peace and security which are being dealt with by the Security Council and similarly notify the General Assembly, or the Members of the United Nations if the General Assembly is not in session, immediately the Security Council ceases to deal with such matters.

Chapter V: The Security Council**Composition****Article 23**

1. The Security Council shall consist of fifteen Members of the United Nations. The Republic of China, France, the Union of Soviet Socialist , the United Kingdom of Great Britain and Northern Ireland, and the

United States of America shall be permanent members of the Security Council. The General Assembly shall elect ten other Members of the United Nations to be non-permanent members of the Security Council, due regard being specially paid, in the first instance to the contribution of Members of the United Nations to the maintenance of international peace and security and to the other purposes of the Organization, and also to equitable geographical distribution.

2. The non-permanent members of the Security Council shall be elected for a term of two years. In the first election of the non-permanent members after the increase of the membership of the Security Council from eleven to fifteen, two of the four additional members shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.
3. Each member of the Security Council shall have one representative.

Functions and Powers

Article 24

1. In order to ensure prompt and effective action by the United Nations, its Members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf.
2. In discharging these duties the Security Council shall act in accordance with the Purposes and Principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII, and XII.
3. The Security Council shall submit annual and, when necessary, special reports to the General Assembly for its consideration.

Article 25

The Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.

Article 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and economic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee referred to in Article 47, plans to be submitted to the Members of the United Nations for the establishment of a system for the regulation of armaments.

Voting

Article 27

1. Each member of the Security Council shall have one vote.
2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of nine members.
3. Decisions of the Security Council on all other matters shall be made by an affirmative vote of nine members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI, and under paragraph 3 of Article 52, a party to a dispute shall abstain from voting.

Procedure

Article 28

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at times at the seat of the Organization.

2. The Security Council shall hold meetings at which each of its members may, if it so desires, be represented by a member of the government or by some other specially designated representative.
3. The Security Council may hold meetings at such places other than the seat of the Organization as in its judgment will best facilitate its work.

Article 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

Article 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its President.

Article 31

Any Member of the United Nations which is not a member of the Security Council may participate, without vote, in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that Member are specially affected.

Article 32

Any Member of the United Nations which is not a member of the Security Council or any state which is not a Member of the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate, without vote, in the discussion relating to the dispute. The Security Council shall lay down such conditions as it deems just for the participation of a state which is not a Member of the United Nations.

Chapter VI: Pacific Settlement of Disputes

Article 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.
2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

Article 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.

Article 35

1. Any Member of the United Nations may bring any dispute, or any situation of the nature referred to in Article 34, to the attention of the Security Council or of the General Assembly.
2. A state which is not a Member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party if it accepts in advance, for the purposes of the dispute, the obligations of pacific settlement provided in the present Charter.
3. The proceedings of the General Assembly in respect of matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

Article 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.
2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.
3. In making recommendations under this Article the Security Council should also take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the Statute of the Court.

Article 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that Article, they shall refer it to the Security Council.
2. If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

Article 38

Without prejudice to the provisions of Articles 33 to 37, the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

Chapter VII: Action With Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression

Article 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 4 and 42, to maintain or restore international peace and security.

Article 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.

Article 41

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

Article 42

Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.

Article 43

1. All Members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance, and facilities, including rights of passage, necessary for the purpose of maintaining international peace and security.
2. Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.
3. The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council. They shall be concluded between the Security Council and Members or between the Security Council and groups of Members and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes.

Article 44

When the Security Council has decided to use force it shall, before calling upon a Member not represented on it to provide armed forces in fulfilment of the obligations assumed under Article 43, invite that Member, if the Member so desires, to participate in the decisions of the Security Council concerning the employment of contingents of that Member's armed forces.

Article 45

In order to enable the Nations to take urgent military measures, Members shall hold immediately available national air-force contingents for combined international enforcement action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined, within the limits laid down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Committee.

Article 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

Article 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.
2. The Military Staff Committee consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any Member of the United Nations not permanently represented on the Committee shall be invited by the Committee to be associated with it when the efficient discharge of the Committee's responsibilities requires the participation of that Member in its work.
3. The Military Staff Committee be responsible under the Security Council for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.
4. The Military Staff Committee, with the authorization of the security Council and after consultation with appropriate regional agencies, may establish sub-committees.

Article 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the Members of the United Nations or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the Members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

Article 49

The Members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

Article 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a Member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

Chapter VIII: Regional Arrangements

Article 52

1. Nothing in the present Charter precludes the existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action, provided that such arrangements or agencies and their activities are consistent with the Purposes and Principles of the United Nations.
2. The Members of the United Nations entering into such arrangements or constituting such agencies shall make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council.
3. The Security Council shall encourage the development of pacific settlement of local disputes through such regional arrangements or by such regional agencies either on the initiative of the states concerned or by reference from the Security Council.
4. This Article in no way impairs the application of Articles 34 and 35.

Article 53

1. The Security Council shall, where appropriate, utilize such regional arrangements or agencies for enforcement action under its authority. But no enforcement action shall be taken under regional arrangements or by regional agencies without the authorization of the Security Council, with the exception of measures against any enemy state, as defined in paragraph 2 of this Article, provided for pursuant to Article 107 or in regional arrangements directed against renewal of aggressive policy on the part of any such state, until such time as the Organization may, on request of the Governments concerned, be charged with the responsibility for preventing further aggression by such a state.
2. The term enemy state as used in paragraph 1 of this Article applies to any state which during the Second World War has been an enemy of any signatory of the present Charter.

Article 54

The Security Council shall at all times be kept fully informed of activities undertaken or in contemplation under regional arrangements or by regional agencies for the maintenance of international peace and security.

Chapter XV: The Secretariat*Article 97*

The Secretariat shall comprise a Secretary-General and such staff as the Organization may require. The Secretary-General shall be appointed by the General Assembly upon the recommendation of the Security Council. He shall be the chief administrative officer of the Organization.

Article 98

The Secretary-General shall act in that capacity in all meetings of the General Assembly, of the Security Council, of the Economic and Social Council, and of the Trusteeship Council, and shall perform such other functions as are entrusted to him by these organs. The Secretary-General shall make an annual report to the General Assembly on the work of the Organization.

Article 99

The Secretary-General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security.

Source: The Avalon Project, Yale Law School: http://avalon.law.yale.edu/20th_century/unchart.asp

North Atlantic Treaty

The North Atlantic Treaty is the United States' most important political and military alliance. Initially designed to deter a Soviet invasion of Western Europe during the Cold War, the North Atlantic Treaty Organization (NATO) that grew out of this treaty created a military alliance with a unified command. Since the organization's founding, an American general has always served as supreme commander of NATO's forces, with a European civilian serving as the organization's Secretary General. During the Cold War, NATO forces prepared for armed conflict, but only after the collapse of the Soviet Union did NATO engage in military operations in the Balkans and Afghanistan. After 9/11, NATO countries formally evoked the treaty and sent armed surveillance planes to the United States.

Washington D.C., 4 April 1949

The Parties to this Treaty reaffirm their faith in the purposes and principles of the Charter of the United Nations and their desire to live in peace with all peoples and all governments.

They are determined to safeguard the freedom, common heritage and civilisation of their peoples, founded on the principles of democracy, individual liberty and the rule of law. They seek to promote stability and well-being in the North Atlantic area.

They are resolved to unite their efforts for collective defence and for the preservation of peace and security. They therefore agree to this North Atlantic Treaty:

Article 1

The Parties undertake, as set forth in the Charter of the United Nations, to settle any international dispute in which they may be involved by peaceful means in such a manner that international peace and security and justice are not endangered, and to refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes of the United Nations.

Article 2

The Parties will contribute toward the further development of peaceful and friendly international relations by strengthening their free institutions, by bringing about a better understanding of the principles upon which these institutions are founded, and by promoting conditions of stability and well-being. They will seek to eliminate conflict in their international economic policies and will encourage economic collaboration between any or all of them.

Article 3

In order more effectively to achieve the objectives of this Treaty, the Parties, separately and jointly, by means of continuous and effective self-help and mutual aid, will maintain and develop their individual and collective capacity to resist armed attack.

Article 4

The Parties will consult together whenever, in the opinion of any of them, the territorial integrity, political independence or security of any of the Parties is threatened.

Article 5

The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defence recognised by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.

Any such armed attack and all measures taken as a result thereof shall immediately be reported to the Security Council. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.

Article 6¹

For the purpose of Article 5, an armed attack on one or more of the Parties is deemed to include an armed attack:

- on the territory of any of the Parties in Europe or North America, on the Algerian Departments of France,² on the territory of or on the Islands under the jurisdiction of any of the Parties in the North Atlantic area north of the Tropic of Cancer;
- on the forces, vessels, or aircraft of any of the Parties, when in or over these territories or any other area in Europe in which occupation forces of any of the Parties were stationed on the date when the Treaty entered into force or the Mediterranean Sea or the North Atlantic area north of the Tropic of Cancer.

Article 7

This Treaty does not affect, and shall not be interpreted as affecting in any way the rights and obligations under the Charter of the Parties which are members of the United Nations, or the primary responsibility of the Security Council for the maintenance of international peace and security.

Article 8

Each Party declares that none of the international engagements now in force between it and any other of the Parties or any third State is in conflict with the provisions of this Treaty, and undertakes not to enter into any international engagement in conflict with this Treaty.

Article 9

The Parties hereby establish a Council, on which each of them shall be represented, to consider matters concerning the implementation of this Treaty. The Council shall be so organised as to be able to meet promptly at any time. The Council shall set up such subsidiary bodies as may be necessary; in particular it shall establish immediately a defence committee which shall recommend measures for the implementation of Articles 3 and 5.

Article 10

The Parties may, by unanimous agreement, invite any other European State in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area to accede to this Treaty. Any State so invited may become a Party to the Treaty by depositing its instrument of accession with the Government of the United States of America. The Government of the United States of America will inform each of the Parties of the deposit of each such instrument of accession.

Article 11

This Treaty shall be ratified and its provisions carried out by the Parties in accordance with their respective constitutional processes. The instruments of ratification shall be deposited as soon as possible with the Government of the United States of America, which will notify all the other signatories of each deposit. The Treaty shall enter into force between the States which have ratified it as soon as the ratifications of the majority of the signatories, including the ratifications of Belgium, Canada, France, Luxembourg, the Netherlands, the United Kingdom and the United States, have been deposited and shall come into effect with respect to other States on the date of the deposit of their ratifications.³

Article 12

After the Treaty has been in force for ten years, or at any time thereafter, the Parties shall, if any of them so requests, consult together for the purpose of reviewing the Treaty, having regard for the factors then affecting peace and security in the North Atlantic area, including the development of universal as well as regional arrangements under the Charter of the United Nations for the maintenance of international peace and security.

Article 13

After the Treaty has been in force for twenty years, any Party may cease to be a Party one year after its notice of denunciation has been given to the Government of the United States of America, which will inform the Governments of the other Parties of the deposit of each notice of denunciation.

Article 14

This Treaty, of which the English and French texts are equally authentic, shall be deposited in the archives of the Government of the United States of America. Duly certified copies will be transmitted by that Government to the Governments of other signatories.

Notes

1. The definition of the territories to which Article 5 applies was revised by Article 2 of the Protocol to the North Atlantic Treaty on the accession of Greece and Turkey signed on 22 October 1951.
2. On January 16, 1963, the North Atlantic Council noted that insofar as the former Algerian Departments of France were concerned, the relevant clauses of this Treaty had become inapplicable as from July 3, 1962.
3. The Treaty came into force on 24 August 1949, after the deposition of the ratifications of all signatory states.

Source: www.nato.int/cps/en/natolive/official_texts_17120.htm

War Powers Act of 1973

Joint Resolution: Concerning the War Powers of Congress and the President

Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled,

Short Title

SEC. 1. This joint resolution may be cited as the “War Powers Resolution.”

Purpose and Policy

SEC. 2. (a) It is the purpose of this joint resolution to fulfill the intent of the framers of the Constitution of the United States and insure that the collective judgement of both the Congress and the President will apply to the introduction of United States Armed Forces into hostilities, or into situations where imminent involvement in hostilities is clearly indicated by the circumstances, and to the continued use of such forces in hostilities or in such situations.

(b) Under article I, section 8, of the Constitution, it is specifically provided that the Congress shall have the power to make all laws necessary and proper for carrying into execution, not only its own powers but also all other powers vested by the Constitution in the Government of the United States, or in any department or officer thereof.

(c) The constitutional powers of the President as Commander-in-Chief to introduce United States Armed Forces into hostilities, or into situations where imminent involvement in hostilities is clearly indicated by the circumstances, are exercised only pursuant to (1) a declaration of war, (2) specific statutory authorization, or (3) a national emergency created by attack upon the United States, its territories or possessions, or its armed forces.

Consultation

SEC. 3. The President in every possible instance shall consult with Congress before introducing United States Armed Forces into hostilities or into situation where imminent involvement in hostilities is clearly indicated by the circumstances, and after every such introduction shall consult regularly with the Congress until United States Armed Forces are no longer engaged in hostilities or have been removed from such situations.

Reporting

SEC. 4. (a) In the absence of a declaration of war, in any case in which United States Armed Forces are introduced—

- (1) into hostilities or into situations where imminent involvement in hostilities is clearly indicated by the circumstances;
- (2) into the territory, airspace or waters of a foreign nation, while equipped for combat, except for deployments which relate solely to supply, replacement, repair, or training of such forces; or
- (3) in numbers which substantially enlarge United States Armed Forces equipped for combat already located in a foreign nation; the president shall submit within 48 hours to the Speaker of the House of Representatives and to the President pro tempore of the Senate a report, in writing, setting forth—
 - (A) the circumstances necessitating the introduction of United States Armed Forces;
 - (B) the constitutional and legislative authority under which such introduction took place; and
 - (C) the estimated scope and duration of the hostilities or involvement.

(b) The President shall provide such other information as the Congress may request in the fulfillment of its constitutional responsibilities with respect to committing the Nation to war and to the use of United States Armed Forces abroad

(c) Whenever United States Armed Forces are introduced into hostilities or into any situation described in subsection (a) of this section, the President shall, so long as such armed forces continue to be engaged in such hostilities or situation, report to the Congress periodically on the status of such hostilities or situation as well as on the scope and duration of such hostilities or situation, but in no event shall he report to the Congress less often than once every six months.

Congressional Action

SEC. 5. (a) Each report submitted pursuant to section 4(a)(1) shall be transmitted to the Speaker of the House of Representatives and to the President pro tempore of the Senate on the same calendar day. Each report so transmitted shall be referred to the Committee on Foreign Affairs of the House of Representatives and to the Committee on Foreign Relations of the Senate for appropriate action. If, when the report is transmitted, the Congress has adjourned sine die or has adjourned for any period in excess of three calendar days, the Speaker of the House of Representatives and the President pro tempore of the Senate, if they deem it advisable (or if petitioned by at least 30 percent of the membership of their respective Houses) shall jointly request the President to convene Congress in order that it may consider the report and take appropriate action pursuant to this section.

(b) Within sixty calendar days after a report is submitted or is required to be submitted pursuant to section 4(a)(1), whichever is earlier, the President shall terminate any use of United States Armed Forces with respect to which such report was submitted (or required to be submitted), unless the Congress (1) has declared war or has enacted a specific authorization for such use of United States Armed Forces, (2) has extended by law such sixty-day period, or (3) is physically unable to meet as a result of an armed attack upon the United States. Such sixty-day period shall be extended for not more than an additional thirty days if the President determines and certifies to the Congress in writing that unavoidable military necessity respecting the safety of United States Armed Forces requires the continued use of such armed forces in the course of bringing about a prompt removal of such forces.

(c) Notwithstanding subsection (b), at any time that United States Armed Forces are engaged in hostilities outside the territory of the United States, its possessions and territories without a declaration of war or specific statutory authorization, such forces shall be removed by the President if the Congress so directs by concurrent resolution.

Congressional Priority Procedures for Joint Resolution or Bill

SEC. 6. (a) Any joint resolution or bill introduced pursuant to section 5(b) at least thirty calendar days before the expiration of the sixty-day period specified in such section shall be referred to the Committee on Foreign Affairs of the House of Representatives or the Committee on Foreign Relations of the Senate, as the case may be, and such committee shall report one such joint resolution or bill, together with its recommendations, not later than twenty-four calendar days before the expiration of the sixty-day period specified in such section, unless such House shall otherwise determine by the yeas and nays.

(b) Any joint resolution or bill so reported shall become the pending business of the House in question (in the case of the Senate the time for debate shall be equally divided between the proponents and the opponents), and shall be voted on within three calendar days thereafter, unless such House shall otherwise determine by yeas and nays.

(c) Such a joint resolution or bill passed by one House shall be referred to the committee of the other House named in subsection (a) and shall be reported out not later than fourteen calendar days before the expiration of the sixty-day period specified in section 5(b). The joint resolution or bill so reported shall become the pending business of the House in question and shall be voted on within three calendar days after it has been reported, unless such House shall otherwise determine by yeas and nays.

(d) In the case of any disagreement between the two Houses of Congress with respect to a joint resolution or bill passed by both Houses, conferees shall be promptly appointed and the committee of conference shall make and file a report with respect to such resolution or bill not later than four calendar days before the expiration of the sixty-day period specified in section 5(b). In the event the conferees are unable to agree within 48 hours, they shall report back to their respective Houses in disagreement. Notwithstanding any rule in either House concerning the printing of conference reports in the Record or concerning any delay in the consideration of such reports, such report shall be acted on by both Houses not later than the expiration of such sixty-day period.

Congressional Priority Procedures for Concurrent Resolution

SEC. 7. (a) Any concurrent resolution introduced pursuant to section 5(b) at least thirty calendar days before the expiration of the sixty-day period specified in such section shall be referred to the Committee on Foreign Affairs of the House of Representatives or the Committee on Foreign Relations of the Senate, as the case may be, and one such concurrent resolution shall be reported out by such committee together with its recommendations within fifteen calendar days, unless such House shall otherwise determine by the yeas and nays.

(b) Any concurrent resolution so reported shall become the pending business of the House in question (in the case of the Senate the time for debate shall be equally divided between the proponents and the opponents), and shall be voted on within three calendar days thereafter, unless such House shall otherwise determine by yeas and nays.

(c) Such a concurrent resolution passed by one House shall be referred to the committee of the other House named in subsection (a) and shall be reported out by such committee together with its recommendations within fifteen calendar days and shall thereupon become the pending business of such House and shall be voted on within three calendar days after it has been reported, unless such House shall otherwise determine by yeas and nays.

(d) In the case of any disagreement between the two Houses of Congress with respect to a concurrent resolution passed by both Houses, conferees shall be promptly appointed and the committee of conference shall make and file a report with respect to such concurrent resolution within six calendar days after the legislation is referred to the committee of conference. Notwithstanding any rule in either House concerning the printing of conference reports in the Record or concerning any delay in the consideration of such reports, such report shall be acted on by both Houses not later than six calendar days after the conference report is filed. In the event the conferees are unable to agree within 48 hours, they shall report back to their respective Houses in disagreement.

Interpretation of Joint Resolution

SEC. 8. (a) Authority to introduce United States Armed Forces into hostilities or into situations wherein involvement in hostilities is clearly indicated by the circumstances shall not be inferred—

- (1) from any provision of law (whether or not in effect before the date of the enactment of this joint resolution), including any provision contained in any appropriation Act, unless such provision specifically authorizes the introduction of United States Armed Forces into hostilities or into such situations and stating that it is intended to constitute specific statutory authorization within the meaning of this joint resolution; or
- (2) from any treaty heretofore or hereafter ratified unless such treaty is implemented by legislation specifically authorizing the introduction of United States Armed Forces into hostilities or into such situations and stating that it is intended to constitute specific statutory authorization within the meaning of this joint resolution.

(b) Nothing in this joint resolution shall be construed to require any further specific statutory authorization to permit members of United States Armed Forces to participate jointly with members of the armed forces of one or more foreign countries in the headquarters operations of high-level military commands which were established prior to the date of enactment of this joint resolution and pursuant to the United Nations Charter or any treaty ratified by the United States prior to such date.

(c) For purposes of this joint resolution, the term “introduction of United States Armed Forces” includes the assignment of member of such armed forces to command, coordinate, participate in the movement of, or accompany the regular or irregular military forces of any foreign country or government when such military forces are engaged, or there exists an imminent threat that such forces will become engaged, in hostilities.

(d) Nothing in this joint resolution—

(1) is intended to alter the constitutional authority of the Congress or of the President, or the provision of existing treaties; or

(2) shall be construed as granting any authority to the President with respect to the introduction of United States Armed Forces into hostilities or into situations wherein involvement in hostilities is clearly indicated by the circumstances which authority he would not have had in the absence of this joint resolution.

Separability Clause

SEC. 9. If any provision of this joint resolution or the application thereof to any person or circumstance is held invalid, the remainder of the joint resolution and the application of such provision to any other person or circumstance shall not be affected thereby.

Effective Date

SEC. 10. This joint resolution shall take effect on the date of its enactment.

CARL ALBERT

Speaker of the House of Representatives.

JAMES O. EASTLAND

President of the Senate pro tempore.

In the House of Representatives, U.S.

November 7, 1973

The House of Representatives having proceeded to reconsider the resolution (H. J. Res 542) entitled “Joint resolution concerning the war powers of Congress and the President”, returned by the President of the United States with his objections, to the House of Representatives, in which it originated, it was

Resolved, That the said resolution pass, two-thirds of the House of Representatives agreeing to pass the same.

Attest:

W. PAT JENNINGS

Clerk.

I certify that this Joint Resolution originated in the House of Representatives.

W. PAT JENNINGS

Clerk.

*In The Senate of The United States**November 7, 1973*

The Senate having proceeded to reconsider the joint resolution (H. J. Res. 542) entitled “Joint resolution concerning the war powers of Congress and the President”, returned by the President of the United States with his objections to the House of Representatives, in which it originate, it was

Resolved, That the said joint resolution pass, two-thirds of the Senators present having voted in the affirmative.

Attest:

FRANCIS R. VALEO

Secretary.

Source: The Avalon Project, Yale University Law School: http://avalon.law.yale.edu/20th_century/warpower.asp

Goldwater Nichols Department of Defense Reorganization Act of 1986

On October 1, 1986, the 99th U.S. Congress passed Public Law 99-433, the Goldwater-Nichols Department of Defense Reorganization Act, which was sponsored by Senator Barry Goldwater and Representative Bill Nichols, The purpose of the act was as follows:

To reorganize the Department of Defense and strengthen civilian authority in the Department of Defense, to improve the military advice provided to the President, the National Security Council, and the Secretary of Defense, to place clear responsibility on the commanders of the unified and specified combatant commands for the accomplishment of missions assigned to those commands and ensure that the authority of those commanders is fully commensurate with that responsibility, to increase attention to the formulation of strategy and to contingency planning, to provide for more efficient use of defense resources, to improve joint officer management policies, otherwise to enhance the effectiveness of military operations and improve the management and administration of the Department of Defense, and for other purposes.

The Goldwater-Nichols Act caused a major defense reorganization, the most significant since the National Security Act of 1947. Operational authority was centralized through the Chairman of the Joint Chiefs as opposed to the service chiefs. The chairman was designated as the principal military advisor to the president, National Security Council, and secretary of defense. The act established the position of vice-chairman and streamlined the operational chain of command from the president to the secretary of defense to the unified commanders.

Since 1986, Goldwater-Nichols has resulted in tremendous changes in the way the Department of Defense operates and has made joint operations the norm, as in the Arabian Gulf, Zaire, Haiti, and Bosnia. Implementation of the act is an on-going project with Joint Vision 2010 (1996) and Joint Vision 2020 (2000). Both documents emphasize that to be the most effective force, the U.S. military must be fully joint: intellectually, operationally, organizationally, doctrinally, and technically. The joint force, because of its flexibility and responsiveness, will remain the key to operational success in the future.

Sources: National Defense University Library: Public Law 99-433, the Goldwater-Nichols Department of Defense Reorganization Act, Introduction. Available online at <http://www.ndu.edu/library/goldnich/goldnich.html>. A digital version of the complete Goldwater-Nichols Act is available at <https://digitalndulibrary.ndu.edu/cdm4/document.php?CISOROOT=/goldwater&CISOPTR=956&REC=1>

U.S. Department of Defense Budgets

Table I.1 Department of Defense Total Obligational Authority (TOA) by Program, 1992–2017 (Dollars in Millions)

	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
<i>Current Dollars</i>											
Mil Personnel	81,055	75,983	71,293	71,473	69,699	70,187	69,686	70,731	73,538	77,251	87,146
Retired Pay, Def											
Opr & Maint	92,145	90,767	89,091	93,989	93,233	91,834	95,856	102,661	106,791	114,545	142,974
Procurement	61,919	53,621	43,761	43,084	43,432	43,149	44,884	50,770	55,502	62,930	63,342
RDT & E	37,879	37,677	34,508	34,422	35,115	36,481	37,184	38,104	38,753	41,748	48,623
Mil Con	4,988	3,905	6,477	5,874	7,358	6,003	5,469	5,148	5,404	5,280	6,745
Fmly Hsng	3,705	3,822	3,566	3,728	4,312	4,122	3,931	3,553	3,601	3,727	3,894
Rev & Mgt Fnds	3,504	3,881	2,643	1,645	1,903	2,411	2,114	1,764	3,369	1,579	2,570
Trust, Receipts, & Other											83
TOTAL,	285,195	269,655	251,339	254,215	255,052	254,186	259,123	272,729	286,958	307,060	355,378
CURRENT \$											
<i>Constant Dollars</i>											
Mil Personnel	155,943	139,914	128,130	125,332	119,589	116,843	111,111	109,368	108,513	110,207	117,582
Retired Pay, Def											
Opr & Maint	161,408	163,313	156,171	160,105	154,798	148,643	149,845	156,578	159,883	164,150	199,181
Procurement	89,174	75,731	60,714	58,799	58,438	57,418	59,095	65,946	71,016	79,344	78,578
RDT & E	55,740	54,677	49,100	47,955	47,962	49,115	49,446	50,084	49,988	52,975	60,811
Mil Con	7,330	5,650	9,117	8,140	10,017	8,092	7,297	6,764	6,990	6,722	8,404
Fmly Hsng	5,481	5,529	5,049	5,198	5,879	5,536	5,234	4,670	4,670	4,742	4,904
Rev & Mgt Fnds	5,275	5,690	3,934	2,493	2,785	3,393	2,950	2,285	4,298	1,981	3,193
Trust, Receipts, & Other											104
TOTAL,	480,350	450,504	412,214	408,020	399,468	389,040	384,979	395,696	405,356	420,121	472,755
CONSTANT \$											
<i>% Real Growth</i>											
Mil Personnel	-5.7	-10.3	-8.4	-2.2	-4.6	-2.3	-4.9	-1.6	-0.8	1.6	6.7
Retired Pay, Def											
Opr & Maint	-16.1	1.2	-4.4	2.5	-3.3	-4.0	0.8	4.5	2.1	2.7	21.3
Procurement	-15.2	-15.1	-19.8	-3.2	-0.6	-1.7	2.9	11.6	7.7	11.7	-1.0
RDT & E	6.2	-1.9	-10.2	-2.3	0.0	2.4	0.7	1.3	-0.2	6.0	14.8
Mil Con	-11.3	-22.9	61.4	-10.7	23.1	-19.2	-9.8	-7.3	3.3	-3.8	25.0
TOTAL	-9.6	-6.2	-8.5	-1.0	-2.1	-2.6	-1.0	2.8	2.4	3.6	12.5

	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10
<i>Current Dollars</i>								
Mil Personnel	109,061	115,549	121,311	126,665	130,287	139,776	145,183	152,997
Retired Pay, Def								
Opr & Maint	172,680	177,494	197,848	211,636	239,894	256,878	270,550	291,763
Procurement	79,571	83,161	98,549	105,315	134,384	164,684	134,837	135,889
RDT & E	58,307	64,367	69,296	72,691	77,589	79,448	80,651	80,655
Mil Con	6,592	6,505	7,305	9,826	14,373	22,423	26,743	23,379
Fmly Hsng	4,323	4,260	4,495	4,653	4,420	3,461	3,544	2,425
Rev & Mgt Fnds	2,488	4,716	3,671	5,485	2,850	5,386	4,354	4,683
Trust, Receipts, & Other					75			
TOTAL,	433,024	456,052	502,476	536,272	603,872	672,055	665,861	691,791
CURRENT \$								
<i>Constant Dollars</i>								
Mil Personnel	142,148	146,110	148,413	150,019	150,199	155,981	157,121	161,197
Retired Pay, Def								
Opr & Maint	232,240	230,006	240,709	248,651	273,492	281,481	295,196	309,238
Procurement	96,668	98,505	113,696	118,645	148,396	178,993	144,455	143,195
RDT & E	71,573	76,976	80,469	82,124	85,646	85,955	86,063	84,777
Mil Con	8,011	7,684	8,401	11,055	15,880	24,363	28,590	24,624
Fmly Hsng	5,367	5,153	5,229	5,271	4,911	3,757	3,786	2,568
Rev & Mgt Fnds	3,050	5,662	4,284	6,223	3,152	5,829	4,649	5,115
Trust, Receipts, & Other					83			
TOTAL,	559,056	570,096	601,201	621,989	681,758	736,359	719,861	730,715
CONSTANT \$								
<i>% Real Growth</i>								
Mil Personnel	20.9	2.8	1.6	1.1	0.1	3.8	0.7	2.6
Retired Pay, Def								
Opr & Maint	16.6	-1.0	4.7	3.3	10.0	2.9	4.9	4.8
Procurement	23.0	1.9	15.4	4.4	25.1	20.6	-19.3	-0.9
RDT & E	17.7	7.5	4.5	2.1	4.3	0.4	0.1	-1.5
Mil Con	-4.7	-4.1	9.3	31.6	43.6	53.4	17.4	-13.9
TOTAL	18.3	2.0	5.5	3.5	9.6	8.0	-2.2	1.5

	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17
<i>Current Dollars</i>							
Mil Personnel	153,628	153,112	149,172	136,350	138,376	140,978	143,983
Retired Pay, Def							
Opr & Maint	304,248	284,822	273,297	209,888	212,785	219,185	224,365
Procurement	131,472	122,208	108,511	104,265	112,273	116,339	122,857
RDT & E	76,135	72,837	69,653	69,782	69,172	66,827	65,807
Mil Con	17,036	12,184	9,572	10,245	11,021	9,350	7,991
Fmly Hsng	3,415	1,865	1,856	1,573	1,506	1,597	1,634
Rev & Mgt Fnds	3,157	3,075	2,628	1,428	772	1,615	686
Trust, Receipts, & Other	2						
TOTAL, CURRENT \$	689,092	650,102	614,688	533,531	545,905	555,891	567,323
<i>Constant Dollars</i>							
Mil Personnel	159,251	155,916	149,172	133,964	134,509	135,133	135,658
Retired Pay, Def							
Opr & Maint	314,921	288,793	273,297	207,579	207,217	209,701	210,527
Procurement	136,054	124,300	108,511	102,464	108,382	110,320	114,439
RDT & E	78,556	73,943	69,653	68,630	66,930	63,587	61,539
Mil Con	17,604	12,388	9,572	10,065	10,644	8,876	7,456
Fmly Hsng	3,537	1,893	1,856	1,553	1,462	1,524	1,532
Rev & Mgt Fnds	3,270	3,127	2,628	1,404	745	1,532	640
Trust, Receipts, & Other	2						
TOTAL, CONSTANT \$	713,194	660,360	614,688	525,661	529,889	530,674	531,790
<i>% Real Growth</i>							
Mil Personnel	-1.2	-2.1	-4.3	-10.2	0.4	0.5	0.4
Retired Pay, Def							
Opr & Maint	1.8	-8.3	-5.4	-24.0	-0.2	1.2	0.4
Procurement	-5.0	-8.6	-12.7	-5.6	5.8	1.8	3.7
RDT & E	-7.3	-5.9	-5.8	-1.5	-2.5	-5.0	-3.2
Mil Con	-28.5	-29.6	-22.7	5.2	5.8	-16.6	-16.0
TOTAL	-2.4	-7.4	-6.9	-14.5	0.8	0.1	0.2

Source: Office of the Under Secretary of Defense (Comptroller). (March 2012). National Defense Budget Estimates for Fiscal Year 2013. Table 6-1 (pp. 85-87). Retrieved from http://comptroller.defense.gov/defbudget/fy2013/FY13_Green_Book.pdf

Note: These dollars include all enacted war and supplemental funding, as well as FY 2013 requested OCO funding.

National Defense and Veterans Summary, 1900-2002

National Defense and Veterans Outlays (in billion dollars)				Defense Outlays, Percent of —		Active Duty Military Personnel (in thousands)					
Year	Total Outlays	Defense Outlays ¹	Veterans Outlays ²	Federal Outlays	GDP ³	Total	Army	Navy	Marine Corps	Air Force	Veterans (in thousands)
1900	0.3	0.2	0.1	36.6	(NA)	125.9	101.7	18.8	5.4	(X)	1,224
1901	0.4	0.2	0.1	39.1	(NA)	112.3	85.6	20.9	5.9	(X)	(NA)
1902	0.3	0.2	0.1	37.1	(NA)	111.1	81.3	23.6	6.2	(X)	(NA)
1903	0.3	0.2	0.1	38.9	(NA)	106.0	69.6	29.8	6.7	(X)	(NA)
1904	0.4	0.3	0.2	45.9	(NA)	110.1	70.4	32.2	7.6	(X)	(NA)
1905	0.4	0.2	0.2	42.9	(NA)	108.3	67.5	33.8	7.0	(X)	1,192
1906	0.4	0.2	0.1	43.5	(NA)	112.2	68.9	35.1	8.2	(X)	(NA)
1907	0.4	0.2	0.1	42.6	(NA)	108.4	64.2	36.1	8.1	(X)	(NA)
1908	0.5	0.3	0.2	44.6	(NA)	128.5	76.9	42.3	9.2	(X)	(NA)
1909	0.5	0.3	0.2	44.4	(NA)	142.2	85.0	47.5	9.7	(X)	(NA)
1910	0.5	0.3	0.2	45.1	(NA)	139.3	81.3	48.5	9.6	(X)	977
1911	0.5	0.3	0.2	45.9	(NA)	144.8	84.0	51.2	9.6	(X)	(NA)
1912	0.5	0.3	0.2	46.3	(NA)	153.2	92.1	51.4	9.7	(X)	(NA)
1913	0.5	0.3	0.2	46.9	(NA)	154.9	92.8	52.2	10.0	(X)	(NA)
1914	0.5	0.3	0.2	48.0	(NA)	165.9	98.5	57.0	10.4	(X)	(NA)
1915	0.5	0.3	0.2	46.1	(NA)	174.1	106.8	57.1	10.3	(X)	773
1916	0.5	0.3	0.2	47.3	(NA)	179.4	108.4	60.4	10.6	(X)	(NA)
1917	0.8	0.6	0.2	31.6	(NA)	643.8	421.5	194.6	27.7	(X)	(NA)
1918	6.4	6.1	0.3	48.5	(NA)	2,897.2	2,395.7	448.6	52.8	(X)	(NA)
1919	11.5	11.0	0.5	59.5	(NA)	1,172.6	851.6	272.1	48.8	(X)	(NA)
1920	2.9	2.4	0.5	37.1	(NA)	343.3	204.3	121.8	17.2	(X)	5,146
1921	2.4	1.8	0.7	34.9	(NA)	386.5	230.7	132.8	23.0	(X)	(NA)
1922	1.7	0.9	0.7	28.4	(NA)	270.2	148.8	100.2	21.2	(X)	(NA)
1923	1.5	0.7	0.7	23.3	(NA)	247.0	133.2	94.1	19.7	(X)	(NA)
1924	1.3	0.7	0.6	23.7	(NA)	261.2	142.7	98.2	20.3	(X)	(NA)

National Defense and Veterans Outlays (in billion dollars)				Defense Outlays, Percent of —		Active Duty Military Personnel (in thousands)							
Year	Total Outlays	Defense Outlays ¹	Veterans Outlays ²	Federal Outlays	GDP ³	Total	Army			Marine Corps		Air Force	Veterans (in thousands)
1926	1.3	0.7	0.6	23.1	(NA)	247.4	134.9	93.3	19.2			(X)	(NA)
1927	1.3	0.7	0.6	24.1	(NA)	248.9	134.8	94.9	19.2			(X)	(NA)
1928	1.4	0.7	0.6	24.7	(NA)	250.9	136.1	95.8	19.0			(X)	(NA)
1929	1.4	0.8	0.6	25.3	(NA)	255.0	139.1	97.1	18.8			(X)	(NA)
1930	1.5	0.8	0.6	25.3	(NA)	255.6	139.4	96.9	19.4			(X)	4,680
1931	1.6	0.8	0.7	23.5	(NA)	252.6	140.5	93.3	18.8			(X)	(NA)
1932	1.6	0.8	0.8	17.9	(NA)	244.9	135.0	93.4	16.6			(X)	(NA)
1933	1.6	0.8	0.8	17.0	(NA)	243.8	136.5	91.2	16.1			(X)	(NA)
1934	1.2	0.7	0.5	10.6	(NA)	247.1	138.5	92.3	16.4			(X)	(NA)
1935	1.5	0.9	0.6	14.2	(NA)	251.8	139.5	95.1	17.3			(X)	4,494
1936	1.7	1.1	0.6	13.6	(NA)	291.4	167.8	106.3	17.2			(X)	(NA)
1937	1.8	1.2	0.6	15.3	(NA)	311.8	180.0	113.6	18.2			(X)	(NA)
1938	1.8	1.2	0.6	18.3	(NA)	322.9	185.5	119.1	18.4			(X)	(NA)
1939	1.9	1.4	0.6	15.5	(NA)	334.5	189.8	152.2	19.4			(X)	(NA)
1940	2.2	1.7	0.6	17.5	1.7	458.4	269.0	161.0	28.3			(X)	4,286
1941	7.0	6.4	0.6	47.1	5.6	1,801.1	1,462.3	284.4	54.4			(X)	4,337
1942	26.2	25.7	0.5	73.0	17.8	3,858.8	3,075.6	640.6	142.6			(X)	4,485
1943	67.0	66.7	0.3	84.9	37.1	9,044.7	6,994.5	1,741.8	308.5			(X)	5,002
1944	79.0	79.1	-0.1	86.7	37.9	11,451.7	7,994.8	2,981.4	475.6			(X)	5,689
1945	83.1	83.0	0.1	89.5	37.5	12,055.9	8,266.4	3,319.6	469.9			(X)	6,498
1946	45.1	42.7	2.5	77.3	19.1	3,024.9	1,435.5	978.2	155.7			455.5	16,655
1947	19.2	12.8	6.3	37.1	5.5	1,582.1	685.5	497.8	93.1			305.8	18,262
1948	15.6	9.1	6.5	30.6	3.5	1,444.3	554.0	417.5	85.0			387.7	18,745
1949	19.7	13.2	6.6	33.9	4.8	1,613.7	660.5	447.9	86.0			419.3	18,945
1950	22.6	13.7	8.8	32.2	5.0	1,459.5	593.2	380.7	74.3			411.3	19,077
1951	29.1	23.6	5.5	51.8	7.3	3,249.4	1,531.8	736.6	192.6			788.4	18,919

1952	51.4	46.1	5.3	68.1	13.2	3,635.9	1,596.4	824.3	232.0	983.3	19,338
1953	57.3	52.8	4.5	69.4	14.2	3,555.1	1,533.8	794.4	249.2	977.6	20,196
1954	53.9	49.3	4.6	69.5	13.0	3,302.1	1,404.6	725.7	223.9	947.9	20,951
1955	47.4	42.7	4.7	62.4	10.8	2,935.1	1,109.3	660.7	205.2	959.9	21,861
1956	47.4	42.5	4.9	60.2	9.9	2,806.4	1,025.8	669.9	200.8	910.0	22,372
1957	50.4	45.4	5.0	59.3	10.1	2,794.8	998.0	676.1	200.9	919.8	22,634
1958	52.2	46.8	5.4	56.8	10.2	2,599.5	898.9	639.9	189.5	871.2	22,727
1959	54.5	49.0	5.4	53.2	10.0	2,503.6	862.0	625.7	175.6	840.4	22,666
1960	53.6	48.1	5.4	52.2	9.3	2,475.4	873.1	617.0	170.6	814.8	22,534
1961	55.3	49.6	5.7	50.8	9.3	2,482.9	858.6	626.2	176.9	821.2	22,403
1962	58.0	52.3	5.6	49.0	9.2	2,805.6	1,066.4	664.2	191.0	884.0	22,275
1963	58.9	53.4	5.5	48.0	8.9	2,698.9	975.9	663.9	189.7	869.4	22,166
1964	60.4	54.8	5.7	46.2	8.6	2,685.8	973.2	666.0	189.8	856.8	22,013
1965	56.3	50.6	5.7	42.8	7.4	2,653.9	969.1	670.0	190.2	824.7	21,834
1966	64.0	58.1	5.9	43.2	7.7	3,092.2	1,199.8	743.3	261.3	887.4	25,534
1967	78.2	71.4	6.7	45.4	8.8	3,375.5	1,442.5	750.2	285.3	897.5	25,805
1968	89.0	81.9	7.0	46.0	9.4	3,546.1	1,570.3	763.6	307.3	904.9	26,273
1969	90.1	82.5	7.6	44.9	8.7	3,458.1	1,512.2	773.8	309.8	862.4	26,925
1970	90.4	81.7	8.7	41.8	8.1	3,064.8	1,322.5	691.1	259.7	791.3	26,976
1971	88.6	78.9	9.8	37.5	7.3	2,713.0	1,123.8	621.6	212.4	755.3	27,523
1972	89.9	79.2	10.7	34.3	6.7	2,322.0	811.0	586.9	198.2	725.8	27,956
1973	88.7	76.7	12.0	31.2	5.9	2,251.9	801.0	563.7	196.1	691.2	28,125
1974	92.7	79.3	13.4	29.5	5.5	2,162.0	783.3	545.9	188.8	644.0	28,218
1975	103.1	86.5	16.6	26.0	5.5	2,128.1	784.3	535.1	196.0	612.8	28,281
1976	108.0	89.6	18.4	24.1	5.2	2,081.9	779.4	524.7	192.4	585.4	28,405
1976, TQ ⁺	26.2	22.3	4.0	23.2	4.9	(NA)	(NA)	(NA)	(NA)	(NA)	28,447
1977	115.3	97.2	18.0	23.8	4.9	2,074.5	782.2	529.9	191.7	570.7	28,526
1978	123.5	104.5	19.0	22.8	4.7	2,061.7	771.6	529.6	190.8	569.7	28,546
1979	136.3	116.3	19.9	23.1	4.7	2,026.9	758.9	523.3	185.3	559.5	28,605

Year	National Defense and Veterans Outlays (in billion dollars)			Defense Outlays, Percent of —		Active Duty Military Personnel (in thousands)					
	Total Outlays	Defense Outlays ¹	Veterans Outlays ²	Federal Outlays	GDP ³	Total	Marine				Veterans (in thousands)
							Army	Navy	Corps	Air Force	
1981	180.5	157.5	23.0	23.2	5.2	2,082.6	781.4	540.2	190.6	570.3	28,519
1982	209.2	185.3	23.9	24.8	5.8	2,108.6	780.4	553.0	192.4	582.8	28,432
1983	234.7	209.9	24.8	26.0	6.1	2,123.3	779.6	557.6	194.1	592.0	28,316
1984	253.0	227.4	25.6	26.7	6.0	2,138.2	780.2	564.6	196.2	597.1	28,207
1985	279.0	252.7	26.3	26.7	6.2	2,151.0	780.8	570.7	198.0	301.5	28,075
1986	299.7	273.4	26.3	27.6	6.2	2,169.1	781.0	581.1	198.8	608.2	27,946
1987	308.7	282.0	26.8	28.1	6.1	2,174.2	780.8	586.8	199.5	607.0	27,803
1988	319.7	290.4	29.4	27.3	5.8	2,138.2	771.8	592.6	197.4	576.4	27,650
1989	333.6	303.6	30.0	26.5	5.6	2,130.2	769.7	592.7	197.0	570.9	27,497
1990	328.4	299.3	29.1	23.9	5.2	2,044.0	732.0	579.0	197.0	535.0	27,320
1991	304.6	273.3	31.3	20.6	4.6	1,986.0	711.0	570.0	194.0	510.0	27,152
1992	332.4	298.4	34.1	21.6	4.8	1,807.0	610.0	542.0	185.0	470.0	26,980
1993	326.8	291.1	35.7	20.7	4.4	1,705.0	572.0	510.0	178.0	444.0	26,789
1994	319.2	281.6	37.6	19.3	4.1	1,610.0	541.0	469.0	174.0	426.0	26,503
1995	310.0	272.1	37.9	17.9	3.7	1,518.0	509.0	435.0	175.0	400.0	26,198
1996	302.7	265.8	37.0	17.0	3.5	1,471.7	491.1	416.7	174.9	389.0	25,881
1997	309.8	270.5	39.3	16.9	3.3	1,438.6	491.7	395.6	173.9	377.4	25,551
1998	310.2	268.5	41.8	16.2	3.1	1,406.8	483.8	382.3	173.1	367.5	25,188
1999	320.2	274.9	43.2	16.1	3.0	1,385.7	479.4	373.0	172.6	360.6	24,803
2000	341.6	294.5	47.1	16.5	3.0	1,384.3	482.2	373.2	173.3	355.7	25,752
2001	354.4	308.5	45.8	16.6	3.0	1,385.0	481.0	378.0	173.0	354.0	25,349

2002	399.5	348.6	51.0	17.3	3.4	1,414.0	487.0	385.0	174.0	368.0	25,618
Highest value	452.4	390.4	62.0	89.5	37.9	12,055.9	8,266.4	3,319.6	475.6	983.3	28,640
Lowest value	0.3	0.2	-0.1	10.6	1.7	0.0	64.2	18.8	5.4	305.8	773

Source: Except as noted, budget data, U.S. Office of Management and Budget, *Historical Tables, Budget of the United States Government, Fiscal Year 2003*; personnel, U.S. Department of Defense, *Selected Manpower Statistics*, annual; and veterans, U.S. Department of Veterans Affairs, *Annual Report of the Secretary of Veterans Affairs*. Retrieved from <http://www.census.gov/statab/hist/HS-51.pdf>

Note: NA = Not available. X = Not applicable.

1. *Source:* 1900–1939, U.S. Bureau of the Budget, unpublished data. Data represent outlays of Department of the Army and Department of the Navy.
2. *Source:* 1900–1939, Veterans Administration, Annual Report of Administrator of Veterans Affairs.
3. Represents fiscal year Gross Domestic Product (GDP).
4. Transition quarter, July–September 1976.

Appendix 2

MILITARY IDEALS

Oath of Enlistment

“I, _____, do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to regulations and the Uniform Code of Military Justice. So help me God.” (Title 10, US Code; Act of 5 May 1960 replacing the wording first adopted in 1789, with amendment effective 5 October 1962).

Source: <http://www.history.army.mil/html/faq/oaths.html>

Oath for Commissioned Officers

“I, _____ (SSAN), having been appointed an officer in the Army of the United States, as indicated above in the grade of _____ do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic, that I will bear true faith and allegiance to the same; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the office upon which I am about to enter; So help me God.” (DA Form 71, 1 August 1959, for officers.)

Source: <http://www.history.army.mil/html/faq/oaths.html>

Code of Conduct for Members of the United States Armed Forces (Executive Order 10631)

I

I am an American, fighting in the forces which guard my country and our way of life. I am prepared to give my life in their defense.

[Article I amended by EO 12633 of Mar. 28, 1988, 53 FR 10355, 3 CFR, 1988 Comp., p. 561]

II

I will never surrender of my own free will. If in command, I will never surrender the members of my command while they still have the means to resist.

[Article II amended by EO 12633 of Mar. 28, 1988, 53 FR 10355, 3 CFR, 1988 Comp., p. 561]

III

If I am captured I will continue to resist by all means available. I will make every effort to escape and aid others to escape. I will accept neither parole nor special favors from the enemy.

IV

If I become a prisoner of war, I will keep faith with my fellow prisoners. I will give no information or take part in any action which might be harmful to my comrades. If I am senior, I will take command. If not, I will obey the lawful orders of those appointed over me and will back them up in every way.

V

When questioned, should I become a prisoner of war, I am required to give name, rank, service number and date of birth. I will evade answering further questions to the utmost of my ability. I will make no oral or written statements disloyal to my country and its allies or harmful to their cause.

[Article V amended by EO 12017 of Nov. 3, 1977, 42 FR 57941, 3 CFR, 1977 Comp., p. 152]

VI

I will never forget that I am an American, fighting for freedom, responsible for my actions, and dedicated to the principles which made my country free. I will trust in my God and in the United States of America.

[Article VI amended by EO 12633 of Mar. 28, 1988, 53 FR 10355, 3 CFR, 1988 Comp., p. 561]

By virtue of the authority vested in me as President of the United States, and as Commander in Chief of the armed forces of the United States, I hereby prescribe the Code of Conduct for Members of the Armed Forces of the United States which is attached to this order and hereby made a part thereof.

All members of the Armed Forces of the United States are expected to measure up to the standards embodied in this Code of Conduct while in combat or in captivity. To ensure achievement of these standards, members of the armed forces liable to capture shall be provided with specific training and instruction designed to better equip them to counter and withstand all enemy efforts against them, and shall be fully instructed as to the behavior and obligations expected of them during combat or captivity.

[Second paragraph amended by EO 12633 of Mar. 28, 1988, 53 FR 10355, 3 CFR, 1988 Comp., p. 561]

The Secretary of Defense (and the Secretary of Transportation with respect to the Coast Guard except when it is serving as part of the Navy) shall take such action as is deemed necessary to implement this order and to disseminate and make the said Code known to all members of the armed forces of the United States.

[Third paragraph amended by EO 11382 of Nov. 28, 1967, 32 FR 16247, 3 CFR, 1966–1970 Comp., p. 691]

Source: Federal Register. The provisions of Executive Order 10631 of Aug. 17, 1955, appear at 20 FR 6057, 3 CFR, 1954–1958 Comp., p. 266, unless otherwise noted. Retrieved from www.au.af.mil/au/awc/awcgate/readings/code_of_conduct2.htm

U.S. Air Force Song: “Off We Go Into the Wild Blue Yonder”

In 1938, *Liberty Magazine* sponsored a contest for an official song of the Army Air Corps. The magazine received 757 entries. A group of Army Air Corps wives selected Robert Crawford’s song titled “What Do You Think of the Air Corps Now?” The title was changed to “The Air Force Song” when the Air Force became a separate branch of the military in 1947.

Crawford didn’t write “Hey!” he actually wrote “SHOUT!” without specifying the word to be shouted. Wherever they appear, the words “U.S. Air Force” have been changed from the original “Army Air Corps.” Words in parentheses are spoken, not sung.

*Off we go into the wild blue yonder,
Climbing high into the sun;*

*Here they come zooming to meet our thunder,
At 'em boys, Give 'er the gun! (Give 'er the gun now!)
Down we dive, spouting our flame from under,
Off with one helluva roar!
We live in fame or go down in flame. Hey!
Nothing'll stop the U.S. Air Force!*

*Minds of men fashioned a crate of thunder,
Sent it high into the blue;
Hands of men blasted the world asunder;
How they lived God only knew! (God only knew hey!)
Souls of men dreaming of skies to conquer
Gave us wings, ever to soar!
With scouts before and bombers galore. (Hey!)
Nothing'll stop the U.S. Air Force!*

*Here's a toast to the host
Of those who love the vastness of the sky,
To a friend we send a message of his brother men who fly.
We drink to those who gave their all of old,
Then down we roar to score the rainbow's pot of gold.
A toast to the host of men we boast, the U.S. Air Force!*

*Off we go into the wild sky yonder,
Keep the wings level and true;
If you'd live to be a grey-haired wonder
Keep the nose out of the blue! (Out of the blue, boy!)
Flying men, guarding the nation's border,
We'll be there, followed by more!
In echelon we carry on. Hey!
Nothing'll stop the Air Force!
Nothing'll stop the U.S. Air Force!*

Source: History of the U.S. Air Force song: <http://www.hill.af.mil/library/factsheets/factsheet.asp?id=5975>

U.S. Army Song: “The Army Goes Rolling Along”

The song was originally written by field artillery First Lieutenant (later Brigadier General) Edmund L. Gruber while he was stationed in the Philippines in 1908. The lyrics of this original version, called “The Caisson Song,” reflected routine activities in a horse-drawn field artillery battery. The song was transformed into a march by John Philip Sousa in 1917 and renamed “The Field Artillery Song.” It was adopted in 1952 as the official song of the Army and retitled “The Army Goes Rolling Along.”

“Caisson Song”

*Over hill, over dale,
We will hit the dusty trail,*

*And those Caissons go rolling along.
Up and down, in and out,
Counter march and left about,
And those Caissons go rolling along,
For it's high high he,
In the Field Artillery,
Shout out your "No" loud and strong,
For wher-e'er we go,
You will always know,
That those Caissons go rolling along.*

"The Army Goes Rolling Along": U.S. Army Song

Intro

*March along, sing our song, with the Army of the free
Count the brave, count the true, who have fought to victory
We're the Army and proud of our name
We're the Army and proudly proclaim*

Verse

*First to fight for the right,
And to build the Nation's might,
And The Army Goes Rolling Along
Proud of all we have done,
Fighting till the battle's won,
And the Army Goes Rolling Along.*

Refrain

*Then it's Hi! Hi! Hey!
The Army's on its way.
Count off the cadence loud and strong (TWO! THREE!)
For where e'er we go,
You will always know
That The Army Goes Rolling Along.*

Verse

*Valley Forge, Custer's ranks,
San Juan Hill and Patton's tanks,
And the Army went rolling along
Minute men, from the start,
Always fighting from the heart,
And the Army keeps rolling along.
(refrain)*

Verse

*Men in rags, men who froze,
Still that Army met its foes,*

*And the Army went rolling along.
Faith in God, then we're right,
And we'll fight with all our might,
As the Army keeps rolling along.
(refrain)*

Source: Official website of the United States Army: <http://www.army.mil/symbols/song.html>; Library of Congress Performing Arts Encyclopedia.

U.S. Coast Guard Anthem: “Semper Paratus (Always Ready)”

The original words and music of the anthem were written by Captain Francis S. Van Boskerck, USCG, in 1927. The current verse and a second chorus were written by Homer Smith, 3rd Naval District Coast Guard quartet, Chief Cole, and LT Walton Butterfield USCGR in 1943. The first line of the original chorus, “So here’s the Coast Guard marching song,” was changed in 1969 to “We’re always ready for the call.”

Verse

*From Aztec Shore to Arctic Zone
To Europe and Far East.
The Flag is carried by our ships,
In times of war and peace.
And never have we struck it yet
In spite of foe-men’s might,
Who cheered our crews and cheered again,
For showing how to fight.*

Chorus

*We’re always ready for the call,
We place our trust in Thee.
Through surf and storm and howling gale,
High shall our purpose be.
“Semper Paratus” is our guide,
Our fame, our glory, too.
To fight to save or fight and die,
Aye! Coast Guard we are for you!*

Source: Official website of the United States Coast Guard: <http://www.uscg.mil/top/downloads/anthem.asp>

U.S. Marine Corps Song: “The Marines’ Hymn”

The *Marines’ Hymn* is the oldest official song in the United States military. Some of the lyrics were popular phrases before the song was written. The line “To the shores of Tripoli” refers to the First

Barbary War, specifically the Battle of Derne in 1805. “The Halls of Montezuma” refers to the Battle of Chapultepec during the Mexican-American War, where a force of Marines stormed Chapultepec Castle.

The author of the lyrics is unknown, although legend has it that it was written by a Marine on duty in Mexico. The music is from the *Gendarmes’ Duet* from an 1867 revision of the 1859 opera *Geneviève de Brabant* by Jacques Offenbach, which debuted in Paris in 1859. Some websites claim that the Marine Corps secured a copyright on the song on August 19, 1891, but this is in error; the copyright was vested on August 18, 1919. In 1929, the Commandant of the Marine Corps authorized the three verses of the Marines’ Hymn as the official version, but changed the third and fourth lines:

Pre-1929 Version

*Admiration of the nation,
we’re the finest ever seen;
And we glory in the title
Of United States Marines.*

Authorized Change

*First to fight for right and freedom
And to keep our honor clean;
We are proud to claim the title
Of United States Marine.*

On November 21, 1942, Commandant Thomas Holcomb approved a change in the words of the first verse’s fourth line from “On the land as on the sea” to “In the air, on land, and sea” to reflect the addition of aviation to the Corp’s arsenal.

*From the Halls of Montezuma,
To the Shores of Tripoli;
We fight our country’s battles
In the air, on land, and sea;
First to fight for right and freedom
And to keep our honor clean;
We are proud to claim the title
Of UNITED STATES MARINES.*

*Our flag’s unfurled to every breeze,
From dawn to setting sun;
We have fought in every clime and place
Where we could take a gun;
In the snow of far off northern lands
And in sunny tropic scenes;
You will find us always on the job —
The UNITED STATES MARINES.*

*Here’s health to you and to our Corps
Which we are proud to serve;*

*In many a strife we've fought for life
And never lost our nerve;
If the Army and the Navy
Ever look on Heaven's scenes;
They will find the streets are guarded
By UNITED STATES MARINES.*

Source: Official website of the United States Marine Corps: <http://www.hqmc.marines.mil/hrom/NewEmployees/AbouttheMarineCorps/Hymn.aspx>

U.S. Navy Song: “Anchors Aweigh”

Lieutenant Charles A. Zimmermann, U.S. Navy, a graduate of the Peabody Conservatory in Baltimore, was selected as the bandmaster of the Naval Academy Band in 1887 at the age of 26. Early in his career, Zimmermann started the practice of composing a march for each graduating class. By 1892, he had become so popular that he was presented with a gold medal by that year's class. More gold medals followed as he wrote a march for each succeeding class.

In 1906, Zimmerman was approached by Midshipman First Class Alfred Hart Miles with a request for a new march. As a member of the Class of 1907, Miles and his classmates wanted an inspiring song that could be used as a football marching song, and that “would live forever.”

Supposedly, with the two men seated at the Naval Academy Chapel organ, Zimmermann composed the tune, and Miles wrote the two first stanzas in November 1906. This march was played by the band and sung by the brigade at the 1906 Army-Navy football game later that month, and for the first time in several seasons, Navy won. This march, *Anchors Aweigh*, was subsequently dedicated to the Academy Class of 1907. The concluding stanza was written by Midshipman Royal Lovell, Class of 1926. The lyrics were revised in the 1920s by George D. Lottman.

Original Lyrics

Verse 1

*Stand Navy down the field, sails set to the sky.
We'll never change our course, so Army you steer shy-y-y-y.
Roll up the score, Navy, Anchors Aweigh.
Sail Navy down the field and sink the Army, sink the Army Grey.*

Verse 2

*Get underway, Navy, Decks cleared for the fray,
We'll hoist true Navy Blue So Army down your Grey-y-y-y.
Full speed ahead, Navy; Army heave to,
Furl Black and Grey and Gold and hoist the Navy, hoist the Navy Blue*

Verse 3

*Blue of the Seven Seas; Gold of God's great sun
Let these our colors be Till all of time be done-n-n-ne,
By Severn shore we learn Navy's stern call:
Faith, courage, service true With honor over, honor over all.*

Revised Lyrics by George D. Lottman

Verse 2 is the most widely sung. The word “weigh” in this sense comes from the archaic word meaning to heave, hoist or raise. “Aweigh” means that that action has been completed. The anchor is aweigh when it is pulled from the bottom. This event is duly noted in the ship’s log.

Verse 1

*Stand, Navy, out to sea, Fight our battle cry;
We’ll never change our course, So vicious foe steer shy-y-y-y.
Roll out the TNT, Anchors Aweigh. Sail on to victory
And sink their bones to Davy Jones, hooray!*

Verse 2

*Anchors Aweigh, my boys, Anchors Aweigh.
Farewell to college joys, we sail at break of day-ay-ay-ay.
Through our last night on shore, drink to the foam,
Until we meet once more. Here’s wishing you a happy voyage home.*

Source: Official website of the United States Navy: http://www.navy.mil/navydata/nav_legacy.asp?id=191

Appendix 3

LAWS OF WAR: MAJOR TREATIES AND CONVENTIONS

The Law of War Documentary Supplement published by the International Law and Operational Department, the United States Army Judge Advocate General's Legal Center and School, Charlottesville, Virginia, contains the text of international laws of war. It is available online at http://www.loc.gov/rr/frd/Military_Law/pdf/law-of-war-documentary-supplement_2009.pdf.

Further information on the laws of war can be found on the website of the Yale University Law School's Avalon Project: Documents in Law, History and Diplomacy, <http://avalon.law.yale.edu>. The website includes materials from 4000 BCE to the present, as well as information on human rights cases.

Treaty Signatures and Ratifications, United States

<i>Treaty/Convention</i>	<i>U. S. Signed</i>	<i>U.S. Ratified</i>	<i>U.S. Reservation/ Understanding*</i>	<i>States Party</i>
Convention (IV) respecting the Laws and Customs of War on Land and its annex: Regulation concerning the Laws and Customs of War on Land	X	X		35
Convention (V) respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land	X	X		35
Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare. Geneva, 17 June 1925.	X	X	X	135
Charter of the United Nations	X	X		192
Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick In Armed Forces in the Field	X	X		194
Geneva Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea	X	X		194

<i>Treaty/Convention</i>	<i>U. S. Signed</i>	<i>U.S. Ratified</i>	<i>U.S. Reservation/ Understanding*</i>	<i>States Party</i>
Geneva Convention (III) Relative to the Treatment of Prisoners of War	X	X		194
Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War	X	X	X	194
North Atlantic Treaty Organization Status of Forces Agreement	X	X		28
Convention for the Protection of Cultural Property in the Event of Armed Conflict, The Hague, 14 May 1954.	X	X		123
Vienna Convention on Diplomatic Relations	X	X	X	186
International Covenant on Civil and Political Rights	X	X	X	164
Vienna Convention on the Law of Treaties	X			109
Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction	X	X	X	163
Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Additional Protocol I)	X			168
Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Additional Protocol II)	X			164
Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (CCW)	X	X	X	109
Amendment to Article I of the CCW	X	X		68
Protocol on Non-Detectable Fragments (CCW Protocol I)	X	X		107
Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (CCW Protocol II)	X	X	X	92
Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices as amended on 3 May 1996 (CCW Amended Protocol II)	X	X	X	92
Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (CCW Protocol III)	X	X	X	103
Protocol on Blinding Laser Weapons (Protocol IV)	X	X		94

<i>Treaty/Convention</i>	<i>U. S. Signed</i>	<i>U.S. Ratified</i>	<i>U.S. Reservation/ Understanding*</i>	<i>States Party</i>
Protocol on Explosive Remnants of War (Protocol V)	X	X		57
Convention against Torture and other Cruel, Inhuman or Degrading Treatment	X	X	X	146
Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction				156
Chemical Weapons Convention, 1993	X	X	X	187
Rome Statute of the International Criminal Court	X [†]			108
Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the Adoption of an Additional Distinctive Emblem (Protocol III)	X	X		40

Source: Law of War Documentary Supplement, http://www.loc.gov/rr/frd/Military_Law/pdf/law-of-war-documentary-supplement_2009.pdf

* The text of the Reservation, etc., is re-printed following the treaty text.

† On May 6, 2002, the United States informed the Secretary General that it does not intend to become a party to the treaty. Accordingly, the United States asserts that no legal obligations arise from its December 31, 2000, signature to the treaty.

Note: For more detailed information, as well as links to the reservations that the U.S. and other countries have made, go to the ICRC website at <http://www.icrc.org/ihl.nsf/INTRO?OpenView>.

Appendix 4

U.S. SUPREME COURT CASES

Ex Parte Milligan, 71 U.S. 2 (1866)

By the middle of the 19th century, military justice was a well-established process that operated without the involvement of Congress or federal courts. In 1858, however, the U.S. Supreme Court ruled in *Dynes v. Hoover*, 61 U.S. 65, that civil courts had no jurisdiction in the court-martial of Dynes, a sailor in the U.S. Navy. However, in 1866, the Court took up the case of Lambden P. Milligan, a civilian who had been convicted of engaging in acts of disloyalty during the Civil War and sentenced to death by a military commission in Indiana. Milligan sought release through habeas corpus from a federal court. In a unanimous decision, the U.S. Supreme Court held that Milligan's trial and sentence were unconstitutional. Writing for the Court, Chief Justice David Davis emphasized that the U.S. Constitution "is a law for rulers and people, equally in war and in peace, and covers with the shield of its protection all classes of men, at all times, and under all circumstances." Davis noted that martial law was appropriate when "war exists in a community and the courts and civil authorities are overthrown." However, it

cannot arise from a threatened invasion. The necessity must be actual and present; the invasion real, such [as] effectually closes the courts and deposes the civil administration. . . . Martial rule can never exist when the courts are open, and in the proper and unobstructed exercise of their jurisdiction.

Milligan established that judicial power lies with the Supreme Court and lower courts, not with a military tribunal such as the one that tried Milligan. Neither the president nor Congress could authorize such a proceeding. It is seen as a landmark case on the limits of military jurisdiction over civilians.

Ex Parte Quirin, 317 U.S. 1 (1942)

Ex Parte Quirin was a 1942 Supreme Court decision that allowed the military, instead of civil courts, to try foreign nationals from enemy countries caught entering the United States to commit destructive acts. This case concerned Operation Pastorius, a failed attempt in June 1942 by Nazi agents to sabotage various U.S. targets. Eight conspirators were arrested and, on the orders of President Franklin Roosevelt, were tried by a military commission. The commission found all eight men guilty and sentenced them to death. Arguing that the president exceeded his power in ordering the commission and that the Fifth and Sixth Amendments to the Constitution protected their rights to a regular trial, seven of the eight conspirators filed petitions for a writ of habeas corpus in federal district court. Their claims were denied, and they appealed to the U.S. Court of Appeals for the District of Columbia. Before the court ruled, however, they filed for hearing before the Supreme Court and, separately, filed petitions for habeas corpus directly with the Court. On July 31, 1942, in

a brief per curiam ruling, the Court stated that the military commission had been created under presidential authority properly exercised and that the petition for habeas corpus was therefore denied. In a full opinion issued on October 29, 1942, a unanimous Court concluded that the conspirators, as spies without uniform whose purpose was sabotage, violated the law of war and were therefore unlawful enemy combatants.

By universal agreement and practice, the law of war draws a distinction between the armed forces and the peaceful populations of belligerent nations, and also between those who are lawful and unlawful combatants. Lawful combatants are subject to capture and detention as prisoners of war by opposing military forces. Unlawful combatants are likewise subject to capture and detention, but, in addition, they are subject to trial and punishment by military tribunals for acts which render their belligerency unlawful.

We have no occasion now to define with meticulous care the ultimate boundaries of the jurisdiction of military tribunals to try persons according to the law of war. It is enough that petitioners here, upon the conceded facts, were plainly within those boundaries, and were held in good faith for trial by military commission, charged with being enemies who, with the purpose of destroying war materials and utilities, entered, or after entry remained in, our territory without uniform—an offense against the law of war. We hold only that those particular acts constitute an offense against the law of war which the Constitution authorizes to be tried by military commission.

The Court held that *Milligan* did not apply because Quirin and the others, unlike Milligan, were actual combatants in the war.

O’Callahan v. Parker, 395 U.S. 258 (1968)

Crimes identified in the Uniform Code of Military Justice include not only those specific to the military context, such as desertion, but also ones that are similar to offenses defined by state and federal law, such as assault, murder, and robbery. The constitutional limits on military jurisdiction have continued to evolve through decisions by the Supreme Court.

In *Toth v. Quarles*, 350 U.S. 11 (1955), the Supreme Court held that the military cannot try civilians—including former members of the military—for military crimes. However, in 1969, the Court held that the military jurisdiction could not be established simply by the fact that the person charged was a member of the military at the time of the offense and trial. According to the decision in *O’Callahan v. Parker*, establishing military jurisdiction in trials required a “service connection” between the crime and the alleged offender’s military duties. Writing for the Court, Justice William O. Douglas reiterated and expanded the *Toth* holding. He noted several important differences between a court-martial and a civil jury trial. For example, in a court-martial, the jury’s decision does not have to be unanimous and the accused is tried not by his or her peers but by a panel of officers. The presiding officer at a military trial “is not a judge whose objectivity and independence are protected by tenure . . . and nurtured by the judicial tradition, but is a military law officer.” Douglas pointed out that

the suggestion of the possibility of influence on the actions of the court-martial by the officer who convenes it, selects its members and the counsel on both sides, and who usually has direct command authority over its members is a pervasive one in military law. . . . A court martial is not yet an independent instrument of justice but remains to a significant degree a specialized part of the overall mechanism by which military discipline is preserved.

Solorio v. United States, 483 U.S. 435 (1987)

In *Solorio v. United States*, the Supreme Court again addressed the jurisdiction of military courts. At issue was whether the jurisdiction of a court-martial convened pursuant to the Uniform Code of Military Justice to try a member of the Armed Forces depended on the “service connection” of the offense charged. The Supreme Court ruled that it did not. Writing for the majority, Chief Justice William Rehnquist argued that *O’Callahan* had been decided wrongly and that military courts have jurisdiction over any service member, regardless of whether the offense is connected to the armed forces.

Richard Solorio sexually abused two daughters (ages 10–12) of a fellow coast-guardsmen for two years while serving in Juneau, Alaska. Coast Guard personnel in Juneau live in the civilian community rather than on an official base or post. The crimes that Solorio committed in Alaska occurred in his private home.

After a general court-martial was convened in New York, Solorio moved to dismiss the charges for crimes committed in Alaska. He argued that the court lacked jurisdiction because the crimes had taken place in a civilian home. The court-martial judge granted the motion to dismiss, ruling that the Alaska offenses were not sufficiently “service connected” to be tried in the military criminal justice system. The government appealed the dismissal of the charges to the U.S. Coast Guard Court of Military Review, which reversed the trial judge’s order and reinstated the charges.

The U.S. Court of Military Appeals affirmed the Court of Military Review, stating that although

not every off-base offense against a servicemember’s dependent is service-connected, sex offenses against young children . . . have a continuing effect on the victims and their families and ultimately on the morale of any military unit or organization to which the family member is assigned.

Justice Rehnquist noted that

In an unbroken line of decisions from 1866 to 1960, this Court interpreted the Constitution as conditioning the proper exercise of court-martial jurisdiction over an offense on one factor: the military status of the accused.

In 1969, the Court in *O’Callahan v. Parker* departed from the military status test and announced the “new constitutional principle” that a military tribunal may not try a serviceman charged with a crime that has no service connection. Applying this principle, the *O’Callahan* Court held that a serviceman’s off-base sexual assault on a civilian with no connection with the military could not be tried by court-martial. On reexamination of *O’Callahan*, we have decided that the service connection test announced in that decision should be abandoned. . . . The requirements of the Constitution are not violated where, as here, a court-martial is convened to try a serviceman who was a member of the Armed Services at the time of the offense charged.

In a dissent joined by Justices William Brennan and Harry Blackmun, Justice Thurgood Marshall characterized the majority opinion in *Solorio* as one in a long series of cases that reflected an unfortunate conviction that “members of the armed forces may be subject virtually without limit to the vagaries of military control.” For him, the majority’s “willingness to overturn precedent” meant that “every member of the armed forces, whose active members number in the millions, can now be subject to court martial jurisdiction . . . for *any* [emphasis in the original] offense, from tax fraud to passing a bad check, regardless of its lack of relation to military discipline, morale and fitness.” Justice Marshall argued that the *Solorio* decision “deprives our military personnel of procedural protections that are constitutionally mandated.”

Rights of Detainees Following the September 11 Attacks

In the wake of September 11, 2001, the Court has had numerous opportunities to revisit issues concerning the reach of military justice that have troubled the tribunal since 1866. After the attacks, President George W. Bush declared his intentions to pursue al Qaeda and any of its allies with military force. On September 18, 2001, Congress passed a resolution, the Authorization for Use of Military Force, that granted President Bush sweeping authority to “use all necessary and appropriate force” against any “nations, organizations, or persons” that he determined had taken part in planning, authorizing, committing, or aiding the attacks. U.S. troops were deployed to Afghanistan where al Qaeda’s leader, Osama bin Laden, was believed to be in hiding.

By early 2002, the United States had organized a facility in Guantánamo Bay, Cuba, for the indefinite detention of enemy combatants. As the war continued, more prisoners from combat operations in Afghanistan and other locations were sent to Guantánamo and confined in camps.

The case of *Hamdi v. Rumsfeld*, 542 U.S. 507 (2004) started with the capture in Afghanistan of a 20-year-old American citizen, Yaser Hamdi. After an interrogation by military authorities in Afghanistan, in

January 2002 he was brought to Guantánamo, where he was confined until April 2002. The U.S. government claimed that Hamdi was “an enemy combatant,” with the result that he could be held “in the United States indefinitely—without formal charges or proceedings”—and without aid of counsel.

Hamdi sought to have his detention ruled unconstitutional on the grounds that it violated his Fifth Amendment right to due process. Ultimately, the U.S. Supreme Court ruled on the question of whether the government violated Hamdi’s due process right by holding him indefinitely, without access to an attorney, based solely on an executive branch declaration that he was an “enemy combatant” who fought against the United States.

A four-justice plurality partly joined by two additional justices held that Fifth Amendment due process guarantees give a citizen held in the United States as an enemy combatant the right to contest that detention before a neutral decision maker. The Court found that the authorization to use military force allowed the use of the enemy combatant classification but did not sufficiently lay out an acceptable procedure for tribunals.

In *Rasul v. Bush*, 542 U.S. 466 (2004), the majority held that their jurisdiction extended to the detention facility in Guantánamo Bay, Cuba. Again, the Court stated that detentions could be authorized constitutionally but that the procedural safeguards afforded to detainees were inadequate. Congress responded by attempting twice (through the Detainee Treatment Act of 2005 and the Military Commissions Act of 2006) to authorize the detentions properly and to remove the Court’s authority to review detainees’ habeas claims. The Court, however, remained unconvinced and insisted in *Hamdan v. Rumsfeld*, 548 U.S. 557 (2006) and *Boumediene v. Bush*, 553 U.S. 723 (2008) that, while inmates could (and should) be tried by military commissions, independent review by federal judges had to be available under Article III of the Constitution and basic procedural safeguards had to be respected.

Appendix 5

MILITARY ORGANIZATION

The U.S. military consists of five branches of the United States Uniformed Services, headed by the president as commander in chief. The Air Force, Army, Navy, and Marine Corps are under the jurisdiction of the Department of Defense. The Coast Guard reports to the Department of Homeland Security during peacetime and to the Department of Defense (by way of the Navy) during wartime. In addition to active-duty members, National Guard units perform as active-duty members on a part-time basis in the Army and Air Force, as do reserve units in all five branches.

Today's Military, a website produced by the U.S. Department of Defense, contains information about all the branches of the U.S. Military: <http://www.todaysmilitary.com/service-branches>.

U.S. Department of Defense Organizational Chart

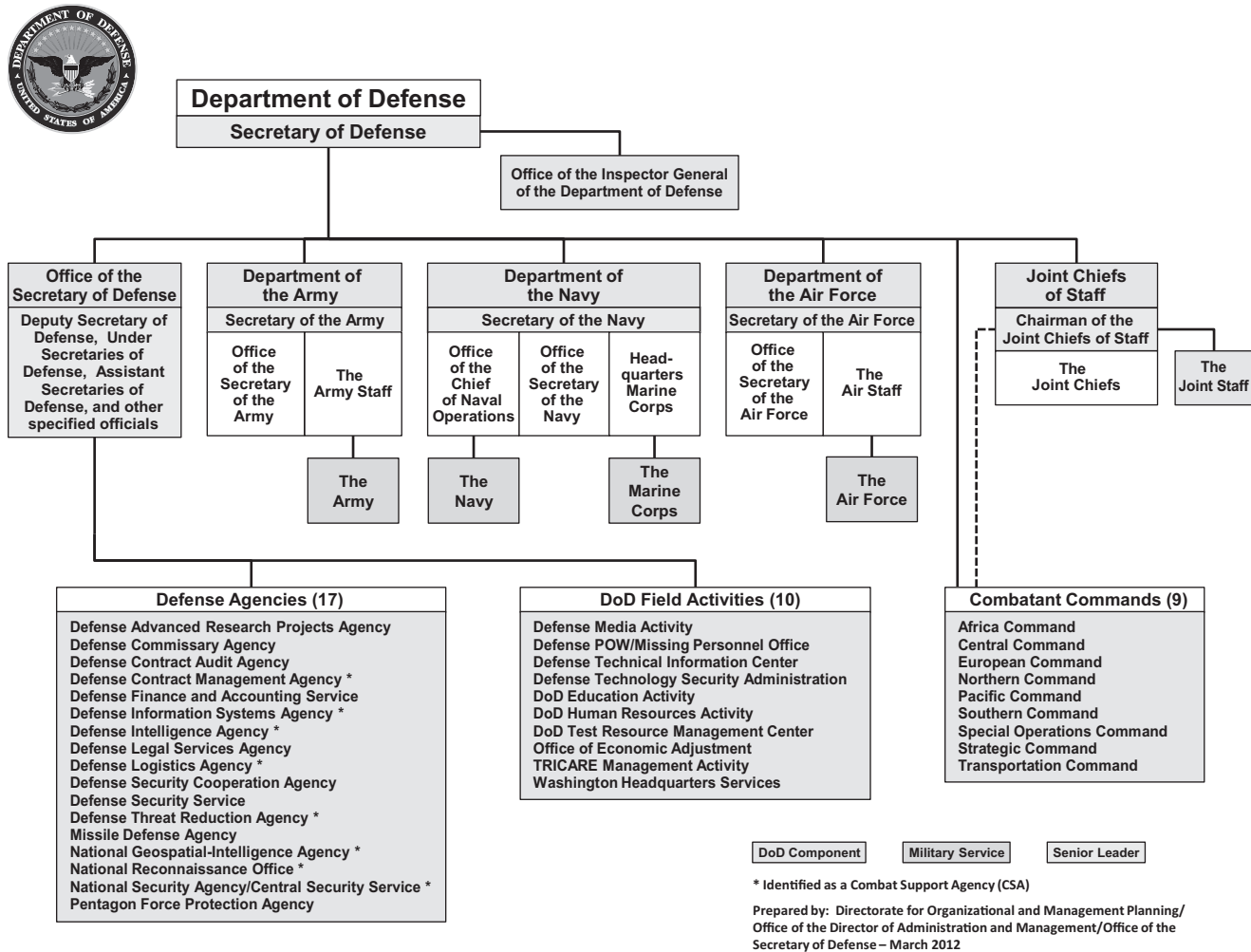


Figure 5.1

Source: Department of Defense, Office of the Director of Administration and Management. Retrieved from http://odam.defense.gov/omp/Functions/Organizational_Portfolios/Organization_and_Functions_Guidebook/DoD_Organization_March_2012.pdf

Unified Command Structure

Combatant Commands (COCOMs), as defined in the military's Unified Command Plan (UCP) consist of three commands defined in terms of function:

USSTRATCOM: United States Strategic Command

USSOCOM: United States Special Operations Command

USTRANSCOM: United States Transportation Command

and six geographic commands that operate worldwide in clearly delineated geographic areas:

USAFRIC: United States Africa Command
 USCENT: United States Central Command
 USEUCOM: United States European Command
 USNORTHCOM: United States Northern Command
 USPACOM: United States Pacific Command
 USSOUTHCOM: United States Southern Command

Since the passage of the Goldwater-Nichols Department of Defense Reorganization Act of 1986, the individual military services and their respective chiefs no longer have primary operational control over warfighting. Instead, they are directed to organize, train, modernize, and equip forces for use by the COCOMs. The COCOM commanders exercise unified command and are empowered to use each branch of the military to achieve the COCOMs' designated missions. Each combatant commander reports to the U.S. secretary of defense through the chairman of the Joints Chiefs of Staff and, through the secretary, to the president of the United States.

For a detailed description of the history and operation of command structure, see "The Unified Command Plan and Combatant Commands: Background and Issues for Congress," by Andrew Feickert (Congressional Research Service, January 3, 2013), available online at <http://www.fas.org/sgp/crs/natsec/R42077.pdf>.

See also entries in this encyclopedia on the U.S. Africa, Central, Pacific, and Southern Commands.

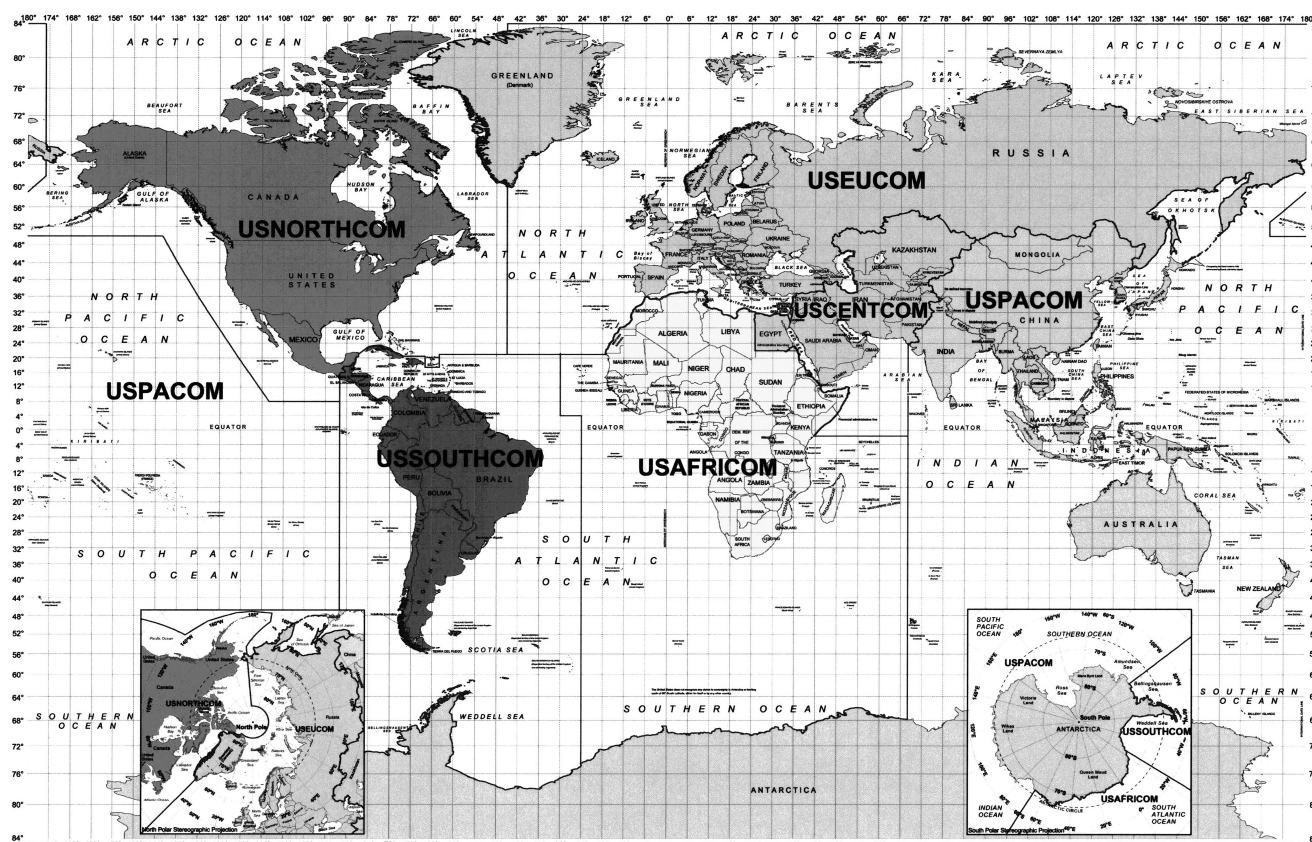


Figure 5.2 Unified Command Plan

Source: Retrieved from http://www.defense.gov/home/features/2009/0109_unifiedcommand/

Organization of the U.S. Army

The army conducts both operational and institutional missions. The operational army consists of numbered armies, corps, divisions, brigades, and battalions that conduct full spectrum operations around the world. The institutional army supports the operational army. Institutional organizations provide the infrastructure necessary to raise, train, equip, deploy, and ensure the readiness of all army forces.

This figure shows the organization of U.S. Army operational units and the typical rank of the commander for each type of unit.

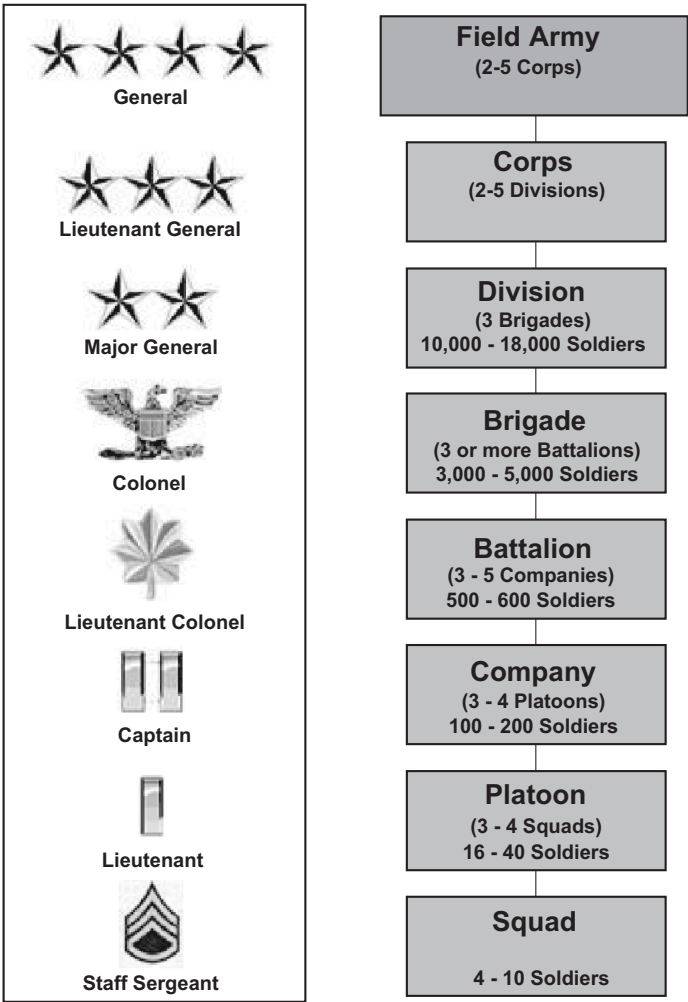


Figure 5.3 U.S. Army Operational Units and Rank

Source: Retrieved from <http://www.army.mil/info/organization/unitsandcommands/oud>

Ranks of Enlisted Soldiers in the U.S. Army

Private (PVT/PV2)

Lowest rank: a trainee who is starting basic combat training (BCT). Primary role is to carry out orders issued to him/her to the best of his/her ability.

Private First Class (PFC)

PV2s are promoted to this level after one year—or earlier by request of supervisor. Individual can begin BCT at this level with experience or prior military training. Carries out orders issued to him/her to the best of his/her ability.

Specialist (SPC)

Can manage other enlisted soldiers of lower rank. Has served a minimum of two years and attended a specific training class to earn this promotion. People enlisting with a four-year college degree can enter BCT as a Specialist.

Corporal (CPL)

The base of the noncommissioned officer (NCO) ranks, CPLs serve as team leader of the smallest army units. Like sergeants, they are responsible for individual training, personal appearance, and cleanliness of soldiers.

Sergeant (SGT)

Typically commands a squad (9 to 10 soldiers). Considered to have the greatest impact on soldiers because SGTs oversee them in their daily tasks. In short, SGTs set an example and the standard for privates to look up to and live up to.

Staff Sergeant (SSG)

Also commands a squad (9 to 10 soldiers). Often has one or more SGTs under his or her leadership. Responsible for developing, maintaining, and utilizing the full range of his or her soldiers' potential.

Sergeant First Class (SFC)

Key assistant and advisor to the platoon leader. Generally has 15 to 18 years of army experience and puts it to use by making quick, accurate decisions in the best interests of the soldiers and the country.

Master Sergeant (MSG)

Principal NCO at the battalion level, and often higher. Not charged with all the leadership responsibilities of a 1SG but is expected to dispatch leadership and other duties with the same professionalism.

First Sergeant (1SG)

Principal NCO and life-blood of the company: the provider, disciplinarian, and wise counselor. Instructs other SGTs, advises the commander, and helps train all enlisted soldiers. Assists officers at the company level (62 to 190 soldiers).

Sergeant Major (SGM)

SGMs' experience and abilities are equal to that of the CSM, but the sphere of influence regarding leadership is generally limited to those directly under his or her charge. Assists officers at the battalion level (300 to 1,000 soldiers).

Command Sergeant Major (CSM)

Functioning without supervision, a CSM's counsel is expected to be calm, settled, and accurate—with unflinching enthusiasm. Supplies recommendations to the commander and staff and carries out policies and

standards on the performance, training, appearance, and conduct of enlisted personnel. Assists officers at the brigade level (3,000 to 5,000 soldiers).

There is only one sergeant major of the army, who serves as the senior enlisted advisor and consultant to the chief of staff of the army (a four-star general).

Organization of the U.S. Navy

Secretary of the Navy: <http://www.navy.mil/navydata/organization/org-sec.asp>

Navy Shore Establishment: <http://www.navy.mil/navydata/organization/org-shor.asp>

Navy Operating Forces: <http://www.navy.mil/navydata/organization/orgopfor.asp>

Organization of the U.S. Air Force

<http://www.af.mil/information/factsheets/index.asp>

Organization of the U.S. Marine Corps

<http://www.marines.mil/Marines/Ranks.aspx>

Organization of the U.S. Coast Guard

<http://www.uscg.mil/top/about/organization.asp>

Appendix 6

MILITARY CASUALTIES

Casualties in Principal Wars in Which the United States Participated, 1775–1991

<i>War/Conflict A/</i>	<i>Branch of</i>	<i>Number</i>		<i>Casualties</i>	<i>Casualties</i>		<i>Wounds</i>
	<i>Service</i>	<i>Serving</i>	<i>Notes</i>	<i>Total Deaths</i>	<i>Battle Deaths</i>	<i>Other Deaths</i>	<i>Not Mortal</i>
Revolutionary War	Total	-	C/	4,435	4,435	-	6,188
1775–1783	Army	-		4,044	4,044	-	6,004
	Navy	-		342	342	-	114
	Marines	-		49	49	-	70
War of 1812	Total	286,730	D/	2,260	2,260	-	4,505
1812–1815	Army	-		1,950	1,950	-	4,000
	Navy	-		265	265	-	439
	Marines	-		45	45	-	66
Mexican War	Total	78,718	D/	13,283	1,733	11,550	4,152
1846–1848	Army	-		13,271	1,721	11,550	4,102
	Navy	-		1	1	-	3
	Marines	-		11	11	-	47
Civil War	Total	2,213,363		364,511	140,414	224,097	281,881

<i>War/Conflict A/</i>	<i>Branch of Service</i>	<i>Number Serving</i>	<i>Notes</i>	<i>Casualties Total Deaths</i>	<i>Casualties Battle Deaths</i>	<i>Casualties Other Deaths</i>	<i>Wounds Not Mortal</i>
(Union Forces Only) E/	Army	2,128,948	D/	359,528	138,154	221,374	280,040
1861–1865	Navy	84,415		4,523	2,112	2,411	1,710
	Marines		N/	460	148	312	131
Spanish-American War	Total	306,760		2,446	385	2,061	1,662
	Army F/	280,564		24,30	369	2,061	1,594
	Navy	22,875		10	10	-	47
	Marines	3,321		6	6	-	21
World War I	Total	4,734,991		116,516	53,402	63,114	204,002
1917–1918	Army G/	4,057,101		106,378	50,510	55,868	193,663
	Navy	599,051		7,287	431	6,856	819
	Marines	78,839		2,851	2,461	390	9,520
World War II	Total	16,112,566		405,399	291,557	113,842	670,846
1941–1946 H/	Army I/	11,260,000		318,274	234,874	83,400	565,861
	Navy J/	4,183,466		62,614	36,950	25,664	37,778
	Marines B/	669,100		24,511	19,733	4,778	67,207
Korean War	Total	5,720,000		36,574	33,739	2,835	103,284
1950–1953 K/	Army	2,834,000		29,856	27,731	2,125	77,596
	Navy	1,177,000		657	503	154	1,576
	Marines	424,000		4,509	4,267	242	23,744
	Air Force	1,285,000		1,552	1,238	314	368
Vietnam Conflict	Total	8,744,000		58,220	47,434	10,786	Hosp. Care Reqd. 153,303 No Hospital Care 150,341
1964–1973 L/	Army	4,368,000		38,224	30,963	7,261	Hosp. Care Reqd. 96,802 No Hospital Care 104,723
	Navy	1,842,000		2,566	1,631	935	Hosp. Care Reqd. 4,178 No Hospital Care 5,898

<i>War/Conflict A/</i>	<i>Branch of Service</i>	<i>Number Serving</i>	<i>Notes</i>	<i>Casualties Total Deaths</i>	<i>Casualties Battle Deaths</i>	<i>Casualties Other Deaths</i>	<i>Wounds Not Mortal</i>
	Marines	794,000		14,844	13,095	1,749	Hosp. Care Req'd. 51,392 No Hospital Care 37,202
	Air Force	1,740,000		2,586	1,745	841	Hosp. Care Req'd. 931 No Hospital Care 2,518
Persian Gulf War	Total	2,225,000		383	148	235	467
1990–1991 M/	Army	782,000		224	98	126	354
	Navy	669,000		56	6	50	12
	Marines	213,000		68	24	44	92
	Air Force	561,000		35	20	15	9

Source: Defense Casualty Analysis System, https://www.dmdc.osd.mil/dcas/pages/report_by_year_manner.xhtml

A. Data prior to World War I are based on incomplete records in many cases. Casualty data are confined to dead and wounded and, therefore, exclude personnel captured or missing in action who were subsequently returned to military control.

B. Marine Corps data for World War II, the Spanish-American War, and prior wars represent the number of individuals wounded, whereas all other data in this column represent the total number (incidence) of wounds.

C. Not known, but estimates range from 184,000 to 250,000.

D. As reported by the Commissioner of Pensions in the annual report for fiscal year 1903.

E. Authoritative statistics for the Confederate forces are not available. Estimates of the number who served range from 600,000 to 1,500,000. The final report of the Provost Marshal General, 1863–1866, indicated 133,821 Confederate deaths (74,524 battle and 59,297 other) based upon incomplete returns. In addition, an estimated 26,000 to 31,000 Confederate personnel died in Union prisons.

F. Number serving covers the period April 21 to August 13, 1898, while dead and wounded data are for the period May 1 to August 31, 1898. Active hostilities ceased on August 13, 1898, but ratifications of the Treaty of Peace were not exchanged between the United States and Spain until April 11, 1899.

G. Includes air service. Battle deaths and wounds not mortal include casualties suffered by American forces in northern Russia to August 25, 1919, and in Siberia to April 1, 1920. Other deaths cover the period April 1, 1917, to December 31, 1918.

H. Data are for the period December 1, 1941, through December 31, 1946, when hostilities were officially terminated by Presidential Proclamation, but a few battle deaths or wounds not mortal were incurred after the Japanese acceptance of the Allied peace terms on August 14, 1945. Number serving from December 1, 1941, through August 31, 1945, were: Total - 14,903,213; Army - 10,420,000; Navy - 3,883,520; and Marine Corps - 599,693.

I. Includes army air forces.

J. Battle deaths and wounds not mortal include casualties incurred in October 1941 due to hostile action.

K. Worldwide military deaths during the Korean War totaled 54,246. In-theater casualty records are updated annually.

L. Number serving covers the period August 5, 1964 (“Vietnam era” begins), through January 27, 1973 (date of cease-fire). Deaths include the period November 1, 1955 (commencement date for the Military Assistance Advisory Group), through May 15, 1975 (date last American servicemember left Southeast Asia). Casualty records are updated annually, including current deaths that are directly attributed to combat in the Vietnam conflict. Additional detail now on table shows number of WIA servicemembers not requiring hospital care.

M. Coast Guard numbers are included with navy. Report does not include one POW (Speicher). Casualty records are updated annually.

N. The Marine Corps number serving is included in the navy total.

Worldwide U.S. Active Duty Military Deaths, Selected Military Operations, 1980–1996

<i>Military Operation/Incident</i>	<i>Casualty Type</i>	<i>Army</i>	<i>Navy</i>	<i>Air Force</i>	<i>Marine Corps</i>	<i>Total</i>
Iranian Hostage Rescue Mission	Nonhostile	0	0	5	3	8
April 25, 1980		0	0	0	0	0
Lebanon Peacekeeping, August 25, 1982–February 26, 1984*	Hostile	3	19	0	234	256
	Nonhostile	5	2	0	2	9
	Total	8	21	0	236	265
Urgent Fury, Grenada, 1983	Hostile	11	4	0	3	18
	Nonhostile	1	0	0	0	1
	Total	12	4	0	3	19
Just Cause, Panama, 1989	Hostile	18	4	0	1	23
Persian Gulf War, 1990–1991		0	0	0	0	0
Desert Shield	Nonhostile	21	36	9	18	84
Desert Storm	Hostile	98	6	20	24	148
	Nonhostile	105	14	6	26	151
	Total	203	20	26	50	299
Desert Shield/Storm	Total	224	56	35	68	383
Restore Hope/Unosom, Somalia, 1992–1994	Hostile	27	0	0	2	29
	Nonhostile	4	0	8	2	14
	Total	31	0	8	4	43
Uphold Democracy, Haiti, 1994–1996	Nonhostile	3	0	0	1	4

Source: Defense Casualty Analysis System, https://www.dmdc.osd.mil/dcas/pages/report_by_year_manner.xhtml

* Place of casualty, Lebanon

U.S. Active Duty Military Deaths, 1980–2010 (as of November 2011)

Calendar Year	Active* Duty	Full-Time (est) Guard+Reserve	Selected**		Total Military FTE	Total Deaths	Accident	Hostile Action	Homicide	Illness	Pending	Self		Terrorist Attack	Undetermined
			Reserve FTE									Inflicted			
1980	2,050,758	22,000	86,872	2,159,630	2,392	1,556	0	174	419	0	231	1	11		
1981	2,093,032	22,000	91,719	22,06,751	2,380	1,524	0	145	457	0	241	0	13		
1982	2,112,609	41,000	97,458	2,251,067	2,319	1,493	0	108	446	0	254	2	16		
1983	2,123,909	49,000	100,455	2,273,364	2,465	1,413	18	115	419	0	218	263	19		
1984	2,138,339	55,000	104,583	2,297,922	1,999	1,293	1	84	374	0	225	6	16		
1985	2,150,379	64,000	108,806	2,323,185	2,252	1,476	0	111	363	0	275	5	22		
1986	2,177,845	69,000	113,010	2,359,855	1,984	1,199	2	103	384	0	269	0	27		
1987	2,166,611	71,000	115,086	2,352,697	1,983	1,172	37	104	383	0	260	2	25		
1988	2,121,659	72,000	115,836	2,309,495	1,819	1,080	0	90	321	0	285	17	26		
1989	2,112,128	74,200	117,056	2,303,384	1,636	1,000	23	58	294	0	224	0	37		
1990	2,046,806	74,250	137,268	2,258,324	1,507	880	0	74	277	0	232	1	43		
1991	1,943,937	70,250	184,002	2,198,189	1,787	931	147	112	308	0	256	0	33		
1992	1,773,996	67,850	111,491	1,953,337	1,293	676	0	109	252	0	238	1	17		
1993	1,675,269	68,500	105,768	1,849,537	1,213	632	0	86	221	0	236	29	9		
1994	1,581,649	65,000	99,833	1,746,482	1,075	544	0	83	206	0	232	0	10		
1995	1,502,343	65,000	94,585	1,661,928	1,040	538	0	67	174	0	250	7	4		
1996	1,456,266	65,000	92,409	1,613,675	974	527	1	52	173	0	188	19	14		
1997	1,418,773	65,000	94,609	1,578,382	817	433	0	42	170	0	159	0	13		
1998	1,381,034	65,000	92,536	15,38,570	827	445	0	26	174	0	165	3	14		
1999	1,367,838	65,000	93,104	1,525,942	796	439	0	38	154	0	150	0	15		

<i>Calendar Year</i>	<i>Active* Duty</i>	<i>Full-Time (est) Guard+Reserve</i>	<i>Selected**</i>		<i>Total</i>		<i>Deaths</i>	<i>Accident</i>	<i>Hostile Action</i>	<i>Homicide</i>	<i>Illness</i>	<i>Pending</i>	<i>Self Inflicted</i>	<i>Terrorist Attack</i>	<i>Undetermined</i>
			<i>Reserve FTE</i>	<i>FTE</i>	<i>Military FTE</i>	<i>Total</i>									
2000	1,372,352	65,000	93,078	1,530,430	832	429	0	37	180	0	153	17	16		
2001	1,384,812	65,000	102,284	1,552,096	943	461	12	49	197	0	153	46	25		
2002	1,411,200	66,000	149,942	1,627,142	1,051	565	17	54	213	0	174	0	28		
2003	1,423,348	66,000	243,284	1,732,632	1,399	597	312	46	231	1	190	0	22		
2004	1,411,287	66,000	234,629	1,711,916	1,847	605	735	46	256	0	197	0	8		
2005	1,378,014	66,000	220,000	1,664,014	1,929	646	739	54	280	1	182	0	27		
2006	1,371,533	72,000	168,000	1,611,533	1,882	561	769	47	257	8	213	0	27		
2007	1,368,226	72,000	168,000	1,608,226	1,953	561	847	52	237	22	211	0	23		
2008	1,402,227	73,000	207,917	1,683,144	1,440	506	352	47	244	6	259	1	25		
2009	1,421,668	75,000	144,083	1,640,751	1,515	467	346	77	277	19	302	0	27		
2010	1,430,985	76,000	178,193	1,685,178	1,485	424	456	39	238	22	289	0	17		

Source: Defense Casualty Analysis System, https://www.dmdc.osd.mil/dcas/pages/report_by_year_manner.xhtml

* Official Department of Defense end-strengths as of December 31 for military pay accounts. Excludes full time Guard and Reserve.

** Full time equivalent (FTE) is based on official Department of Defense fiscal year-end selected reserve strength (10% of the figure is used to estimate days on Active Duty). FTE estimate also includes mobilized National Guard and Reserve.

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